

The Foundations and Early Implementation Experience of Smart Specialisation in EU Cohesion Policy

Philip McCann,

University of Groningen

Raquel Ortega-Argilés,

Birmingham Business School and University of Groningen



UNIVERSITY OF
BIRMINGHAM

BIRMINGHAM
BUSINESS
SCHOOL



university of
 groningen

Introduction

- Built on evidence from the research project:
Smartspec- Smart Specialisation for Regional Innovation, EC 7FP
- SBEJ and EPS papers on the role of SMEs and Entrepreneurship and the new empirical evidence on the RIS3 implementation process.

Aim of the presentation (1)

- Building in the **first evidence** collected from the **European process**.
- Reflect on the process in which regional policy is contributing towards the design and implementation of **new reindustrialisation processes from entrepreneurship and diversification** processes to re-establishing of **mature industries**.

Aim of the presentation (2)

- Discuss the ways **European Regional Policy** in general has been **re-shaped** in order to build on the role played by **entrepreneurship in driving regional innovation**
- The **early stage experience** of the smart specialisation agenda within EU cohesion policy, stressing the types of entrepreneurship and **SMEs measures and the policy prioritisation choices** made by different member states and regions.
- Conclude with a discussion of the **major features of the policy progress** so far and the **main challenges** ahead.

The role of entrepreneurship

- **EU regional and urban policy reforms** and in particular the emergence of smart specialisation as a policy prioritisation framework has brought **entrepreneurship and SMEs at the centre-stage** in EU development policy thinking.
- In particular, the efficacy of the role played by entrepreneurship in **driving innovation** was considered as being central to the European issues, because entrepreneurship was understood as being **key to fostering not only innovation, but also innovations that could be successfully nurtured, disseminated and taken up within the wider EU economy.**
- Therefore, finding ways to **enhance the scale and effectiveness of entrepreneurial processes** was seen as being a **critical policy challenge.**

The role of entrepreneurship

- Entrepreneurial actions in this broad sense can be understood either in terms of **classic business start-ups**, or the **venturing of SMEs into new activities and technologies**, or even the efforts by large firms to build new networks with SMEs.
- A common feature here must be that the entrepreneurial actions contain a sufficient degree of **experimentalism and self-discovery** (Hausmann and Rodrik 2003) as is essential in all forms of innovation.

The role of entrepreneurship

- The fostering of SMEs, and in particular of entrepreneurship, are **critical factors** in driving economic development because of their **impacts** on **wealth generation, innovation, skills and capabilities, the opening up of new markets, job creation and job satisfaction** (Van Praag and Versloot 2007; Feldman et al. 2011; European Commission 2012).

SME and Entrepreneurship policies

- Cohesion Policy is today the largest policy source of funding for SMEs in Europe
- Importance in the new context
 - Europe 2020, Small Business Act
 - The Entrepreneurship 2020 Action Plan – *reignite the entrepreneurial spirit in Europe.*
 - Investment priorities: promoting entrepreneurship, supporting the capacity of European SMEs.
 - Facilitating economic exploitation of ideas and fostering the creation of new firms and supporting the capacity of SMEs to grow in regional, national and international markets and to engage in innovation processes.

SME and Entrepreneurship policies

- EU Cohesion Policy reforms signals a clear **intention to put entrepreneurship and the role of SMEs in fostering growth and development** as the central tenets of the new generation of regional development policies.
- This line of thinking inherently involves an **entrepreneurial ecosystems type of approach**. Where **policies may be targeted** on any of the technological, financial, institutional, or skill-related **elements within the ecosystem**, either to **enhance** certain features of the local entrepreneurial system, to **overcome** key constraints and bottlenecks, or to bridge any perceived missing links (REDI index).
- However, it also signals a movement **away from regional development policies** emphasising *flagship high-technology initiatives* or the advocacy of *large-scale infrastructure* building aimed the technological upgrading of the existing industrial fabric of the region.

SME and Entrepreneurship policy

SME Policy	Entrepreneurship Policy
Reducing administrative and bureaucracy burden	Reducing administrative and bureaucracy burden
Business taxes and fiscal incentives	Business taxes and fiscal incentives (Social security benefits, including health care, pensions and unemployment benefits,...)
Access to capital/financing (risk reduction tools including investment readiness and proof-of-concept and the leveraging of public procurement, repayable short-term loans) e.g. Ensuring access to finance (Opolskie, PL)	Access to micro loans and seed funds (support self-finance, venture, grants, bank loans, corporate co-sharing funding, research grants, guarantee schemes, stock purchase warrants...) e.g. Lombardy Seed Fund (Lombardy, IT); Microfinance Institute (East-Mid Sweden, SE); Capital Investment Fund (Malopolska, PL)
Provision of information services e.g. The 2000 SME Plan (Nord-Pas-de-Calais, FR); One southern Indiana Chamber (1SI) (New Albany, Indiana, US)	Provision of information about start-up e.g. Barcelona Activa (Barcelona, ES);
Export and marketing services (support the first client search, procurement, soft landing, technological showcasing, quality and design management, meet-the-buyer fairs, export guarantee scheme) e.g. Chamber of Commerce of Prato (IT); State export initiative (Washington, US); Center for Trade Development (Pennsylvania, US).	Highlighting entrepreneurs as role models – <i>communication about heroes</i> e.g. mentoring support in Women’s Enterprise Agency (Helsinki, FI); Endeavor Programme (County Kerry, IE); Business Plans competitions (Poitou-Charente and Midi-Pyrénées, FR); entrepreneurship fairs

SME and Entrepreneurship policy

<p>Provision of training and consultancy (advice, coaching, mentoring, professional services, vocational training scheme) e.g. SPIT and CQMS (Bratislava, SK)</p>	<p>Entrepreneurship education e.g. CASE-Centre for Amsterdam Schools for Entrepreneurship (Amsterdam, NL); Företagsamt Halland (SE); Endeavor Programme (County Kerry, IE); Solvay School and NEC (BE); IRCE (Provence-Alpes-Cote d'Azur, FR)</p>
<p>Technology transfer (cluster, inter-clusters, university-enterprise partnerships, diaspora, technology centers, open innovation platforms) e.g. <i>innovation voucher schemes</i>: INDEX (West Midlands, UK); IVC (Estonia, EE). Poznan Science and Technology Park PPNT (Wielkopolska, PL); TOP Programme (Twente, NL)</p>	<p>Facilitating network services e.g. Madrid Emprende's business incubator network (Madrid, ES); Barcelona Activa (Barcelona, ES); Juneau County Economic Development Corporation's (JCEDC) and Inventors and Entrepreneurs Club (Camp Douglas, US)</p>
<p>Support of infrastructures (incubator, living labs, prototyping, design centers, science parks, fab labs)</p>	<p>Support of infrastructures (incubator, living labs, prototyping, design centers, science parks, fab labs) e.g. Wallonia Space Logistics (Wallonia, BE); Cloud Incubator Hub (Murcia, ES)</p>

Entrepreneurship and Innovation policies challenge

- **Policy evaluation challenge**
 - Far from *classic textbook type* approach to costs benefit analysis – ideal for mega infrastructures
 - Theoretical links between individual project interventions and the wider societal impacts are rather more diffuse
- The **scale of the public expenditure is disguised** because it is spent by a wide range of government departments, regional organisations and non-government agencies
 - Necessary to adopt a rather more realistic type of methodology
 - Various indicators
 - Tracking devices
- **Policy evaluation should be part of the process since the beginning**
- New policy initiatives (**pilot exercises**) tend to proceed in a rather more inductive manner reliant on the use of available data alongside bottom-up observations and experience (*bottom-up inductive approach rather than a top-down deductive approach*)

SME and Entrepreneurship policy - evaluation

- Evaluation frameworks more used in Entrepreneurship policies:
 - The COTE framework by OECD
 - The MILES framework by the World Bank
 - The SME test of the EC – *requirement at the conditionalities*

COTE framework by OECD

- Clarity and Coherence regarding the Objectives of the policy, its specified Targets and Evaluation processes.
- *Rationale, Additionality, Appropriateness, Superiority, Systemic Efficiency, Own Efficiency and Adaptive Efficiency.* Of these seven criteria, in the end the most important criterion is that of *additionality*, and it is this which essentially defines as the true impact of the policy scheme or programme.

MILES framework

- The MILES framework for the development of entrepreneurship and SME policy (World Bank 2007) considers the overarching higher levels goals of such policies and the acronym stands for the themes of: *Macroeconomic* and political stability; *Investment* climate, institutions and infrastructure; *Labour* market regulation and institutions; *Education* and skills; *Social* protection.

SME test

- The “SME test” comprises four main steps (European Commission, 2009).
- 1st step: involves a consultation with SMEs/SME representative organisations.
- 2nd step: preliminary assessment of the businesses which are likely to be affected.
- 3rd step: involves a measurement of the impact of the proposed policy on SMEs. At this stage an exhaustive cost-benefit analysis should be performed.
- 4th step: the use of alternative options or mitigating measures, if appropriate.

SMEs and Entrepreneurship and the role of prioritisation

- The basic argument of the smart specialisation approach is that policy resources must be **prioritised on those activities, technologies or sectors where a region has the most realistic chances to develop wide-ranging and large-scale impacts** which also develop and build on many different local and interregional linkages and connections (Foray et al. 2012).
- Such an approach requires that many of these entrepreneurial activities and technologies to be prioritised are **already partly embedded in the region's existing industrial fabric and that as many local actors and institutions are engaged** in the policy design and delivery process.
- Importantly, policies should be **focused on stimulating and facilitating entrepreneurial actions**, and with **local SMEs** being seen not only as the key priority in their own right but developing links between SMEs and other larger local actors is a critical agenda.

First evidence

Table 1. European innovation benchmarking tools.

Eye@RIS3

<http://s3platform.jrc.ec.europa.eu/eye-ris3>

Benchmarking regional structure (Orchestra)

<http://s3platform.jrc.ec.europa.eu/regional-benchmarking>

S3 Inter-regional Trade and Competition Tool

<http://s3platform.jrc.ec.europa.eu/s3-trade-tool>

RIM Plus: <http://ec.europa.eu/enterprise/policies/innovation/policy/regional-innovation/monitor/>

European Innovation Scoreboards

http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards/index_en.htm

Regional Competitiveness Index 2013: http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/6th_report/rci_2013_report_final.pdf

KETs Observatory: <https://webgate.ec.europa.eu/ketsobservatory/policy>

KETs Technology Infrastructure:

<https://ec.europa.eu/growth/tools-databases/ketsobservatory/kets-ti-inventory/map>

Digital Entrepreneurship Monitor: <http://ec.europa.eu/enterprise/dem/>

Eurostat «Regional Statistics Illustrated» per NUTS2 region 2003–2011: <http://epp.eurostat.ec.europa.eu/cache/FSI/#?vis=economy>

Regional Development and Entrepreneurship Index <http://blogs.lse.ac.uk/red/>

RIO

<https://rio.jrc.ec.europa.eu/en>

The Horizon 2020 Policy Support Facility

European Service Innovation Scoreboard ESIS

http://ec.europa.eu/growth/tools-databases/esis/scoreboard/esis-database/index_en.htm

Sectoral analyses

http://ec.europa.eu/growth/sectors/index_en.htm

International Benchmarking Database

BAKBase1

http://www.bakbasel.com/fileadmin/documents/bakbasel_ibp_factsheet_2011_english.pdf

The Online Education and Training Monitor

http://ec.europa.eu/education/news/2014/20140409-visualisation-tool_en.htm

CityBench—ESPON CityBench for benchmarking European Urban Zones

http://www.espon.eu/main/Menu_Projects/Menu_ScientificPlatform/citybench.html

European Localized Innovation Observatory

EUROLIO

<http://eurolio.univ-st-etienne.fr/?language=en>

DG Growth—Internal Market, Industry, Entrepreneurship and SMEs

<http://ec.europa.eu/growth/tools-databases/sme-best-practices/euomed/index.cfm?fuseaction=welcome.detail>

Small Business Act—Database on Good Practices:

<http://ec.europa.eu/growth/tools-databases/sme-best-practices/SBA/index.cfm?fuseaction=welcome.detail>

Example of information provided by industry: Aeronautics and Space: <http://www.acare4europe.com/sria>

European Cluster Observatory

<http://www.clusterobservatory.eu/index.html>

First evidence

Table 2. Covered 'EU priorities', sub-priorities, business areas and target markets by EU Member States and regions.

EU priorities 'EU sub-priorities' (Member States)	Examples of sub-categories	Examples of regions
Aeronautics and space 'Aeronautics Safety and security Aeronautics and environment' CZ, DE, ES, FR, IT, PL, PT, RO, SE, UK	Aeronautics and environment Safety and security	Lombardia (ITC4) Midi-Pyrénées (FR62)
Blue growth 'Transport and logistics Blue renewable energy Aquaculture Offshore mining, oil and gas Shipbuilding and ship repair Coastal maritime tourism Fisheries Marine biotechnology' DE, DK, EL, ES, FI, FR, IE, IT, MT, PL, PT, SE, UK	Marine biotechnology Offshore mining, oil and gas	Lisboa (PT17) Cantabria (ES13)
Cultural and creative industries 'Development of regional cultural & creative industries Support to link cultural & creative industries with traditional industries' BE, BG, DE, DK, EL, ES, FR, IT, MT, NL, PL, PT, RO, SE, SI, UK	Development of regional cultural and creative industries Support to link cultural and creative industries with traditional industries	Midtjylland (DK04) Dytiki Ellada (EL23)
Digital agenda 'Basic broadband: coverage in rural areas Cleaner environment & efficient energy networks (e.g. smart grids) e-Commerce & SMEs online e-Government (e.g. e-Procurement, e-Participation) e-Health (e.g. healthy ageing) e-Inclusion (e.g. e-Skills, e-Learning) ICT trust, cyber security & network security Intelligent inter-modal & sustainable urban areas (e.g. smart cities) New media & easier access to cultural contents (e.g. heritage) Open data & sharing of public sector information' AT, BE, BG, CY, CZ, DE, DK, EL, ES, FI, FR, HU, IE, IT, LT, LV	e-Health (e.g. healthy ageing) ICT trust, cyber security and network security	Cyprus (CY) Basse-Normandie (FR25)

First evidence

Table 4. Categories for 'Research and Innovation Capabilities' and 'Business Areas and Target Markets'.⁴

Research and Innovation Capabilities Business Areas and Target Markets	Examples of sub-categories	Examples of regions
Agriculture, forestry and fishing	Agricultural services Forestry and logging	Notto Aigalo (EL42) Kainuu (FI1D4)
Construction	Civil engineering Building construction	Picardie (FR22) Molise (ITF2)
Creative and cultural arts and entertainment	Amusement and recreation Sports activities	Illes Balears (ES53) Jämtlands län (SE3.22)
Energy production and distribution	Energy distribution Power generation/renewable sources	Flemish Region (BE2) Schleswig-Holstein (DEF)
Human health and social work activities	Residential care activities Social work activities without accomm.	Slaskie (PL22) No example found
ICT	Computer programming, consultancy Telecommunications	Bratislavský kraj (SK01) Galicia (ES11)
Manufacturing and Industry	Chemicals and chemical products Nanotechnology	Nord-Pas-de-Calais (FR30) Sachsen (DED)
Mining and quarrying	Mining support service activities Mining of metal ores	Lubelskie (PL31) Sweden (SE)
Public administration, security and defence	Defence Public administration justice, judicial,	No example found Romania (RO)
Services	Education Security and investigation activities	Luxembourg (LU) Midi-Pyrénées (FR62)
Tourism, restaurants and recreation	Accommodation (hotels, camping) Restaurants and catering industry	Basilicata (ITF5) Província Autònoma de Trento (ITH2)
Transporting and storage	Rail transport and related services Road transport and related services	Kymenlaakso (FI1C4) Aquitaine (FR61)
Water supply, sewerage, waste management and remediation activities	Sewerage Water collection, treatment and supply	Etelä-Karjala (FI1C5) Poland (PL)
Wholesale and retail trade	Retail trade Wholesale trade	Nord-Pas-de-Calais (FR30) Nord-Pas-de-Calais (FR30)

Source: 'Eye@RIS3' database.

Table 5. National Specialisation Areas: Smart specialisation strategies programming period 2014-2020, EU13.

	Bulgaria	Croatia	Cyprus	Czech Republic	Estonia	Hungary	Lithuania	Malta	Romania	Slovakia	Slovenia
Food, agriculture and fisheries	X	X	P	X	P	X		X			
Biotechnology	X	P		X	P		P			x	x
Health		P	P		P	X	P	X			
ICT	X		P		P		P	X			x
Nanosciences & nanotechnologies				X					x		x
Materials					P		P		x	x	x
New production technologies		P	P	X	P	X	P	X	x	x	x
Integration of nanotechnologies for individual app				X			P	X	x	x	x
Energy		P	P				P			x	
Environment		P		X			P		x	x	X
Aeronautics	X			X				X	x		X
Space				X				X			
Automotive			P								
Rail				X			P				
Waterborne		P	P					X	x		
Urban transport and intermodalities	X	P	p	X		X	P	X	x	x	X
Socio-economic sciences and humanities				X		X		X	x	x	X
Security		X			P				x	x	

Source: Stairway to Excellence project

Notes: X(covered), P (partially covered). Latvia is NA. Poland analysis is at regional level.

Covered: research area fully included into S3 priority definition. Partially covered: Research area only partially included into S3 priority definition (S3 priority definition do not cover the full scope the research area).

Conclusions

- RIS3 is not a one-off process, necessary simply to respond to ex ante conditionalities, but rather an **ongoing process of governance and policy-making upgrading.**
- The early stage experience of RIS3 implementation across many EU regions suggests that **the benefits of RIS3 tend to be multi-dimensional** rather than purely technological and research, also involving institutional and governance dimensions.

Conclusions

- Earlier **understandings of innovation and entrepreneurship** tended to focus purely on narrow scientific and R&D and firm creation related aspects, whereas today they:
 - focus on local and societal aspects
 - involve public and private sector actors
 - engage society via participatory actions
- Relevant domains are now **activities, tasks or specific technological functions** in firms and production processes rather than sectors or industries.

Conclusions

- In economically **strong regions** with more *robust institutional and governance systems*, RIS3 often leads to a **refining and sharpening of existing practices**, while in **many Southern European regions** in particular, RIS3 activities appear to have **led to real progress**.
- On the other hand, in the economically **weakest regions** with *less robust governance arrangements*, and in particular in Eastern Europe, RIS3 has often proved to be **very challenging**. RIS3 poses challenging demands on fragile or limited institutional frameworks, but at the same time this also offers real opportunities for institutional learning and the upgrading of governance capabilities..

Conclusions

- Increasing the **outward orientation and global engagement** is also a big part of the smart specialisation story (Thissen et al. 2013) and this is one area which needs bolstering.
- Need to integrate and exploit potential opportunities with FDI linkages in Eastern Europe relating to downstream activities closer to the market (Radosevic and Stancova, 2015)

Conclusions

- RIS3 has already proved to be an **important narrative for beginning to overcome various institutional blockages** and bringing about **changes to policy making both within and beyond the sphere of technological and pure firm formation matters** (Rodrik, 2014).

Sources

Philip McCann & Raquel Ortega-Argilés, 2016. "[The early experience of smart specialization implementation in EU cohesion policy](#)," [European Planning Studies](#), Taylor & Francis Journals, vol. 24(8), pages 1407-1427, August.

Philip McCann & Raquel Ortega-Argilés, 2016. "[Smart specialisation, entrepreneurship and SMEs: issues and challenges for a results-oriented EU regional policy](#)," [Small Business Economics](#), Springer, vol. 46(4), pages 537-552, April.