# Smart specialisation as placebased policy. Lessons learnt?



**DOI reference:** 10.1080/13673882.2018.00001022

By Elvira Uyarra, The University of Manchester, UK.

Smart specialisation is now over a decade old. In this insights article, **Elvira Uyarra**, reflects on lessons learnt and identifies three areas in which the policy could be improved; internationalisation, implementation and greater attention to the demand side. She concludes that a normative and transformative agenda is needed to realise the initiative's goals in the future.

### Introduction

Smart specialisation was first introduced in 2007, in a policy brief, *Knowledge for Growth*, prepared by an independent advisory group to the European Commissioner for Research and Innovation (Foray and Van Ark, 2007). Later on it was transformed from a sectoral concept to a place-based one (McCann and Ortega-Argilés, 2011) and then integrated into the reformed cohesion policy for 2014–2020. The idea of smart specialisation is thus only little more than a decade old and in this short time span it has become the cornerstone of regional innovation policy in Europe. With more than 120 regions developing smart specialisation strategies identifying priorities for research and innovation investments, and a budget of over 80 billion euro for the 2014-2020 period, smart specialisation is probably the "largest innovation policy experiment in the world" (Radosevic and Stancova, 2018: 263).

In this way, the idea of smart specialisation has evolved into a place-based policy prioritisation framework aimed at helping regions to identify their research and innovation resources in order to build critical mass in areas of comparative advantage. 'Specialisation' is a misnomer here, as it is not about making regions more specialised but about leveraging existing strengths to identify new opportunity areas for investment. A key novelty is that such prioritisation is expected to emerge as a result of an 'entrepreneurial process of discovery' (Hausmann and Rodrik, 2003), whereby "entrepreneurs discover the right domain of future specialization" (Foray, David, & Hall, 2011; p. 7). Acknowledging the high integration of EU regions in global production and innovation networks, another novelty of smart specialisation is the importance placed on not just internal connectivity (within the triple and quadruple helix) but also external connectivity, emphasising a need for regions to look beyond their administrative borders when developing strategies.

Smart specialisation also continues a tradition of 20 years of EU regional innovation policies, most notably the Regional Innovation Strategy (RIS) and Regional Innovation and Technology Transfer Strategy (RITTS) initiatives of the mid 1990s and early 2000s, inspired by the regional innovation system concept. Like smart specialisation, they were predicated upon the idea that regional innovation strategies needed to be systemic, demand-led, institutionally embedded and place-based.

In my PhD research more than a decade ago, I looked at the implementation of these policies, with a particular focus on Castilla y Leon (Spain), which was one of the regions selected to participate in the EU Regional Technology Plan pilot initiative, forerunner to the later RIS and RIS+ programmes. The main idea of these initiatives was that, by building up or reorganising their 'regional system of innovation', regions would enhance the use of structural funds since they would absorb and channel incoming investment into activities that were better attuned to regional needs.

These early interventions had positive outcomes with relation to the development of regional innovation policies. They contributed to a raised awareness among firms and policy makers of innovation. They created spaces for dialogue in regions that were geographically, institutionally or culturally fragmented and encouraged a move towards strategic thinking for innovation-oriented regional development, helping many regions to clarify the components of their innovation support infrastructure, and to develop measures to rationalize them. However, a key shortcoming of these initiatives was their static and linear approach to innovation. They adopted a supply-side orientation, focused on how technological resources could be structured so that firms could take better advantage of them, without consideration of the specific characteristics of the demand side. Additionally, the idea was to match the regional supply of innovation with regional demand for innovation, in a limited and bounded view of the regional innovation system. It assumed that all the dimensions relevant for innovation could (or should) be present in the same region, not recognising that the ecology relevant for innovation is "not necessarily deployed and contained within strict regional boundaries and their development and evolution is likely to defy administrative frontiers" (Foray, 2013, p. 67). There was also a tendency to prescribe a uniform model of innovation systems that overlooked the uniqueness and context specificity of the socio-political construction of regions, underestimating the difficulties and the required long-term nature of institution building. As a result, regions tended to adopt a 'me-too' approach, pursuing unrealistic strategies and fashionable technologies, rather than focusing on existing strengths.

In my research, I also observed a clear 'implementation gap' following the launch of these strategies. The consultation process leading to the design of the strategy was put centre stage, with the intention of building new and strengthening existing relationships between regional actors, but often at the expense of implementation. Not enough importance was given to the actual implementation and to the assessment of the output of this process, which meant that consensus was reached about general objectives and priorities, but not on concrete measures and performance indicators. This often led to conservative decision-making about programmes and measures, often involving a continuation of existing policy tools. It also contributed to a loss of momentum and disenchantment about the whole exercise on the part of actors involved, who confessed a 'fatigue' of questionnaires, audits and meetings without seeing clear correspondence between their participation and policy outcomes.

Similar criticisms have also come to the fore in relation to the current implementation of smart specialisation strategies. This begs the question of whether lessons have been learnt and bottlenecks addressed, particularly in less favoured regions, which are the ones which need the most help. In the second part of this paper I would like to make three observations in relation to lessons learnt in three aspects of smart specialisation policy, namely internationalisation, demand side and policy implementation.

### **Internationalisation of RIS3**

First, regions have been encouraged to take into account their position in relation to the national and global context when developing their strategies, and to engage in extra-regional collaboration in order to build critical mass, reduce resource overlap and improve policy coordination (Uyarra et al, 2014). In a recent paper with Chiara Marzocchi and Jens Sörvik, based on a survey to EU regions, we tried to unpack whether and to what extent regional innovation policies are becoming more 'outward oriented' (Uyarra et al., 2018).

We found that internationalisation remains a neglected dimension of smart specialisation strategies. 'Outward orientation' tends to be limited to the design stage (such as regional benchmarking and efforts directed at policy learning and capacity building) and upstream knowledge production activities, and it is relatively neglected in downstream areas of knowledge application. The Vanguard initiative, promoting inter-regional cooperation in industrial strategies in order to develop 'world class clusters' was one rare example of the latter. There was little 'outward orientation' linked to the policy instruments supporting the strategic priorities of smart specialisation (including the international dimension of policy

mix design and evaluation) and even less so evidence of cross-border RIS3 (for instance the Galicia - Northern Portugal RIS3T strategy).

We identified a number of key barriers to greater interregional collaboration, including insufficient resources, a lack of political commitment, administrative barriers, and differences in multilevel institutional architecture, as well as relational and institutional inertia. Financial and resource constraints to collaboration were more problematic for Southern EU regions, and insufficient engagement at the national level were a greater concern for Eastern EU regions.

The experimental nature of smart specialisation, which envisions a systemic and joined-up approach in developing roadmaps and mixes of policy interventions in coordination with other stakeholders, seems to be significantly constrained by political and administrative requirements of public administration and funding rules. As one interviewee put it, regional strategies are not designed in such a way that enable interregional collaboration, adding that "we did not really program our money in a way that makes it possible for partners from abroad to work with us".

## **Policy implementation**

A second area of concern is the persistence of an 'implementation gap'. A number of voices have expressed concern that the focus of smart specialisation has been mainly on the design of the strategies and not enough attention has been given to their implementation (Marques and Morgan, 2018). However, the actual impact of policies depends as much on having the right institutional configuration for implementation as whether the rationales behind their use are 'correct' or not (Flanagan and Uyarra, 2016). As Rodrik (2007: 113) suggests, "a first-best policy in the wrong institutional setting will do considerably less good than a second-best policy in an appropriate institutional setting".

It is implicitly assumed that regions possess the capacity to implement the strategies, but this is often not the case. Responses to the smart specialization agenda have been found to be influenced by institutional factors, including capacities of local governance systems, the presence of formal and soft institutions, the capacity of actors and multi-level governance arrangements (see e.g. Kroll, 2016; McCann and Ortega-Arguilés, 2016). Low institutional capacity

influences the likelihood of regions effectively engaging in policy prioritization and entrepreneurial discovery processes. In order to avoid this implementation gap, there is a need to pay more attention to the political processes in these regions and the mundane and messy realities of policy implementation.

Policy consistency, namely the potential gap between policy aspirations and the implementation of appropriate instruments, is a much neglected aspect of the policy mix for innovation. As Kroll (2018; p.26) argues "the process of translating political decisions into effective measures and actions is – more often than not – a complex, multi-actor process of negotiation and interpretation on its own that deserves to be analysed with the conceptual tools of governance and policy analysis".

The more experimental the policy (and the greater the ambiguity in policy means and ends, for instance the need to interpret the concept of entrepreneurial discovery process), the more critical contextual knowledge and implementation capacity are likely to be. This is why it is also important to look at actors implementing strategies 'on the ground', since they have key skills and practical knowledge that assist policymakers and managers in their understanding of problems and the context for its solution (Ansell et al, 2017; Flanagan and Uyarra, 2016). As Sotarauta (2018) points out in a recent paper, we need to pay more attention to agency in smart specialisation, including policy implementers and project champions who bridge the gap between policy definition and implementation.

# **Demand side innovation policy**

My third and final point is the persistence of a supply side and linear bias in regional innovation strategies and in the regional innovation policy mixes resulting from them, which remain largely focused on the generation of new technology at the expense of diffusion and deployment. Not enough attention has been paid to demand side policies shaping the conditions for the uptake and diffusion of innovations, particularly the role of (private and public) users. Demand, particularly the potential of the public sector to effect social economic and environmental change through public procurement, has been a neglected aspect, or "sleeping giant" (Morgan, 2017), of regional innovation policy. Very few instances can be found of regions, particularly lagging regions, effectively

harnessing the power of public sector demand to drive economic diversification and transformation. Galicia is one of the very few regions that has incorporated public procurement of innovation in its RIS3 toolbox, so far using it effectively to promote innovation and better public services in a range of areas including health and sustainable land management.

In relation to this, in a forthcoming article (Dale-Clough et al, 2019) we argue that more attention should be given to the role of demand in the creation of public value and achieving transformative change in regions, understood not just as diversifying an economy's industrial structure but also as transforming it in socially desirable directions. Smart specialisation lacks a normative focus, being more concerned with the economic competitiveness of places. We argue that we need better frameworks to link regional innovation policy with recent concerns around better or more responsible innovation, and transformative innovation policy. Concepts, such as responsible research and innovation (RRI), have not really been used in in the context of place-based innovation policy and remain detached from mundane dimensions of innovation, while the idea of transformative and mission-oriented policies have a top-down bias that neglects the idiosyncratic socio-economic characteristics of places.

Smart specialisation is now a decade old. As the Commission moves forward to the design of the new smart specialisation period after 2020, it is time to take stock and learn from current and past experiences of implementation of regional innovation strategies. Future strategies should have a stronger focus on implementation, interregional collaboration and demand for transformative change.

#### References

Ansell, C., Sørensen, E., & Torfing, J. (2017). Improving policy implementation through collaborative policymaking. Policy & Politics, 45(3), 467-486.

Flanagan, K., & Uyarra, E. (2016). Four dangers in innovation policy studies-and how to avoid them. Industry and Innovation, 23(2), 177-188.

Foray and Van Ark (2007) Smart specialisation in a truly integrated research area is the key to attracting more R&D to Europe, Knowledge Economists Policy Brief, no. 7

Foray, D. (2013), "The economic fundamentals of smart specialisation", Ekonomiaz: Revista vasca de economía, Vol. 83 No. 2, pp. 55-82.

Foray, D., David, P. and Hall, B. (2011): Smart Specialisation: From academic idea to political instrument, the surprising career of a concept and the difficulties involved in its implementation, MTEI Working Paper 2011-001, EPFL, Lausanne.

Hausmann, R., Rodrik, D., (2003). Economic development as self-discovery. Journal of Development Economics 72, 603–633.

Kroll, H. (2015). Efforts to implement smart specialization in practice—leading unlike horses to the water. European Planning Studies, 23(10), 2079-2098.

Kroll, H. (2018). From strategy to implementation: What is desirable and what realistic? (No. 59). Fraunhofer ISI Discussion Papers Innovation Systems and Policy Analysis.

Marques, P., & Morgan, K. (2018). The Heroic Assumptions of Smart Specialisation: A Sympathetic Critique of Regional Innovation Policy. In New Avenues for Regional Innovation Systems-Theoretical Advances, Empirical Cases and Policy Lessons (pp. 275-293). Springer, Cham.

McCann, P., & Ortega-Argilés, R. (2015). Smart specialization, regional growth and applications to European Union cohesion policy. Regional Studies, 49(8), 1291-1302.

McCann, P., & Ortega-Argilés, R. (2016). The early experience of smart specialization implementation in EU cohesion policy. European Planning Studies, 24(8), 1407-1427.

Morgan, K., (2017). Nurturing novelty: Regional innovation policy in the age of smart specialisation. Environment and Planning C: Politics and Space 35, 569-583.

Radosevic, S., & Stancova, K. C. (2018). Internationalising smart specialisation: Assessment and issues in the case of EU new member states. Journal of the Knowledge Economy, 9(1), 263-293.

Rodrik, D., 2004. Industrial Policy for the Twenty-First Century (SSRN Scholarly Paper No. ID 617544). Social Science Research Network, Rochester, NY.

Sotarauta, M. (2018). Smart specialization and place leadership: dreaming about shared visions, falling into policy traps?. Regional Studies, Regional Science, 5(1), 190-203.

Stilgoe, J., Owen, R. and Macnaghten, P. (2013). Developing a framework for responsible innovation. Research Policy, 42: 1568-1580.

Uyarra, E., Marzocchi, C., & Sörvik, J. (2018). How outward looking is smart specialisation? Rationales, drivers and barriers. European Planning Studies, 26(12), 2344-2363.

Uyarra, E., Ribeiro, B. and Dale-Clough, L. (2019) Exploring the normative turn in regional innovation policy: responsibility and the quest for public value, forthcoming in European Planning Studies.

Uyarra, E., Sörvik, J., Midtkandal, I., (2014). Inter-regional Collaboration in Research and Innovation Strategies for Smart Specialisation (RIS3). S3 Working Paper Series no 6/2014 (JRC Working Paper No. JRC91963). Directorate Growth & Innovation and JRC-Seville, Joint Research Centre.

#### About the author



Elvira Uyarra is Reader in Innovation Policy and Strategy at Alliance Manchester Business School (University of Manchester) where she is also one of the directors of the Manchester Institute of Innovation Research. She is also Adjunct Professor at the Mohn Center of Innovation and Regional Development at the University of Western Norway. Elvira is a Fellow of the Regional Studies Association and Chair of the North West if England branch of the RSA.