

# Weaknesses and Opportunities of RIS3-type Policies

# **Seven Theses**

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# Smart Specialisation, a disputed concept

In the past five years, the European Commission's uptake of what has become known as the 'smart specialisation' or 'RIS3' approach has led to diverse, controversial discussions on both the academic and the political level (Capello 2014; Foray 2014; JRC/IPTS 2015; Cardiff University 2015). As many have argued (Cooke 2012; Kroll 2015) and even its core proponents acknowledged (Foray 2011; 2014) the takeover of what was originally a sectoral concept into regional policy has not occurred without conceptual friction. Arguably, moreover, this takeover occurred in a rather swift, even hasty manner (Foray 2014; Kroll 2015) leaving little room for the in-depth exploration of the implications of the concept and the diverse potentials that it might harbour and, more importantly, how to articulate and communicate these properly.

On good grounds, therefore, several conceptual caveats and objections have been raised against the RIS3 approach and put to the fore in various fora of discussion. Certainly, many early communications of the European Commission (such as the RIS3 Guide) were overly complex and did not readily enable the reader to obtain a comprehensive idea of what the concept aimed at. More importantly even, policy practice had soon overtaken the ongoing conceptual development of the RIS3 approach so that it became increasingly difficult to disentangle what was core to the concept and what had evolved around it for practical policy-oriented reasons. In short, both regional policy makers and academics were left grasping to understand what 'smart specialisation' actually means.

Even though work remains underway (Cardiff University 2015), there is thus currently no generally shared definition of what smart specialisation is and implies for policy making. While practically it has developed into an influential, yet contested political process driven by the European Commission, conceptually it still waits to fully accommodate all paradoxes that its regional application needs come to terms with. Somewhat naturally, therefore, a notable part of the recent discussion on smart specialisation has sought to outline where it is deficient and what the negative implications of these deficiencies could be. A further exploration of its potentially positive outcomes beyond the initial normative statements, to the contrary, appears to be somewhat less commonly pursued.

Against this background, and that of more and more information on RIS3-policy practice now available, this short paper seeks to make some first propositions for the restoration of a balance in exploring the potential impacts of RIS3 policies by first acknowledging a number of common criticisms to then, in a second step, juxtapose them with opportunity focused deliberations based on a policy-inspired understanding of smart specialisation. Thus, it aims to contribute to restoring a common point of departure and reference by suggesting how a post-politicisation concept of smart specialisation could be contoured and what this implies for the next steps of factual RIS3 implementation that are currently being prepared (e.g. Gianelle/Kleibrink 2015; Cardiff University 2015).

#### Some RIS3 controversies – addressed from an opportunity-based perspective

# **1** A centralist, interventionist approach?

It has at times been suggested by affected policy makers and implied by academics that smart specialisation sought to politically transform regional economies, thus reflecting European Commission hubris, inspired by a centralist and interventionist motivation. To an extent, this is a natural first reaction as the ex-ante conditionality was indeed an external trigger, some central policy documents use wordings like 'economic transformation' (European Commission 2012), Foray argued for a Europe-wide division of tasks (Foray 2009) and some high-level representatives of the European Commission have expressly advocated a quite active role of the state in driving processes of entrepreneurial discovery (Landabaso 2014).

That said, it needs to be acknowledged that, from the outset, all conceptual contributions placed a clear emphasis on the desirability of entrepreneurial (rather than state-driven) and bottom-up (rather than centralist) decision making processes (David et al. 2009; Foray 2012; Coffano/Foray 2014). The role of the state that was advocated is dominantly that of a moderator in a process open to different, regionally specific outcomes (Foray 2009; Landabaso 2012). Even those advocating a stronger public role as a tendency justify their proposition as a matter of last resort for those cases in which relevant business actors remain absent or non-committed (European Union, 2012). On the policy stage, moreover, the concept was not only introduced due to is conceptual appeal, but, more importantly, as it seemed to promise a means to make regional policy more effective and to deploy the sizeable ESIF budget more legitimately, drawing on local expertise (Barca 2009; Kroll 2015). In that sense, it was of course justified by a public rationale – yet not necessarily the rationale to increase the role of the public sector. A review of early discussions suggests (JRC/IPTS 2015; European Union 2012), that the European Commission was well aware of its pro-enterprise and bottom-up nature from the outset and promoted it actively. Arguably, the concept thus leaves a lot of leeway to regional actors and encourages the design of new approaches based on local decisions.

# 2 Specialisation vs. diversity

The somewhat unfortunate choice of the term 'smart specialisation' has led many to conclude that the approach aimed at 'specialising' regional economies although both economic theory and policy practice suggest that these could profit more from diversification or related variety. Certainly, basic economic theory is quite clear on the fact that such 'specialisation' efforts would be questionable indeed (cf. Cooke 2012; Boschma 2014). Unfortunately, the practical implications of the approach outlined by Foray did not always prove easily accessible to regional policy makers during the early stages of RIS3 communication. Instead, some abridged presentations and a still prevalent understanding of specialisation as sectoral at the regional level came together in nurturing the impression that 'specialisation, no matter how' was indeed the intention (JRC/IPTS 2015). In consequence, many RIS3 strategies now still reflect a quite traditional, i.e. sectoral or technological, notion of priorities (lacobucci 2014) which in the long term could lead to unintended and undesirable outcomes.

Firstly, however, this reading of the term 'Smart Specialisation' overemphasises the 'specialisation' part and underemphasises the 'smart' part. On a conceptual level, it must be qualified as a misreading. From the outset, the 'domains' that RIS3 policies aim to support with priority were described as cross- sectoral, at the interfaces of technologies and economic activities (Foray 2009). Hence, the concept not only intends to accommodate related variety, but can hardly be conceived other than building upon it (McCann/Ortega-Agilés 2011; 2014). Secondly, criticisms of smart specialisation as 'specialising' overlook what RIS3 – by means of its politicisation – has become: a concept on how to responsibly allocate funding (European Union 2012). As argued above, it is evident that EU regional policy has neither mandate nor capacity to, based on centralist deliberations, 'specialise' regional economies. Instead, RIS3 policies seek to, in a fact-based and participative process, establish in which cross-cutting 'domains' promising endeavours should best be supported (Coffano/Foray 2014). Further, RIS3 policies have no intention to aggravate the problem when, in times of austerity, state-funded RTDI diversity cannot in all regions be sustained to the desirable degree. Instead, they aim to, pragmatically, prevent that the allocation of remaining funds becomes fragmented and seek to focus them on those policies that are least dispensable (European Union 2012). Other than the name 'specialisation' suggests, therefore, neither RIS3 debate nor policy practice can be found to suggest that diversity would not be useful or that regional actors should stop exploring further, additional specialisations once RIS3 policies are in place.

# **3** A myopic approach, focused on technologies?

Commonly, it is held that smart specialisation places a strong, arguably overt focus on technologies and takes a technology-push perspective even in regions that would profit more from other types of specialisations in e.g. services or low-tech industries. Typically, this proposition is justified by the fact that early publications on smart specialisation focus strongly on a discussion of the role of knowledge and technologies for the European economy (Foray 2009; David et al. 2009). Hence, some have highlighted correctly that that much of the original smart specialisation discussion has, predominantly, been a discourse on technologies. Also, RIS3 policies technically address the innovation dimension of cohesion policy (European Union 2013), so that, naturally, much of the practical policy discussion on RIS3 strategies revolves around research and development and many regions treated the ex-ante conditionality, first and foremost, as one in technology policy.

While it is true that the academic smart specialisation discourse thus emerges from a discussion of and on technologies, it never focused on technology generation alone. Quite to the contrary, the concept places the adaptation of general purpose technologies in different 'domains' of the economy in the centre of its argument – be they as such high-tech or traditional industries, in manufacturing or services (Enkel/Gassmann 2010; Foray 2009; 2012). Thus, RIS3 policies' key difference to former approaches is precisely that the economic use-value of any technology that should be carefully considered. In doing so, smart specialisation takes an at its core demand- and local challenge oriented perspective. Additionally, a broad-based consideration of policies' socio-economic utility and even social innovation as an object of RIS3 was from its early stages present in the RIS3 discussion (European Union 2012). Hence, priorities in low-tech areas or services do not stand in contrast to the smart specialisation idea, and their potential could be further explored in the academic debate as well as future policy efforts.

## **4** Innovation vs. cohesion

Some argue that RIS3 policies support a bias on innovation that could jeopardise the prime mission of EU cohesion policy, to improve socio-economic well-being in lagging regions. As it is true that RIS3 policy is innovation policy in both concept and application, this is a thought worth considering. Indeed, cohesion policy aims to increase socio-economic cohesion and while place-based innovation policies have become recognised as important enablers in this endeavour (European Union 2012), regional economic theory clearly suggests that they can hardly live up to this task alone (Barca 2009; Barca et al. 2012). Further, the smart specialisation concept openly favours the creation of agglomerations for some capabilities in a selected number of regions – to create a limited number of 'world-class' technological hubs on a European level (Foray 2009). Even in a world of perfect RIS3 implementation, therefore, cohesion policy cannot be effective based on this concept alone.

While all that is true, RIS3 strategies were arguably never really meant to – as standalone documents – replace 'traditional' approaches to cohesion policy or to preclude the innovative further development of capacity building and redistributive measures in the field of broader socio-economic development. This can be argued both conceptually and technically. Conceptually, regions were always encouraged to make their RIS3 documents 'integrated, place-based economic transformation agendas', rather than disconnected R&D strategies (Ortega-Agilés 2012; European Union 2012). Even if they fail to do so, moreover, the RIS3 ex ante conditionality was technically only placed on the innovation-oriented thematic objective of the ERDF operational programmes (European Union 2013) so that other activities in cohesion policy can in no manner be formally inhibited or precluded by any RIS3 requirement and should indeed by vigorously developed in parallel.

# **5** Emerging niches vs. fixed priorities

Some argue that innovation is based on experimentation and the emergence of new technological niches is dependent on actions against current consensus. Consequently, the whole idea of prioritising future-oriented actions by consensus could be considered as contradictory. This argument is valid in principle, backed up by most general findings in innovation theory (e.g. Morgan 1997; Markard/Truffer 2008; Cooke 2012) and reflected in various decades of regional policy practice (Asheim et al. 2006; Kroll 2012; Kroll/Meyborg 2014). Also, some of the early smart specialisation literature suggests that technologically-open policies were per se undesirable 'beyond those needed to improve general framework conditions and general capabilities' (cf. Foray 2009; Coffano/Foray 2014) which, at that level of generalisation, is arguably incorrect.

However, the question remains to what extent RIS3 policies are likely to or at all capable of affecting stakeholders' ability to experiment in practice. Both according to the RIS3 Guide and during strategy development, it has been underlined that, when the need arises, priorities can be adapted, and the set up of governance mechanisms to do so has been encouraged (European Union 2012). Moreover, RIS3 strategies will in practice primarily be used to give indications for the allocation of funding to large-scale projects in domains of development notably beyond the stage of initial niches – an, in principle and practice, proven approach (Kroll 2012; Kroll/Meyborg 2014). Despite the abovementioned general statements against technologically-open policies, even Foray's early writings do not explicitly deny the role of risk-tolerant, technologically-open funding for small-scale early stage R&D activities in emerging niches. Arguably, the initial, strong statements against any unspecific policies can also be read as a call for a more conscious public risk-taking by concentrating large-scale funding on endeavours that have gained credibility among a notable stakeholder group and avoid 'white elephants'. Primarily, RIS3 can thus be understood as an instrument to guide major, long-term decisions on which advanced or at least advancing trends a region should support. Overall, that is not in conflict with technologically-open early-stage funding.

# **6** The policy dimension

Some argue that the fact that RIS3 policies have on many occasions been watered down or met with resistance by local policy makers proves their lack of aptitude. Mixed records of implementation (Reid/Stanovnik 2013; Komninos et al. 2014; Kroll 2015) as well as general, conceptual doubts regarding the utility and effectiveness of bottom-up approaches to define priorities (Iaccobucci 2014) seem to suggest that the approach cannot and does not work effective. Undoubtedly, moreover, the increasing body of evidence on RIS3 strategies provides ample justification for scepticism, if not resignation regarding some aspects of the RIS3 agenda.

In this context, however, seems important to recognise that RIS3 strategies, like all regional policies, have to be negotiated between specific regional interest groups and government representatives. Regions are far from homogenous and, for good reasons, all regional strategies have to go through democratic processes of opinion formation and legitimisation. Typically and justifiably, these do not favour overly biased (or 'specialised') outcomes (laccobucci 2014). Naturally, any agreement on support priorities thus will be politically contested as some interest groups can and will be negatively affected (laccobucci 2014; Kroll 2015) – less commonly because the administration holds specific, diverging, conceptual beliefs. That some general resistance to specialisation does indeed exist need therefore not necessarily be read as negative evidence regarding the general adequacy and utility of RIS3-type policies. While there is a legitimate adversity of democratic polities to specifically favour selected interest groups, it could still be that such decisions would, from a regional development perspective, be useful and worth considering. In all further pursuits of RIS3-type policies, the set up of suitable processes of arbitration will be a core challenge that could be taken up in the academic debate more intensively.

# **7** The implementation challenge

Finally, the fact that RIS3 processes have, in many regions, so far yielded limited outcomes in policy practice can be taken to suggest that the concept is futile as it was and remains ignorant of the implementation capacities of those less developed regions for which it is supposedly most important. Certainly, there is some truth to this argument. Arguably, it has been one of the most detrimental effects of the rush in implementation that the relevant framework conditions 'on the ground' could be insufficiently acknowledged before policy prescriptions were developed. Initially, this caused reservations and scepticism in many regions and left some of them disillusioned and frustrated until today (Kroll 2015).

When analysing these problems, however, it seems important to acknowledge that the RIS3 agenda has had the effect of exposing, rather than aggravating existing weaknesses in regional governance and strategic policy making. Neither 'business as usual' nor any other approach to cohesion would have avoided an encounter with the administrative inadequacies that the RIS3 agenda experienced. Moreover, the agenda's effect of exposing need for action could even be considered welcome, as the unsatisfactory status quo in governance will continue to affect any future cohesion policy, RIS3-type or not. Without the half-intentional 'stress-test' of RIS3 implementation, a prevalent absence of strategic and coordinative capabilities would have remained (more) unchallenged. While the process as it was may have been one of the least efficient ways to learn about regional capacities, it still yielded valuable insights that can inform future policy making – and should be leveraged to help avoid or at least anticipate similar friction in the future.

# **Policy conclusions**

With the technical fulfilment of the ex-ante conditionality or related action plans completed in most regions and nations, the formal, externally triggered process of RIS3 implementation as driven by the European Commission is coming to an end. In the coming years, therefore, ongoing RIS3 activities will once more be of a more voluntary nature and it will be up to individual regions to regard them as superfluous, harmful or to decide to pursue them further – with the aim to explore some of the RIS3 concept's further inherent opportunities that may have come to insufficient fruition in the haste of ex-ante fulfilment.

Against this background, this paper would like to raise seven theses based on the controversies outlined above:

- 1. In principle, the bottom-up nature of the smart specialisation concept presupposes robust regional ownership. Effective RIS3-type policies cannot be centrally imposed for long. If RIS3-type policies are to remain relevant in the future, they will have to be(come) locally driven and locally designed.
- 2. RIS3-type policies are not as such meant to reduce variety in regions nor did they command the means to do so. Instead, their motivation is to counter fragmentation. Where funds are limited, however, care must indeed be taken that related variety is not negatively affected. This needs to be clarified.
- 3. Smart specialisation's initial conceptual focus was demand-driven: placed on the application of technologies, including low-tech industries and services. Due to its application context, this emphasis became insufficiently reflected in many strategies. Opportunities to amend this should be further explored.
- 4. Smart specialisation cannot be the only remedy to Europe's failure to increase cohesion. It can, however, play a positive role in a larger system by organising regional innovation policies in a manner conducive to cohesion. Nonetheless, due attention should be paid to the development of other cohesion policies.
- 5. Technologically-open policies are a key element of regional innovation policy to foster new niches. Policy practice has shown that this need not conflict with RIS3-type priority setting if this focuses on guiding and justifying large-scale investments. This division of tasks needs to be more explicitly clarified.
- 6. By some, it had been underestimated how controversial prioritisation can be. Related negotiations, however, are democratically legitimate and in many places also well-established. Here, policy makers need to play an active role in moderating a constructive, opinion-based arbitration of suitable priorities.
- 7. The swift takeover of smart specialisation into policy practice left a lack of differentiation in the approach. Institutionally weaker regions had difficulties in making sense of RIS3-type policies and now lack motivation to continue the effort. Both policy practice and academic discourse need to address this.

Well noting its problems and paradoxes, we therefore see many opportunities to develop the smart specialisation approach further at a conceptual level as well as to keep exploring new ways to implement meaningful RIS3-type policies in practice.

Comparing initial tenets and current policy practice, however, we also feel that much needs to be clarified – for which neither mere references to early conceptual writings nor a purely pragmatic policy perspective can at this point be sufficient. Instead, lessons from both need to be consciously combined.

With many problems and paradoxes well identified, there seems ample need for further research on smart specialisation. Despite justified criticism, an opportunity-based perspective should be given sufficient room in this endeavour.

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