Interview with D. Foray following the 1st Seminar of the 2020 Smarter Conference

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Following the 1st Seminar of the 2020 Smarter Conference, JRC came back to some of the intriguing questions asked during the session, and for which there was no more room to answer them. We found a very helpful Dominique Foray when we put the questions in front of him, with the following results.

It is always surprising to see that skills are hardly ever mentioned when addressing Smart Specialisation. How can we talk about innovation and structural change without considering the human factor that will be critical for the effective implementation of any effective change? Shouldn't there be a strong role for UAS (Universities of Applied Science) in reinforcing regional innovation ecosystems, through skills, entrepreneurship, etc.

FORAY - Of course, SKILLS is a crucial element! I am absolutely convinced by Paul Romer's argument that '*it is not enough to increase spending on R&D. Instead an economy must increase the total quantity of inputs to go into the process of innovation*'. And of course one key part of these inputs is people – who are able either to produce new knowledge or to absorb and apply the new knowledge to the existing processes. And this argument is even more relevant and important when, as in S3, the structural transformation of certain industries is the goal. Then the translation of any priority area – say the digitalisation of

sectors X and Y - necessarily involves training programmes (look again at the slides on the experience of Fribourg). By the way, it is interesting to see that the new S3 regulations, which are established in order to prepare the next programming period, are very much aligned with the idea that a wide range of different projects - not only R&D – need to be funded to respond to various constraints and problems within a given priority area [1]. I am thinking in particular of the novel emphasis in the new regulation on innovation diffusion as well as on training and skills– all activities which are now eligible for funding within the S3 framework. Indeed, these are in many cases the key components of the transformative activity which aims at generating the targeted structural change.
Universities of Applied Sciences (UAS) of course should be a key partner. As I am based in Switzerland, where UAS are fully involved in and key player of regional innovation systems, I am totally convinced of this point.

You seem to still reinforce the agglomeration focus of S3. Yet we know that this has negatively impacted the so-called places left behind. Should we be refreshing this rationale, if we truly understand (and care about) place-based impacts of S3? When you talk about planning, you apparently do not mean spatial planning. As S3 priorities are often applied to (Capital) cities, shouldn't we bring in a stronger territorial dimension into S3 (with an additional S for spatial)?

FORAY - I am still convinced that a key determinant of innovative performance in a region is relational density, agglomeration, proximity – which favours economies of scale and scope in knowledge production and information spillovers across firms and between firms and research, etc.. . This is one dimension of a place-based policy: recognising the importance of local density or agglomeration and implementing programmes to get it – hence the focus of S3 on a few processes of transformation (priorities) in which resources will be concentrated and relational density will be increased through the selection and support of RELATED projects. I don't see why the least advanced places should not be part of this game. The least advanced places have different innovation needs and will have different priority areas (than more advanced regions), and this will reflect their specific capacities and opportunities – *"there is not only one game in town"* – but ANY type of innovation (and innovation-related activities) requires density and proximity in order to be efficient.
About spatial planning I can't say a lot (because I have no expertise in spatial planning!). What I can say is that S3 is NOT a spatial policy and thus has no spatial planning component in it but it is an innovation policy which is place-based. S3 is first an INNOVATION policy – and we know that driving forces towards spatial disparity are inherently associated with the innovation process – because of i) the substantial indivisibility in R&D and other innovation-related activities at the economy-wide level, ii) the centrality of agglomeration processes, iii) the role of anchor tenants (e.g. large companies) in making local systems more efficient and iv) the fact that spin-offs are frequently located close to the parent entity. All these features have increasing returns and thus generate some kind of winner-takes-it-all outcome (remember Brian Arthur's

[1] COM(2017) 376 final « Strengthening Innovation in Europe's Regions: Towards resilient, inclusive and sustainable growth at territorial level ».

locational models). As a result, the promotion of innovation through a policy is always likely to generate spatial disparities. Now the emphasis in S3, not only on R&D, but also on skills, diffusion, management capabilities, infrastructures – which are all important ingredients for achieving for example the structural transformation of a traditional industry, is key to counterbalance driving forces towards spatial disparity. Think of a priority area such as the digitalisation of the agro-food sector. Such a priority area will imply many things to do and certainly not just supporting start-ups, fundamental science and venture capital supply. Rather, diffusion of technologies, training and building capabilities in farms and SMEs will become key. This is likely to counterbalance the driving forces towards spatial disparity. This is of course not spatial planning. However, an S3 approach, which reflects accurately the region-specific capacities and opportunities and supports not only R&D but also diffusion and training will favour at least the spatial distribution of innovation capacities.

According to you the identification of priorities is done with a planning logic: but what comes BEFORE the identification of priority? how are the different options come into being and what role do companies and entrepreneurs play in this?. In your presentation, it seems like the planning logic should guide the identification process, and the explorative logic (Entrepreneurial Discovery Process) should guide the next two steps. Don´t we need this combination in all three phases?

FORAY - It is important to recognise that S3 involves a planning logic – but we need to stress immediately that there is not such a thing as an omniscient planner in this logic. This is why, once the planning exercise has been made to determine a few priority areas, the logic of entrepreneurial discovery will kick in. I learned many things from Hirschman but perhaps the most important to me is that a planning logic which recognises uncertainty is a fully relevant approach to industrial policy. Now we have to make clear that a robust and transparent planning logic DOES involve a participatory process – this is an exercise which is evidence-based and must include stakeholders, experts and citizens. But this is not entrepreneurial discovery in the Hayekian sense – which is about the micro and sector specific decisions about investments, which rely on information and knowledge which are decentralised, local, dispersed and not in the hands of the Government.
I recognise here that the S3 practices have greatly informed theory and allowed the theory to be improved. Although it was specified in the EC regulation that "*the priority areas should be chosen through an entrepreneurial discovery process* ", it never happens in reality! (See my quotation of Mikel Navarro on the Basque Country experience in my paper "*In responses to six critical questions about smart specialisation*" – reference below). One favoured game of economists is to show that something that has been working in practice for a very long time can also work in theory! As economists working on S3, let's consider that something which does not work in practice should perhaps not be integrated in the theory! So, it is good that S3 theory and S3 regulations have adapted now to the policy practice to build a more consistent S3 concept, in which there is indeed a planning component (which again does not exclude at all a participatory process) and then an entrepreneurial discovery component. This makes S3 unique!

Do we need more prioritisation from the top or more entrepreneurial discovery at regional level in a post Covid-19 time of increased uncertainty?

FORAY - This is a difficult question. I don't think the post Covid-19 time has led to more uncertainty in terms of innovation (of course not in terms of the pandemic process itself which creates huge uncertainty). But as regarding innovation, the future is rather clear:

- Some new business opportunities have emerged and this is not only about vaccine research but also on medical technologies (not always high tech) as well as all ICT innovations supporting online activities in most sectors (ranging from education to business processes);
- Some sectors have to fully revamp their business models – such as tourism, culture, sports and all sectors where massive physical agglomerations of people have until now been a key measure of success;
- The inefficiency of some sectors has been made more visible during the crisis – for instance healthcare, in which business and social innovations are becoming central to improve healthcare provision and coordination;
- Finally, while the confinement has been good news for environmental protection and climate policy, the economic and social costs have been huge. This is a great lesson for our European Green Deal. The point is not to slow down economic growth or to stop everything, but to put the EU on a trajectory of sustainable and green growth. Here again, business and social innovations are central.

These are the innovation challenges characterising the post-Covid-19 time. Perhaps I forgot a few things – but clearly, S3 will have to take into account these challenges while defining the priority areas and translating them into region-specific transformative activities

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The nexus between prioritisation and implementation 'steps' is indeed the core challenge for making S3 deliver in terms of transformation of our economies. We could argue though that EDP and bottom-up dynamics are also needed in the 'planning', otherwise the risk of inertia is too big: vested interests of 'strong' existing actors/sectors will play the dominant role, overshadowing the voice of emerging actors/activities, which is a big problem in industrial transition regions.

FORAY - This question is very close to the earlier question about planning. Again, it is crucial not to confuse a participatory process to be involved in a top-down logic of setting strategic priorities with an entrepreneurial discovery process which is fully bottom up and will be supported within each priority. I like so much the following sentence by Paul David that I am quoting it all the time: "*S3 is neither totally top-down nor purely bottom-up. It is about designing an intermediate process aiming to enhance entrepreneurial efforts and coordination within a framework (a strategic priority) structured by the government.*" David proposed by the way the French expression of '*planification indicative*' to try to capture this mix of logics but we never used it in our further papers – considering that the term did not capture well the balance between top-down and bottom-up or planning and entrepreneurial discovery.

As a matter of fact, some of these questions are addressed also in my recent papers, *In response to 'Six critical questions about smart specialisation'* » (DOI – 10.1080/09654313.2019.1664037) and *Six additional replies – one more chorus of the S3 ballad* (DOI – 10.1080/09654313.2020.1797307) - both published in *European Planning Studies* to respond respectively to Hassink and Gong (2019) and Benner (2020).

Thanks a lot, Dominique Foray!

FORAY - Thanks for all your questions!