

# Structurally Weak Regions in a Context of Increasing Returns-Based Regional Policy



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This Regional Insight article discusses the implication of mobilising policy instruments in the context of increasing returns-based regional policy in Portugal. The focus is on structurally weak regions that attempt to escape the “regional development trap” using the available regional development and innovation policy instruments. The article examines how different territories cope and adjust to the funding logic, favouring more dynamic territories and consolidated regional innovation systems. The evidence discussed is based on the evaluation work of regional programs and policies in NUTS II and III territories or Nomenclature of Territorial Units for Statistics.

Portugal is a middle-income economy, although not always following a stable catching-up trajectory with the EU, generally interrupted in recession periods, that shows a diversified typology of NUTS II regions. Regional typologies are diverse not only from the perspective of the European Structural Investment Funds (ESIF) incidence in the territory (mainland and Azores and Madeira

islands), but also from the EU classification of innovative regions. Although classified as moderate innovators, the seven NUTS II regions of the country present very different regional innovation systems, when analysed using innovation input and output indicators, density of collaborative practices within the systems and quality of governance models. For example, comparing NUTS II Norte, Centro and Lisbon regions with Alentejo and Algarve or Madeira with Azores, it is easy to notice very different levels of consolidation of regional innovation systems and several innovation paths and specialisation profiles.

**Figure1: Map of Portugal's NUTS II**



Source: Author's archive, 2023.

That diversity may be approached using the lens of structurally weak regions or left behind places, showing that it is possible to observe the coexistence of promising examples of territories in a strong catching-up trajectory with the EU (principally some NUTS III territories in the littoral areas of Norte and Centro and Lisbon region) with lagging behind NUTS III territories. The latter and the former both try to mobilise the apparatus of regional development and innovation policy instruments available through ESIF programmes to escape from the so called

“regional development trap” (Diemer et al., 2022), inspired in the “middle-income trap” concept traditionally used in international development theory. One should be aware that regional development and innovation policies in Portugal are strongly dependent on the EU cohesion policy instruments and programmes, generating an ambivalent situation: on the one hand, stability in regional policy instruments is reinforced, although, on the other hand, it leads to a weak participation of national, regional and local budgets.

The main topic of this Regional Insight article is to discuss the implication of both types of territories in mobilising a vast group of policy instruments in which increasing returns-based approach (Romer, 1986) tends to be dominant. It is beyond the scope of this article, to develop the argument that regional to develop the argument that regional development policy began to be mainly inspired by the logic of increasing returns approach when the dimensions of competitiveness and innovation integrated into the core of ESIF regional development programmes (Figueiredo, 2020). The 2014-2020 programming period generated a strong impulse to competitiveness and innovation dimensions. This trend will be significantly reinforced in the 2021-2027 period, combined with the generalisation of the results-based approach.

*Considering the non-homogeneity of Portuguese structurally weak regions, the pertinent question is to ask how so different territories cope and adjust to a planning and funding logic that tends to favour more dynamic territories and more consolidated regional and local innovation systems?*

My evidence to discuss this topic is based on the evaluation work of regional programmes at the NUTS II level and of policies at the national level (for example, the evaluation of national and regional Smart Specialisation Strategies (S3) in the 2014-2020 programming period), completed with the experience of technical assistance to some NUTS II regions and NUTS III territories in the design of competitiveness and innovation-based strategies.

The learning experience allowed by the 1<sup>st</sup> cycle of implementation of S3 in Portugal (2014-2020 programming period) offers pertinent evidence to discuss this topic (Figueiredo, 2019). Regional S3 have been implemented in a context marked by a strong uneven degree of maturity of regional innovation systems, in line with productive specialisation profiles, principally in terms of related variety. The already mentioned evaluation showed that the creation of favourable

environments concerning the entrepreneurial discovery processes is highly correlated with the maturity of regional innovation systems. In fact, the intensity and density of collaborative practices affect the dynamics of entrepreneurial discovery processes. The better succeeded experiences of collaboration between research institutions and firms are located in the NUTS II regions of Norte, Centro and Lisbon whose innovation systems are more consolidated or, at least, evolving quickly to it. The same can be told concerning the experience of clusters operating as proactive actors of innovation policies. Practically all the clusters that resisted along several programming periods are territorially represented in those territories.

All these facts are observed in an experimental period of implementation of national and regional S3. The strategic priorities of each regional S3, including the national S3, were very broadly defined and integrated a vast number of priority domains. In general, they invoke natural language to identify the priorities, not linked in a rigorous way with technological fields or indicators (D'Adda et al., 2019) and consequently to the innovative capabilities of regions.

For similar reasons, it is possible to say that the results of this 1<sup>st</sup> cycle of S3's implementation, are also distant from the concept of transformative activities (Foray, et al.) that, in principle, regional S3 should identify as priorities. That means that this 1<sup>st</sup> cycle of implementation of regional S3 was still very distant from selective orientations. So, the effects associated with the logic of increasing returns approach will be tougher to integrate into future implementation cycles for structurally weak territories, admitting that selectiveness, links with regional innovative capabilities, relatedness and entrepreneurial discovery processes will be more demanding.

But, although considering these shortcomings of the initially implemented S3 processes, the difficulties faced by territories presenting less developed or incipient regional innovation systems are already visible. It is important to discuss how these territories tried to tackle the problem and how regional development programmes and regional S3 adapted to the challenges generated by the logic of increasing returns approach.

One possible answer has been to integrate low density territories and rural innovation in the design of the regional S3. It was clearly the case of the Centro region, that dedicated one of the four platforms of its S3 to innovation in low

density territories, applying the idea of smart specialisation strategy to the enhancement of endogenous resources and also to rural innovation. The idea was strongly fostered by the municipality of Fundão, located in the inner part of south Centro region about 250 kilometres from Porto. This municipality is very proactive in attracting knowledge and young talents, principally in programming activities and it is particularly active in developing research activities associated to the local abundant culture of cherries, safeguarding and enhancing cherry local varieties. Fundão is a very inspiring example, although is not generalised to other structurally weak and low-density territories. But the idea of enhancing endogenous resources following a rationale of S3, combining it with attraction of knowledge and talents deserves careful attention in the future. This reminds me of Philip Cooke's work on regional innovation activities encompassing Doing-Using-Interacting, which are not necessarily constrained to territories with greater technological capabilities.

In the 2014-2020 programming period, the regional Centro S3 was practically the unique example of S3 in which the problem of structurally weak territories is addressed. Revising its regional S3 for the period of 2021-2027, the Alentejo region explored the approach, considering that, with the exception of the territory surrounding the international and transshipment port of Sines, Alentejo is practically a vast and a low-density region in a significant trajectory of demographic decline. Due to the singularity of the examples, it is possible to conclude that S3 in Portugal did not succeed to mitigate the challenges determined by the predominant influence of increasing returns-based approach of the new generation of regional policies.

How can the challenges arising from the increasing returns-based approach of new regional policies be effectively mitigated?

Taking advantage of my experience concerning the subject, I would say that for the structurally weak territories located in NUTS II regions (such as Norte and Centro) in which other territories are well adapted to the new rationale, it will be absolutely necessary to upgrade the institutional base of those territories concerning innovation. In this case, upgrade means to fight against atomisation and focus the concentration of resources in one or two big priorities. In the Norte region, in the less-developed territories of Terras of Trás os Montes and Douro, two initiatives, one covering the sustainability of mountain areas (CIMO - Mountain Research Center led by the Bragança Polytechnic Institute) and another

focused on research and technology to the Douro wine cluster (led by the the Association for the Development of Viticulture in the Douro Region a regional partnership, involving winemakers and the Norte Universities and Polytechnic Institutes, ADVID) are good examples of the institutional upgrade I recommend. In these territories under severe depopulation and consequently lacking entrepreneurial capabilities it is important that this kind of institutions substitute for the scarcity of entrepreneurial spirit. Attracting knowledge and talent without a clear perception of priorities will represent a high risk of resources destruction. It is crucial to create resources centres to absorb and attract knowledge transfer. I think that similar approaches could be explored in Centro region, involving for example forest activities.

Another way to succeed in upgrading the institutional base of these territories is to reinforce partnerships and collaborative projects with institutions such as research centres, interfaces, technology transfer centres, technology centres and firms located in more innovative resources concentration. Depending on the existence of an institutional base able and prepared to absorb and manage the results of that cooperation and collaborative research and knowledge transfer activities and on the will of the more dynamic centres to do it, it also seems to be a promising way to extend innovation to structurally weak territories. Simultaneously, those collaborative projects will help the institutions located in these territories to take advantage of international research networks already working and contribute to new internationalisation paths of less developed territories.

### **Concluding remarks**

The growing influence of increasing returns-based manifestations of regional policy is a challenge to structurally weak territories. It is not possible to stop the probability of innovation policies being animated by regions in which regional innovation systems are more consolidated and performing. It is the natural rationale of innovation and competitiveness policies. However, without neglecting this big trend, it is possible to make structurally weak territories participate in these trends and extend approaches such as those of regional S3 to those territories. Notwithstanding the possibility of mitigating that big trend, the opportunities opened to structurally weak territories require institutional innovation, consolidation and upgrade, the absolute rejection of atomisation and creativity in combining knowledge for endogenous resources enhancement and

attracting talents. Some examples already working in low-density territories in Portugal show that it is a real possibility. The degree of dissemination of that kind of experience is not determined and strongly dependent on the quality of the strategies to do it and the magnitude of knowledge and human resources attracted by these territories.

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