



FROM RIVALRY TO SYNERGY: R&I POLICY AND COHESION POLICY

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INTRODUCTION

The future of research and innovation (R&I) policy in the EU is currently being debated and the recently published 'Lamy Report' is an important milestone in this debate. In its 11 recommendations, the Lamy Report – officially called 'The independent High Level Group on maximizing the impact of EU Research and Innovation Programmes' – offered a bold and compelling vision for R&I policy in the post-2020 era. The call that attracted most public attention was the call for a doubling of the seven year R&I budget to at least EUR 120 billion, which the report described as “the best investment the EU can make” (High Level Group, 2017:9). However, there has been little or no public debate about the R&I model that implicitly runs through the Lamy Report. Nor has there been much public debate about other important issues, such as the many drivers of productivity and economic growth in different socio-economic conditions or about the merits of sourcing the extra R&I funding from the post-2020 Cohesion Policy.

The aim of this short conceptual paper is to provide some cautionary arguments about the unintended consequences of a full alignment of policies – the FP on the one hand and the R&I aspects of Cohesion Policy (RIS3)¹ on the other – which seem similar but which reflect distinct and complementary logics.

Our sympathetic critique of the Lamy Report revolves around one core proposition: that such an alignment, which at first glance seems reasonable because the policies look the same, is likely to be detrimental in the long term to the basic objective of RIS3 which – is regional economic development.

GOALS AND PROGRAMMES – A SIMPLE FRAMEWORK

To understand and develop the relationship between R&I policies and Cohesion policy, and to better appreciate potential synergies and tensions, we might start by distinguishing goals from programmes, as Paul Romer has recommended (Romer, 2002).

A goal is a coordination envelope to align programmes and instruments – designed to move the economy towards the goal. It should represent an objective that is neither risky nor radical and for which there is a broad base of intellectual support. Goals should remain stable and relatively constant over time. They should also imply metrics to measure success.

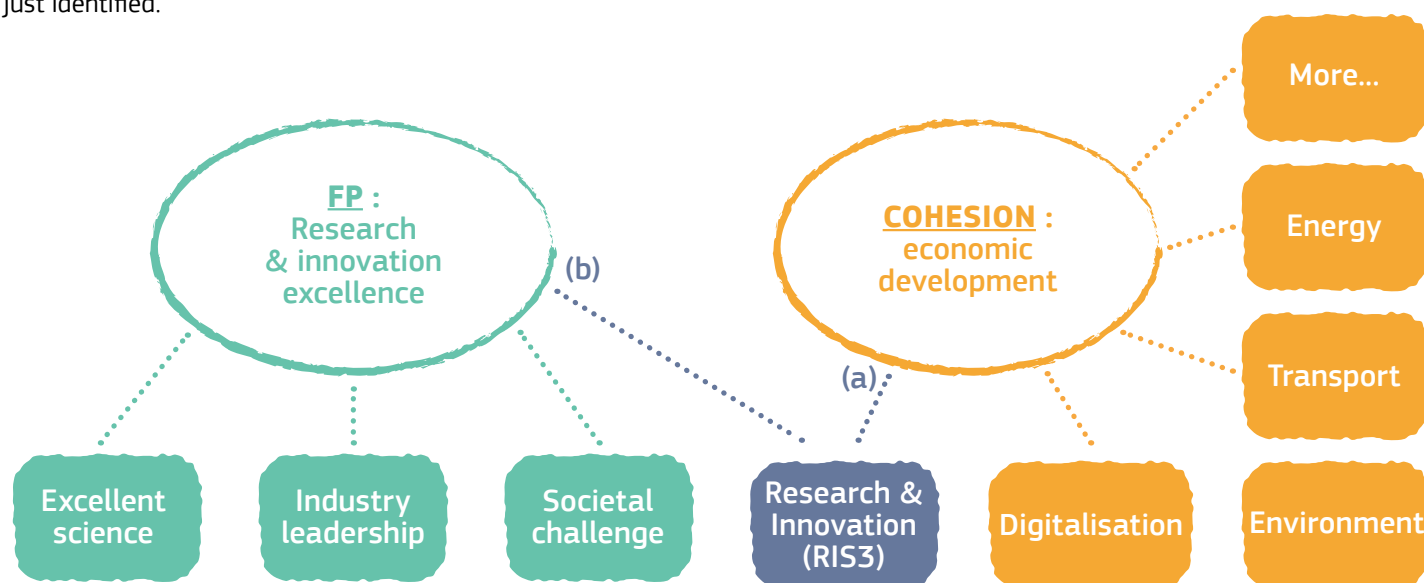
In contrast to a goal, a programme is a specific policy proposal that seeks to move the economy towards a specific goal. Programmes can be less conservative and more experimental than the underlying goals. A variety of programmes can be tried, including ones where there is some uncertainty as to whether they will succeed. They can be modified or stopped.

The advantages of a framework that separates goals from programmes is that it makes it clear that when we look at EU-level R&I policy underpinned by the FP and Cohesion Policy underpinned by the ESIF it is easy to see that these two policies are characterised by very different goals. Thus, the question arising from the current discussion is to know whether a programme (ESIF operational programmes that implement RIS3 strategies) – initially designed to serve a certain goal (later we call this 'economic development') – can be re-designed to serve another goal (later we call this 'research and innovation excellence'), without putting at risk its initial mission (which was about economic development).

¹ **RIS3** stands for Research & Innovation Strategies for Smart Specialisation; **FP** stands for Framework Programme; **R&I** stands for Research & Innovation; **ESIF** stands for European Structural and Investment Funds; **OP** stands for Operational Programmes.

CAN A SPECIFIC PROGRAMME – SUCH AS AN ESIF OP THAT IMPLEMENTS A RIS3 – SERVE TWO GOALS?

The diagram below expresses in very simple terms the problem just identified.



Two goals are identified in the above diagram, each corresponding to a precise policy: **R&I excellence** is the goal of the future FP9, while **economic development** is the goal of the Cohesion/regional Policy². At the moment, we should note that these goals are of course not contradictory or mutually exclusive. On the other hand, nobody could deny that they are different – not contradiction but different!

Each goal involves a series of implementation measures (work/operational programmes). Initially, the RIS3 strategies and the ESIF OP implementing them were designed to serve the cohesion goal (i.e. economic development). This is depicted by relation (a). The proposition under discussion and explicitly recommended in the Lamy Report is that: *“A substantial proportion of the future structural and agricultural funds should focus on financing R&I infrastructure and their sustainability, universities, research centres, incubators, science parks and innovation diffusion activities that are aligned with and support the post 2020 EU R&I programme’s objectives and pillars. This approach should take into consideration increasingly transnational smart specialisation strategies. **The EU R&I programme should set the agenda for R&I investments within the Structural Funds**”³ (High Level Group, p.17). This option is depicted by relation (b).*

The question is whether relations (a) and (b) can coexist harmoniously so that the new relation (b) will not interfere with relation (a). Unfortunately we think that interferences are likely and that a pure alignment of RIS3 and its ESIF funding to the FP agenda will compromise the regional economic development objectives of RIS3 and Cohesion Policy.

² Without entering into deep definitional issues, economic development can be defined, according to Sen (1999) as “the expansion of capacities that contribute to the advancement of society through the realisation of individuals’, firms’ and communities’ potentials”, or as “the means to achieve sustained increases in prosperity and quality of life realised through innovation, lowered transaction costs, and the utilisation of capabilities towards the responsible production and diffusion of goods and services” (Feldman et al., 2014).

³ Our highlight

THE NEED TO COMPLEMENT THE CONCEPT OF 'EXCELLENCE'

Excellence is a good word – capable of producing a broad base of political and intellectual support and, as such, it is a relevant goal for a policy such as FP9. On the face of it, then, why should this concept of excellence not apply to economic development goals, too? The problem we wish to identify is not this concept of excellence as such, but rather the activities and outputs to which such excellence should apply.

We argue that the scope and validity of the concept of 'research and innovation excellence' – as defined in the FP – are quite narrow and would *de facto* exclude many activities and outputs that are seen as central to driving economic development, particularly in less-developed and transition regions.

Indeed, with respect to Cohesion Policy and economic development, R&I excellence cannot be viewed as the only source of productivity, growth and development⁴. In the R&I domain, there are many types of innovation-related actions that are relevant for productivity and growth, such as building up human capital, adopting (not inventing) new technologies, diffusing novel management practices, generating complementarities between key enabling technologies and traditional sectors as well as developing social innovations. All these activities are important in order to strengthen capabilities and lever the growth and development potential of a regional economy; and all need to be included in any RIS3 exercise as important drivers of innovation, growth and structural change. As the great innovation economist Manuel Trajtenberg (2010) wrote a few years ago: *"They are perhaps less exciting and flamboyant than high-tech and world-class science, but they ultimately represent the key to economy-wide growth in most regional economies."*

Therefore, the conventional objective of R&I excellence (which informs the Lamy Report) needs to be complemented by a broader, richer and more complex approach so as to apply to place-based innovation ecosystems. The Lamy Report says that: *"The budget for such investment could flow from the future Structural Funds to the post-2020 EU R&I programme, to be implemented according to the latter's main principles **but with a geographical rationale**"*⁵ (High Level Group. p.17). Based on the final qualification, the authors seem to be moving in our direction, although they do not go far enough⁶!

COMPLEMENTING THE CONCEPT OF EUROPEAN 'EXCELLENCE' WITH REGIONAL 'RELEVANCE'

A broader approach that goes beyond excellence would need to be applied not only to the generation and exploitation of new knowledge, but also to the exploitation of existing knowledge. This would require that **regional policy develops its own criteria of relevance in R&I** which should go beyond the criteria proposed in the Lamy Report and should consider the problems of the **exploitation and deployment of existing knowledge in specific place-based contexts**. The key point for policymakers to recognise is that **the drivers of growth are different in different regions, largely depending on their distance to the technology frontier, and thus regional policies in different regions will have differentiated tasks** (Aghion and Akcigit, 2015). If policymakers and the Commission do not recognise this point (i.e. that R&D-based growth is only one route among several), a pure alignment of the R&I elements of Cohesion Policy and the next FP, with the latter setting the agenda for R&I investments in the former, would produce limited and perverse results. Why? Because, at best, at best, it would create a few pockets of excellence in cohesion regions with limited links and spillovers to local economies and a weak impact on growth.

Recognising all the factors and activities that really matter for economic development in the R&I domain is the crucial point, so that any kind of alignment between a strategy initially designed within the Cohesion Policy framework (such as RIS3) and the FP goal does not create too many distortions in the relationship between this programme and its overriding goal of economic development.

In our working paper (see Foray, Morgan and Radosevic, 2018) we develop a framework and a set of proposals for moderating the inevitable tensions and trade-offs between excellence and relevance – or in other words, between working at the world's scientific frontier and working productively within the regional context.

⁴ By the way, this also applies, to the case of leading regional economies whose economic future depends not only depends on their ability to generate great 'just-off-the-campus' start-ups.

⁵ Our highlight

⁶ Having read the very recent report from the High Level Group of Innovators on establishing a European Innovation Council (European Commission, 2018), we see no reason to change the basic arguments in this conceptual paper. Unfortunately, as its title suggests, the EIC Report addresses itself to start-ups, venture capitalists and breakthrough innovations, which is a relatively small part of the capacious domain of innovation, productivity growth and economic development.

REFERENCES

P. Aghion and U. Akcigit (2015) ***Innovation and Growth: The Schumpeterian Perspective***, October 2015. Available at <http://www.coeure.eu/wp-content/uploads/Innovation-and-Growth.pdf>

European Commission, ***Europe is Back: Accelerating Breakthrough Innovation***, DG Research and Innovation, European Commission, 2018

M.Feldman et al., ***The logic of economic development: a definition and model for investment***, 2014

D.Foray, K.Morgan and S.Radosevic, ***The role of smart specialization in the EU research and innovation policy landscape***, DG Regio Working Paper, European Commission, 2018

High Level Group, ***LAB – FAB – APP – Investing in the European future we want***, DG Research and Innovation, 2017 (Lamy Report)

P. Romer, ***Should the Government subsidize supply or demand in the market for scientists and engineers?***, NBER Working Paper 7723, 2002

A.Sen, ***Commodities and capabilities***, Oxford University Press, Oxford, 1999

M.Trajtenberg, Development policy: an overview, in D. Foray (Ed), ***The new economics of technology policy***, Edward Elgar, 2010