



EURECIA Periodic Report

1. Publishable summary

The overall aim of the EURECIA project is to develop and apply a novel conceptual framework and methodology to understand better the dynamics of the European science system and the activities of the European Research Council (ERC) by assessing the impact and outcomes of its funding schemes. More specifically, the objectives of the research project are to:

- develop a conceptual framework to analyse the impact(s) of the ERC funding schemes in their interaction with existing national and transnational governance regimes;
- develop a bespoke methodology for the identification and attribution of ERC impact;
- apply this methodology, thereby both testing it and providing Stage One data on (a) the researchers, (b) research organisations, (c) research funding organisations, and (d) the wider context of national and transnational governance of science;
- propose methodologies for discrete (panel) assessment of progress towards the ERC achieving its desired and expected outcomes and impact;
- ensure that the framework for assessing outcomes and impact of the ERC incorporates a statement (and understanding) of its 'added value'; and
- provide output to aid ERC's strategy (including scrutinising its objectives) in consultation with ERC key stakeholders.

For the purposes of this project 'impact' has been conceptualised as 'a clearly attributable difference over time' and our research programme seeks to account for both intended (as represented by the objectives) and unintended impact of the ERC funding schemes. Correspondingly, the project and the research programme are structured around three framework questions. These are: 'How to measure impact?'; 'How to attribute impact?'; and 'How to assess impact?'

Measuring impact is inherently challenging particularly in a complex system like science. This demands a nuanced and revised understanding of what science is, its

dynamics, the nature of the relationship between policy and science and the causal mechanisms that produce empirically measurable effects (i.e. impact). Drawing on theories and concepts from the sociology of science, science studies and political science, among others, science has been conceptualised as a relationship between research spaces and research fields (Nedeva, www.eurecia-erc.net) and the research programme has been structured accordingly.

EURECIA is developing a methodology to measure the impact of the ERC funding schemes in five distinct but inter-related aspects of the science system: researchers, research and careers (G. Laudel, J. Glaser); knowledge communities (M. Nedeva, D. Thomas, Y. Nugroho); research organisations (M. Stampfer, J. Edler); the European funding landscape (T. Luukkonen); and national funding landscapes (B. Van der Meulen). Furthermore, the project incorporates two cross cutting themes, on science governance (D. Braun) and science dynamics (R. Whitley), ensuring cognitive congruence between the various aspects. Within each aspect we have already identified, by considering causal mechanisms, the possible effects that the ERC funding schemes can produce and have developed ways to empirically register them. A combination of research methods including surveys, cases studies and in-depth interviews, is being applied.

It is likely that impacts will vary across different funding landscapes, organisations and research fields. Hence, the study covers universities, research organisations, research funders and researchers, to be interviewed in nine European countries (the Netherlands, Switzerland, the United Kingdom, France, Germany, Italy, Poland, Norway and Austria). We will also survey the 2007 cohort of researchers supported by the ERC Starting Independent Researcher Grant, including as a control group the researchers who passed the quality threshold but did not receive funding. Because of low numbers in this cohort, accounting for different research fields is problematic but has been done where possible.

Attributing impact, particularly in a highly complex system, is another non-trivial matter that is at the core of this research project. Whilst we are aware that it is highly likely that the overwhelming majority of 'differences over time' or impact could result from a combination of influences it is still important, both cognitively and practically, to trace these back to specific policy interventions. Here we are exploring two avenues. First, attribution is possible by un-packing the causal mechanisms systematically producing particular effects (impact). Second, we are looking into the possibility to identify attributable effects of the ERC funding schemes by using a control group whose members have very similar attributes to the grantees but were not funded by the ERC.

Last but not least, EURECIA is to consider the matter of assessing the impact of research funding agencies, and the ERC funding schemes more specifically. Here the following issues deserve particular attention. First, customarily research funding agencies as well as specific funding schemes and policies are assessed on the basis of whether or not they have achieved their objectives. This is highly problematic in the case of research funding agencies for two reasons: their over-arching objective is normally to develop research capacity rather than to achieve specific, easily measured outcomes; and using objectives as a starting point of assessment does not allow for a re-consideration of the objectives themselves. This calls into question the measure of success and/or failure of research funding agencies. In other words, whether a research funding agency has created the conditions for research capacity to develop is likely to be a better measure of its success than the measurement of capacity itself. Second, assessment is to a large degree typically a normative and political process. In this respect, it is important to recognise what criteria are being used to form judgement and how these were constructed.

Since the beginning of the project the EURECIA team has made good progress in terms of: (re)conceptualising key notions; developing the conceptual framework(s) for measuring and attributing impact, specifically the impact of the ERC funding schemes; and developing a methodology for the identification and attribution of the impact of the ERC funding schemes. Naturally, achievements to date, e.g. as reflected by the working papers on the different aspects of the science system, are work in progress and the conceptual framework and methodology are continuously being updated and developed further. Currently the project is in its empirical stage during which the framework and methodology will be tested and Stage One data on the aspects of the science system will be collected.

Finally, the project is expected to produce a novel conceptual framework and a bespoke methodology for measuring, attributing and assessing the impact of research funding agencies and, more specifically, of the ERC's funding schemes. Potentially, the project results can have conceptual and methodological effects for the study of science dynamics, the understanding of the complex relationships between policy and science and the study and assessment of impact. These effects are likely to spill over into several research fields, most notably science and innovation policy, science studies, political science and sociology of science. Practically, the project's results will lay the foundation for understanding and assessing the impact of the ERC funding schemes which in turn may precipitate a higher level of reflexivity and strategic capacity for the ERC.

For further information about the project, its progress and achievements, or to participate in project events, please visit [**www.eurecia-erc.net**](http://www.eurecia-erc.net).