

Evaluating the effectiveness of agricultural and rural policies: an introduction

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Roberto Esposti and Franco Sotte (editors)

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Department of Economics and Social Sciences, Università Politecnica delle Marche, Ancona, Italy

10 Over the last two decades, policy evaluation has emerged as a sub-discipline in its own right within social sciences. Also the attention of political institutions has sharply increased in this respect, particularly as regards agricultural and rural policies, since they are persuaded that any future development in policy making should be necessarily grounded on a rigorous and systematic evaluation
15 work. In the case of the Common Agricultural Policy (CAP), the European Commission (and the DG Agriculture, in particular) publishes its own evaluation analyses and reports, produces its methodological guidelines and encourages (and funds) the scientific community to carry out independent and rigorous programme evaluation studies (European Commission, 2006;
20 EENRD, 2010).

Two overlapping factors may explain this increasing interest for policy evaluation studies. On the one hand, the scientific community has increasingly recognised policy evaluation as a legitimate scientific challenge, also in the specific fields of agricultural economics and rural studies, and has progressively developed a sophisticated toolbox in this respect (Imbens and Wooldridge, 2009).
25 On the other hand, however, policy evolution in these fields has significantly increased the complexity of this evaluation, which has led to the expansion of the amount of evidence policy design needs to better pursue its objectives. In many developed countries (and, in particular, in the EU), agricultural and rural policies have been progressively reformed with the aim of assigning them new and multiple objectives. The emphasis on agricultural and rural policies as multipurpose policies, allegedly aiming at (and/or justified by) the provision of a large set of heterogeneous public goods, will be likely confirmed and reinforced even in the next programming period. Multiple and heterogeneous
30 goals, however, make the evaluation of policy effectiveness an even more complex task. Evaluation is expected to look at all the declared policy objectives and to take properly into account heterogeneous territories and farm-agent typologies as well as the interaction with other (mostly non-sectoral) policies pursuing similar or complementary goals (e.g. environmental and regional policies).
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Within this evolutionary context, the emergence of a massive stream of research, with the dignity of a new scientific discipline, contains an opportunity and a risk at the same time. The opportunity is a real leap in the research effort that supports policy making and, therefore, a real improvement in the quality of
45 policy design and delivery. The risk, however, is a sort of methodological

orthodoxy or reductionism that tends to progressively confine the evaluation of policy effectiveness to a restricted number of approaches. In the last decade especially, the research community has paid increasing attention to the so-called quasi-experimental *ex post* evaluation methods. Just to make a few remarkable
50 examples in agricultural economics and rural studies, we can mention Pufahl and Weiss (2009), Winters, Maffioli and Salazar (2011) and Michalek (2012). In fact, there is an often underestimated difference between *ex post* policy impact assessment and evaluating policy effectiveness *latu sensu*. Reducing the latter to the quantification of an impact means to limit one's attention to
55 one or a few variables on which the policy is expected to have an influence, with the assumption that many other variables, potentially interacting with the policy implementation itself, are negligible or constant or under control.

But even assuming that a quantitative assessment of the impact of specific policy measure may fully control for the context in which this policy operates (the behaviour and expectations of stakeholders, the functioning and capacity of institutions, the role of other policies and initiatives), it remains true that a proper evaluation of such a policy should take into account, and therefore 'quantify', how it interacts and affects this context. For instance, evaluating a policy necessarily also means taking into account its implementation costs (ICs), the
60 unintended and deadweight effects, its interaction with other policies, its influence on economic agents' behaviour, including farmers' participation, etc. Most of these aspects are neglected, i.e. they are necessarily assumed as exogenous with respect to the policy delivery, in most quasi-experimental policy impact studies. On the contrary, taking all these aspects into account requires multiple
65 and complementary methodological approaches.

This Special Feature collects four selected papers presented at the 122nd EAAE Seminar, 'Evidence-Based Agricultural and Rural Policy Making: Methodological and Empirical Challenges of Policy Evaluation', held in Ancona (Italy) on 17/18 February 2011. Giving policy evaluation the above-
75 mentioned broad sense, the objective of this Seminar was to collect empirical studies ranging over the whole spectrum of possible methodologies and applications, with specific reference to agricultural and rural development policies. Papers selected and then presented at the Seminar strongly concentrated on CAP evaluation, as could be expected, and in particular on second pillar measures. This could be explained by the fact that, though the whole EU Rural Development Policy (RDP) has assumed an increasing complexity in terms of a variety of objectives and instruments, its individual (or group of) measures usually have clear implementation and well-defined targets and beneficiaries, so they seem suitable to perform quantitative evaluations. Nonetheless, the
80 complex implications of these measures (e.g. the agro-environmental measures) also underline how proper evaluation requires multiple methodological approaches.

The Seminar succeeded in bringing together papers showing this methodological heterogeneity and complementarity and covered the increasingly wide
90 set of measures implemented within agricultural and rural policies, from price support to environmental protection. The four papers selected for this Special

Feature are fully representative of this broad spectrum of methodological approaches and empirical applications and of quite diverse policy measures (and objectives). What links these papers together, besides their focus on CAP measures ranging from price support to investment subsidies and agro-environmental schemes, is that they look at policy effectiveness from a different perspective, that is, they turn the spotlight either on the behaviour of agents or on institutional capacity. In doing so, they provide a concrete picture of this methodological multidimensionality. Therefore, the ambition of this Special Feature is to help a fruitful scientific discussion about the large and open toolbox the practitioners can exploit to perform consistent policy evaluations.

The paper by Barbara Fährmann and Regina Grajewski focuses on policy cost-effectiveness by paying specific attention to the often neglected ICs in the context of rural development policies. While ICs are in principle recognised as a relevant factor for policy making, they are seldom taken into account in policy evaluation. Though an appraisal of ICs, including proof of effectiveness and implementation adequacy, should be essential in the evaluation of programmes, taking ICs into account in policy evaluation raises considerable methodological and practical concerns. The paper develops a methodological approach to quantify and include ICs within evaluation studies. This approach is based on cost–performance accounting administrative data applied to several RDP measures implemented in five German states. Results show that, though high ICs increase the overall cost of the programme leading to a reduction in funding efficiency, they may also improve the practical efficiency of programmes because they are associated with more targeted and more effective measures. In any case, it emerges that if an RDP evaluation does not appropriately include the respective ICs, neither its findings nor its recommendations can be truly meaningful.

Policy cost-effectiveness is again at the core in the paper written by Johannes Sauer and Ada Wossink, though from a different perspective. They propose a new approach to assess the cost-effectiveness of green payment schemes. For such measures to be effective, it becomes critical to know how these options interact with agricultural production decisions. This interaction is evidently affected by the heterogeneity of farms and farming conditions. The adopted theoretical framework allows for complementary, supplementary and competitive relationships between agricultural production and non-marketed ecosystem service generation. The three cases emerging from this theoretical approach depend on the minimum level of the non-marketed ecosystem services and are empirically investigated using a flexible transformation function and UK farm-level panel data. Empirical results confirm that, as biophysical connections between the provision of ecosystem services and market activities have important implications on farm performance, there is potential for improvement in its efficiency. This improvement could be achieved through better policy targeting and by offering contracts on the basis of competitive bidding that could alleviate the problem of over-compensation and clearly enhance the cost-effectiveness of agricultural policies.

The paper submitted by Stefano Pascucci, Tiziana de Magistris, Liesbeth Dries, Felice Adinolfi and Fabian Capitanio moves our attention from policy design and costs to the response of farmers in terms of participation. After all, also low farmer participation may reduce policy effectiveness. The paper analyses farmer participation in some exemplary RDP measures to assess, on the one hand, to what extent regional RDP priorities are driven by regional characteristics and, on the other hand, whether regional policy priorities help to explain farmer participation. Therefore, the approach emphasises how a different effective policy across regions may depend on the heterogeneous institutional capacity to select priorities and measures that encounter a higher participation rate by local farmers. Using Italian farm-level data, the paper estimates a multi-level binary choice model that includes both farm-level and regional-level explanatory variables. Results suggest that, while regional governments tend to select RDP priorities based on the specific features of their region, these priorities encounter higher farmer participation only for some measures, e.g. agro-environmental schemes, while this is not necessarily observed in other cases (measures regarding farm competitiveness, for instance).

Finally, the paper by Jan-Henning Feil, Oliver Musshoff and Alfons Balmann proposes an approach aimed at simulating the different investment decisions of farmers in response to alternative policy schemes, like price support, investment subsidies and production ceilings. The paper adopts a real option approach, an approach that is assuming an increasing interest in policy analysis as it seems more suitable for analysing agricultural investments than traditional investment models based on the net present value. By means of this model, and of genetic algorithms as heuristic optimisation techniques, the authors simulate the impact of the different political schemes on farm investments and profitabilities and on sectoral welfare. It has been shown that the implementation or extension of these political schemes may generally increase the willingness of the farmers to invest but may also cause a significant reduction in sectoral welfare. Comparing the different policies, results suggest that both investment subsidies and production ceilings are preferable to price floors because sectoral welfare declines less.

As Editors of this Special Feature, and chairs of the Seminar Organizing Committee and Scientific and Program Committee, respectively, we share the responsibility for the initial short-listing of the papers presented at the seminar, the selection of the external referees and the control of the whole review process in order to finally come to the selection of the four papers here included. Nonetheless, we wish to thank Alison Burrell for her helpful collaboration during the selection of papers and reviewers, as well as the Editors of the *European Review of Agricultural Economics* and the ERAE Foundation for their support and assistance in the realisation of this Special Feature. A final thanks goes to all the contributors and participants to the 122nd EAAE Seminar and to its organisers and funders, that is, the Department of Economics and Social Sciences of the Università Politecnica delle Marche, the Interuniversity Center on Rural, Environmental, Economic Policies (SPERA) and the non-profit organisation 'Associazione Alessandro Bartola'.

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