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ENVIRONMENTAL SUBSIDIES AND FARM ECONOMIC AND ENVIRONMENTAL PERFORMANCE

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Environmental subsidies and farm economic and environmental performance[1]

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INTRODUCTION

The Common Agricultural Policy (CAP) has broadly two main groups of subsidies: Income support and rural development support. Under the new CAP, there is the introduction of schemes that promote environmental protection, animal protection welfare, and climate change adaptation. These schemes will be funded by Member States' budgets devoted to income support. Agricultural subsidies influence both farm income and farm competitiveness. While research on the effects of subsidies on the income of different farmers and the competitiveness of their farms is not new, quantification of environmental performance associated with environmental payments has received limited academic attention. We analyse the relationship between the Green Low-Carbon Agri-Environment Scheme (GLAS) and environmental and competitiveness outcomes. GLAS is the main agri-environment scheme in Ireland that has been designed to promote more sustainable production practices.

DATA AND ESTIMATION

We use data from the National Farm Survey (NFS) distinguishing dairy and beef producers. Our approach helps to understand the relationship between environmental subsidies and potential inefficiencies in production. In addition, it helps to identify the relationships between these subsidies and potential and unintended incentives that affect the farmer's decision on the type and amount of inputs that can potentially translate into increases in the farm's methane

[1] This Bulletin summaries the findings from: Tovar Reaños, M.A and Martinez Cillero M (2022), Farm technical and environmental efficiency and subsidy redistribution in Ireland: A simulation approach of possible performance and equity effects, Journal of Agricultural Economics, Available online: https://onlinelibrary.wiley.com/doi/full/10.1111/1477-9552.12509. This research is supported by the ESRI Environment Research Programme, which in turn is funded by the Environmental Protection Agency, Ireland. The EPA Research Programme is a Government of Ireland initiative funded by the Department of the Environment, Communications and Climate Action.

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emissions. The results from this research aim to inform and support the design of policies to mitigate these issues.

We find considerable differences in the effects of environmental subsidies across the farm types. Our estimates suggest that the GLAS has reduced inefficiencies in the production of daily farms, whereas we do not find any evidence for a similar effect in the case of beef farms. Conversely, we find that GLAS has not influenced the environmental performance of dairy farms, but we find evidence that this subsidy has influenced the performance of beef farms.

We also simulate increases in GLAS payments financed through reductions in income support. Under the scenario in which additional payments are allocated proportionally to the received GLAS payments, we find that the impacts on income inequality can be smoothed for both farm types.

POLICY IMPLICATIONS

Our findings highlight the importance of considering the heterogeneous effects of changes in environmental payment schemes across different farm types. Our simulation results also suggest a trade-off between improving competitiveness and environmental gains. When designing environmental payment schemes, policy makers need to consider that effects differ across farm types and income levels.

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