Regional impacts of the Austrian carbon price

Topic: Input-Output Modelling: Energy policies (2)
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Abstract

The Austrian government introduced a national carbon price for sectors not covered by the EU Emission Trading System in October 2022. To private households, revenues from national carbon pricing are recycled via regionally differentiated lump-sum ("climate bonus") payments. In this paper, we use the macroeconomic models ADAGIO and ASCANIO to analyse the impact of carbon pricing and revenue recycling at the level of the Austrian federal states. Thereby, we contribute to the literature on the regional effects of carbon pricing as well as to the debate on the design of compensation measures, focussing on the effects of lump-sum compensation on vertical income distribution and regional economic performance. According to our simulations, national carbon pricing leads to a slight decline in real GDP and employment. On household incomes, the effect on aggregate is neutral, but as expected effects on income distribution are progressive. These effects can partly be explained by the compensation scheme chosen, since lump-sum payments can offset the regressive effects of carbon pricing but are not suitable for achieving positive macroeconomic impacts. Federal states with a higher share of manufacturing lose more than those with a high share of services.
Additionally, we analyse the implications of the abolishment of the climate bonus in 2025 due to budget consideration.

Keywords: carbon pricing, recycling carbon pricing revenue, revenue use, compensation mechanism, income distribution, economic growth, regional impact
JEL codes: H23, Q54, Y58