

## Hidden welfare effects of tree plantations

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### Abstract

Subsidies to promote tree plantations have been questioned because of negative impacts of the forestry industry. Quantitative evidence on the socioeconomic impacts of afforestation subsidies or of tree plantations is elusive, mainly due to data scarcity. We assess the overall impact of a tree plantation subsidy in Chile, using our original 20-year panel dataset that includes small area estimates of poverty and the subsidy assignment at the census-district scale. We show that forestry subsidies – on average – in fact, do increase poverty. More specifically, using difference in difference with matching techniques, and instrumental variables approaches, we show that there is an increase of about 2 per cent in the poverty rate of treated localities. We identify employment as a causal mechanism explaining this finding, since we found a negative effect of tree plantations on employment, and therefore, on poverty. We suggest reassessment of the distributional effects of the forest subsidy and forestry industry.

### Keywords

afforestation subsidies, impact evaluation, poverty, tree plantations.