Implementation of carbon pricing in an aging world calls for targeted protection schemes

Topic: Input-Output Analysis: Income Distribution Policies - II
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Understanding the impact of climate fiscal policies on vulnerable groups is a prerequisite for equitable climate mitigation. The elderly, especially the low-income elderly, as one of the most vulnerable groups, have largely been ignored in current climate policy designs. Here, we quantify and compare the distributional impacts of carbon pricing on different age-income groups in the US, the UK and Japan first and then on different age groups in 31 countries. We find that the elderly are more vulnerable to carbon pricing than younger groups in all income groups. In particular, the low-income elderly and elderly in less wealthy countries face greater challenges because carbon pricing lead to both higher rate of increase in living cost among low-income elderly and greater income inequality within the same age group. In addition, the low-income elderly would benefit less than the younger group within the same income group in the commonly proposed carbon revenues recycling schemes. The high vulnerability of the low-income elderly to carbon pricing calls for targeted social protection along with climate mitigation polices towards to an aging world.