

Submission for 8th International German Socio-Economic Panel User Conference

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Title: Valuing Air Quality Using the Life Satisfaction Approach

Abstract: We use the life satisfaction approach to value air quality, combining individual-level panel for Germany in the years 1985-2003 and high-resolution SO₂ data. To avoid simultaneity problems, we construct a novel instrument exploiting the natural experiment created by the mandated scrubber installation at power plants, with wind directions dividing counties into treatment and control groups. We find a negative effect of pollution on well-being that is larger for instrumental variable than conventional estimates, robust to the inclusion of local unemployment and particulate pollution, and larger for environmentalists and predicted risk groups. To calculate total willingness-to-pay for clean air, the estimates are supplemented by hedonic housing regressions.