

# Intergenerational Transmission of Education in Japan\*

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April 20, 2013

## Abstract

This paper investigates the intergenerational effects of education in Japan, using a non-parametric bounds approach. Parents' education is considered one of the key factors in explaining of child's educational success. Empirical studies of social science have long been interested in quantifying the magnitude of the relationship, and have often found a significant positive correlation between parents' and child's schooling. Unfortunately, a positive intergenerational correlation does not necessarily reflect a causal relationship. If the identification assumption on the exogenous treatment selection is not valid, the ordinary least squares estimates provide a biased magnitude of the causal effect. Rather than imposing the strong assumptions required to obtain point estimates, this paper derives bounds depending on relatively weak and testable monotonicity assumptions on treatment response, selection and instrumental variables. A combination of three assumptions provides informative bounds on the average treatment effect of parents' schooling on child's schooling. The main results show that the tightest upper bounds on the effects are lower than the point estimates that rely on the assumption on exogenous selection of parents' schooling. These results suggest that simple regression estimates have an upward bias and overstate the true causal effect of parents' education.

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\*This work is supported by the Grant-in-Aid for Japan Society for the Promotion of Science Fellows (DC2), Grant Number: 12J10408.