

HETEROGENEOUS TREATMENT EFFECT OF CLASS SIZE REDUCTION

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Abstract

This paper applies instrumental variable quantile regression (IV-QR) to STAR experimental data for measuring heterogeneous class size effect across SAT score distributions. Due to the debate over class size reduction as a possible human capital policy to reduce inequality, primary interest especially focuses on its effect for low achievers. This study, however, demonstrates that treatment effect is quantitatively greater in upper quantiles rather than in lower quantiles; class size reduction widens achievement gap between high achievers and low achievers. This result is consistent with the implication of modified Lazear model of class size which assumes complementarity between student's ability and congestion effect. Empirical evidence suggests that promotion of class size reduction mitigates black-white achievement gap only among high-achievers, leaving behind the most disadvantaged students.

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