

# Estimating Quantile Treatment Effects in a Regression Discontinuity Design

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## Abstract

The connection between regression discontinuity and instrumental variables noted by Angrist and Lavy (1999) and Hahn, Todd and van der Klaaw (2001) suggests using quantile IV to estimate quantile treatment effects in a regression discontinuity design. This paper develops a simple, implementable quantile IV estimator for treatment effects in a regression discontinuity framework, using the inverse quantile regression method developed by Chernozukov and Hansen (2006). An empirical application to the returns to compulsory schooling is provided.

**Keywords:** quantile methods, regression discontinuity

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