

# Inference for Parameters Defined by Conditional Moment Inequalities

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September 4, 2008

## **Abstract**

In this paper, we propose an instrumental variable approach to construct confidence sets for the true parameter in models defined by conditional moment inequalities/equalities. We show that by properly choosing instrumental functions, one can transform conditional moment inequalities/equalities into unconditional ones without losing identification power. Based on the unconditional moment inequalities/equalities, we build Anderson-Rubin-type test statistics which have tractable asymptotic distributions. Confidence sets are constructed by inverting appropriate tests. Critical values are chosen using subsampling, plug-in asymptotic and generalized moment selection (GMS) procedures. We show that our confidence sets have correct coverage probability under a broad set of drifting sequences of parameters.