Abstract:

How do wheelchairs impact income and the possible channels of probability of employment and time allocation for the physically disabled in Ethiopia? In order to improve opportunities for people with disability, it is imperative to know the effect that a wheelchair has on the lives of the disabled. An estimated 7.6 percent of the population of Ethiopia is disabled (ILO, 2004). This study focuses on physically disabled wheelchair users as well as those in need of a wheelchair in Ethiopia. Analysis from 261 participants across Addis Ababa, Ethiopia was taken to analyze a wheelchair's impact across numerous time, economic and distance variables.

I demonstrate how matching methods can be used to estimate how wheelchair beneficiaries would have fared had they not been given a wheelchair. Through nearest neighbor covariate matching results show that current wheelchair users earn \$6.23 more per week and work 1.75 hours more per day than their non-wheelchair using counterparts. This study only uses a one time period cross sectional data and cannot control for time invariant heterogeneity. However, this study is the first study to use an observable control that is statistically similar across measurable covariates between treatment and control groups. Prior literature is mostly summary in nature and no econometric research has been done to identify a valid counterfactual. The positive results point to the potential for wheelchairs to be a cost-effective catalyst for economic growth and societal engagement for wheelchair beneficiaries. Future research, possibly through a randomized control trial, to better tease out channels of impact that wheelchairs may be having. The results of this study are limited in causal conclusions, but the results and subsequent robustness checks are substantial.