Agricultural and Applied Economics Seminar

Contract Farming as Partial Insurance

Marc Bellemare
Associate Professor
Applied Economics
University of Minnesota
(with Yu Na Lee and Lindsey Novak)

Wednesday, September 28, 2016
12:00 – 1:30 pm
119 Ruttan Hall

The institution of contract farming, wherein a processing firm contracts out the production of an agricultural commodity to a grower household, has received much attention in recent years. We look at whether participation in contract farming is associated with lower levels of income variability for a sample of 1,200 households in rural Madagascar. Relying on a framed field experiment aimed at eliciting respondent marginal utility of participation in contract farming for identification in a selection-on-observables design, we find that participation in contract farming is associated with a 0.20-standard deviation decrease in income variability. Looking at the mechanism behind this finding, we find support for the hypothesis that fixed-price contracts explain the reduction in income variability associated with contract farming. Then, because the same assumption that makes the selection-on-observables design possible also satisfies the conditional independence assumption, we then estimate propensity score matching models, the results of which show that our core results are robust and that participation in contract farming would have greater beneficial effects for those households that do not participate than for those who do, i.e., the magnitude of the average treatment effect on the untreated exceeds that of the average treatment effect on the treated. Our findings thus show that participation in contract farming can help rural households partially insure against income risk via contracts that transfer price risk from growers to processors.