Title: "Prospective Fertility Intentions and LATEs of Fertility on Female Labor Supply"

joint with Hide Ichimura (University of Arizona) and Wanchuan Lin (Peking University)

Abstract: We revisit the Local Average Treatment Effect (LATE) of fertility on female labor supply, following the influential work of Angrist and Evans (1998). As it is well-known, the exclusion restriction plays a key role in the identification of LATE (Imbens and Angrist (1994), Angrist et al. (1996)). However, as argued in Ichimura and Pantano (2020) a generic violation of this restriction is likely present in many applications of the LATE framework as used in empirical practice. We provide evidence that "failed compliers" are present in Angrist and Evans (1998)'s seminal work that used sex-composition of existing children to instrument for additional fertility. Failed compliers are those who intend to comply with the instrument assignment but eventually either are, or would be (if counterfactually assigned to a different value of the instrument), unable to comply. For example, a woman who is longing for a girl after two boys may plan to have a third child, yet she may find out she is now infertile, becoming a never-taker in the classic LATE framework. These failed compliers contaminate the always-takers and never-takers. The fundamental exclusion restriction is then violated for these never- and always-taker groups whenever individuals who intend to be compliers can engage in pre-treatment behaviors that interact with the intended treatment status to improve the potential outcome under that treatment status. We then follow Ichimura and Pantano (2020)'s suggestion to use elicited data on intended treatment status, in our case prospective fertility intentions, to restore identification of LATE and explore whether and to what extent the classic IV/Wald framework provides a biased estimate for the LATE of fertility on female labor supply. Using this alternative framework we find that the effects of fertility on labor supply are still negative and significant, but much smaller in magnitude.