

“Childhood Immunization, Mortality and Human Capital Accumulation: Micro-Evidence from India” (*Job Market Paper*)

Abstract: In the mid-1980s, the Indian government embarked on one of the largest childhood immunization programs-called “Universal Immunization Program” (UIP)-in order to reduce the high mortality and morbidity among children. I examine the effect of this immunization program on child mortality and educational attainment by exploiting district-by-cohort variation in exposure to the program. Results indicate that exposure to the program reduced infant mortality by 0.4 percentage points and under-five child mortality by 0.5 percentage points. These effects on mortality are sizable-they account for approximately one-fifth of the decline in infant and under-five child mortality rates between 1985-1990. The effects are more pronounced in rural areas, for poor people, and for members of historically disadvantaged groups. While the program clearly reduced mortality, it had mixed effects on children's educational outcomes. I find it had a negative impact on primary school completion, but a positive impact on secondary school completion. The negative effect at low levels of schooling may be due to lower average health among marginal surviving children or resource constraints faced by the government where investments in child health programs may have crowded out investments in school infrastructure and quality. The greater propensity to complete secondary school on the other hand may be due to improved health among those farther away from the margin of survival.

“Economic and Social Impacts of Rural Roads in India” (with Prof. Abhijit Banerjee (MIT) and Prof. Rohini Pande (KSG, Harvard))

Abstract: There is a general belief that roads are good for development and living standards, but, little is known about impacts of rural infrastructure on the welfare of the people. Particularly for developing countries, there is a lack of evidence on the return to rural infrastructure projects. This paper exploits the strict population criterion to build roads and uses this criterion as an instrument to examine the impacts of roads on the well being of the rural people. The Government of India launched Pradhan Mantri Gram Sadak Yojana (PMGSY) in 2000, to provide connectivity to unconnected rural villages as part of a poverty reduction strategy. We conducted a large village level survey in the rural villages of Uttar Pradesh in India. The survey explores various economic and social dimensions along which roads may have affected rural welfare. The data collection is over and we have just started analyzing the data.

“International Trade and Mobility” (with Prof. Adriana Kugler, University of Houston)

Abstract: A substantial literature has emerged in the last decade examining the correlation of economic status across generations in the US, Europe and Scandinavian countries. There are relatively fewer studies, however, which examine developing countries and even fewer studies which examine the possible causes and channels of intergenerational mobility. In this paper we examine the role of international trade on intergenerational mobility in India. We use repeated cross-sections of household data from National Sample Survey (NSS) and preliminary results suggest that the intergenerational earnings elasticity ranges from 49.8% to 54.8%. We also estimate the elasticity for education and find that it varies from 49.9% to 53.9%. We find that impact of father’s earnings on son’s earnings gets reduced when a measure of caste capital is included, suggesting that the consideration of ethnic capital, as suggested by Borjas (1991), is important. Another preliminary finding is that the coefficients for education regression and earnings regression are very similar in magnitude, suggesting that the transmission is channelized through education. Analysis of impact of international trade on mobility has just begun. We use variation in district’s exposure to international trade to examine whether international trade is an equalizing force for the son’s generation.

“The Child Quantity-Quality Trade-off in Developing Countries”

Abstract: There are numerous studies that confirm the existence of child quantity-child quality trade-off proposed by Gary Becker and his associates (Becker, 1960; Becker and Lewis, 1973; Becker and Tomes, 1976). A recent study by Angrist, Lavy, and Schlosser (2005) and Black, Devereux, and Salvanes (2005) cast doubt on the existence of a quantity-quality tradeoff and raise a provocative question: Is there a quantity-quality tradeoff as formulated by Becker? In this paper I introduce another source of exogenous variation in child quantity at the household level, exposure to India’s childhood immunization program (Universal Immunization Program), to test the existence of quantity-quality tradeoff in a developing country. I utilize exposure of first-borns to the immunization program to investigate probability of subsequent births. I look at investment in health of the child such as use of health care facilities as well as investments in education as the quality outcome variables. I use individual-level data from the Reproductive and Child Health (RCH) Survey. RCH is a large, nationally representative survey. Analysis of the data is underway.