



## 4<sup>th</sup> Annual CEGA Research Retreat (R<sup>2</sup>)

Friday, November 2<sup>nd</sup>, 2012

The Seaborg Room

### *Presentations*

#### **“Could Droughts Improve Human Capital? Evidence from India”**

*Manisha Shah (UC Irvine)*

Weather shocks should affect both total income and the relative price of time. If wages are affected by rainfall shocks, and child and parental time are important inputs into human capital, droughts could potentially increase human capital investment. We find that while children exposed to drought during critical periods (particularly in utero) score lower on cognitive tests, current-year droughts increase test scores. We examine potential pathways for this effect, and find that both children and parents work less and have lower wages in drought years. The converse holds true for positive rainfall shocks. We also find that early-life exposure to droughts has deleterious effects on health, schooling, and later-life wages. We conclude that both the income and substitution effects of rainfall shocks are important in this context.

#### **“Does the Effect of Pollution on Infant Mortality Differ Between Developing and Developed Countries? Evidence from Mexico City”**

*Paulina Oliva (UC Santa Barbara)*

Much of what we know about the marginal effect of pollution on infant mortality is derived from developed country data. However, given the lower levels of air pollution in developed countries, these estimates may not be externally valid to the developing country context if there is a nonlinear dose relationship between pollution and mortality or if the costs of avoidance behavior differs considerably between the two contexts. In this paper, we estimate the relationship between pollution and infant mortality using data from Mexico. We find that an increase of 1 parts per billion in carbon monoxide (CO) over the last week results in 0.0032 deaths per 100,000 births, while a 1  $\mu\text{g}/\text{m}^3$  increase in particulate matter (PM10) results in 0.24 infant deaths per 100,000 births. Our estimates for PM10 tend to be similar (or even smaller) than the U.S. estimates, while our findings on CO tend to be larger than those derived from the U.S. context. We provide suggestive evidence that a non-linearity in the relationship between CO and health explains this difference.

#### **“Daily Shocks and Daily Labor Supply in Kenya”**

*Jon Robinson (UC Santa Cruz) and Pascaline Dupas (Stanford)*

The majority of people in developing countries are self-employed and receive income in small sums, predominantly in cash. Managing such cash assets can be difficult, especially since very few people have access to a safe place to save money: people may be tempted to spend cash on impulse goods, or may have difficulty shielding cash from requests from others (Jakiela and Ozier, 2012; Dupas and Robinson, 2012). If people cannot easily transfer wealth across days for reasons like this, daily labor supply may be sensitive to very short term income needs. This comes at potentially significant cost with convex effort costs, and at even greater cost if health capital stocks are drawn down by work (as is very likely in the case of manual labor in developing countries). In such an environment, it is likely that people will quit work soon after reaching a daily income goal – their labor supply will resemble that of individuals with reference-dependent preferences (Koszegi and Rabin 2006), which has found empirical support in several studies in the US (Camerer et al, 1007; Farber, 2004; Crawford and Meng, 2011).

In this paper, we document how the labor supply of Kenyan bicycle-taxi drivers (locally known as “boda-bodas”) responds to daily consumption needs. To this end, we use passenger level data from daily diaries kept by our study participants over 30 to 90 consecutive days. Crucially, this data also includes a self-reported daily income goal, as well as information on shocks encountered. Bodas do not appear to smooth their labor supply across days. Instead, daily labor supply fluctuates with daily consumption needs, with the hazard rate of stopping work for the day jumping up as soon as the daily goal has been reached. Preliminary evidence suggests that such effects are less pronounced for the few individuals in our sample who report having some personal savings at baseline and most pronounced for those in poor health at baseline. We also show that goals are sensitive to health shocks, and that bodas work more on days when they have large goals which cannot be reached on a given day.

Given the convex health costs of boda work (e.g., working extremely long hours as a boda on “high consumption” days rapidly depletes one’s health stock), this pattern of labor supply potentially has negative dynamic consequences on productivity. Consistent with this, average health among bodas in our sample is extremely poor. These results suggest that increasing access to means to transfer wealth across days or to improving health capital could greatly improve the welfare of daily income earners in Kenya.

### **"Do Fair Elections Enhance Government Legitimacy? Experimental Evidence from Afghanistan"**

*Clark Gibson (UCSD) and Michael Callen (UCLA)*

International development agencies invest heavily in institution building in fragile states, including expensive interventions supporting democratic elections. Yet little evidence exists on whether democratic elections enhance the domestic legitimacy of governments, in the sense that they increase the consent of residents to be governed. Using the random assignment of an election fraud-reducing intervention, we find that decreasing visible electoral misconduct improves four survey measures of consent, and of attitudes toward government: (i) disputes should be brought to the Afghan National Police; (ii) improvised explosive devices (IEDs) should be reported; (iii) Afghanistan is a democracy; and (iv) parliamentarians can improve service provision. These results are consistent with theories of legitimate government based on conditional consent, such as reciprocity and signaling. Additional evidence consistent with election fairness increasing contingent consent is that these results attenuate if respondents knew that the fraud intervention was external.

### **"Understanding Peer Effects in Financial Decisions: Evidence from a Field Experiment"**

*Leo Bursztyn (UCLA)*

Using a high-stakes field experiment conducted with a financial brokerage, we implement a novel design to separately identify two channels of social influence in financial decisions, both widely studied theoretically. When someone purchases an asset, his peers may also want to purchase it, both because they learn from his choice (“social learning”) and because his possession of the asset directly affects others' utility of owning the same asset (“social utility”). We find that both channels have statistically and economically significant effects on investment decisions. These results can help shed light on the mechanisms underlying herding behavior in financial markets.