3rd Urbanization and Poverty Reduction Research Conference
Session I

Comments by:
Antonio M. Bento
Impossible to properly discuss four excellent papers in 8 minutes

For each paper:
- Highlight the key finding
- Provide one comment for discussion

Identify gaps in the literature and directions for future research
Ambitious paper – Map and measure urban expansion for 200 cities in the world

Unique: Global Nature; Fantastic Data

Interesting Facts:

- Historical cities increased their urban extent 16-fold during 20th century; urban densities declined at a rate of 2% per annum
- Urban land cover in developing countries may increase on average 4-6 fold

Next Steps: Determinants and consequences of expansion (squatterizing; affordability; road network); Push to link with discussions of climate adaptation in cities
Fantastic Question: link exposure to high temperature anomalies in-utero with long-term impacts on adult human capital accumulation and productivity

Strategy: match earnings of formal sector workers in Ecuador on temperature and rainfall anomalies in and around the time (location) of each individual’s birth

Finding: higher temperatures while in-utero lead to significantly lower earnings for whom a 1°C increase in temperature leads to a 1.1%-1.7% decrease in earnings

Concern: Ability to make long-term statements (without knowing mechanism); Selection into formal sector; Informal sector works do not have strategies for adaptation (population of interest); Climate may become a poverty trap
**Question:** links between India’s manufacturing spatial adjustments and electricity usage

**Highly relevant for public policy:** reducing power blackouts; pollution levels (and its spatial distribution)

**Phenomenal data:** surveys for organized and informal sectors

**Finding:** electricity usage per unit of output in urban plants declined steadily; **mechanisms:** reductions in existing sites of activity; lower usage in fast-growing sectors

**Next Steps:** Link spatial adjustments to pollution; evaluate infrastructure projects
Theoretical structural model to evaluate the impact of migration restrictions on spatial shocks (e.g. sea level rise; flooding)

Key model features:

- Location specific attributes (amenities, productivity and geography)
- Blend of a static and dynamic component
- Only channel of adaptation is migration, therefore, relaxing migration restrictions lead to large welfare gains; agents own land but because there is no housing in the model (no mechanism for defensive expenditures against the shock)
Thoughts for further work

- **Modeling of Climate change**: Disentangle the unexpected shocks versus long term steady climate change.
- Towards a more comprehensive model of the **channels** for climate adaptation and impacts:
  - Channels of adaptation: technology; physiological factors; defensive expenditures (improved housing and other goods); migration;
  - Distributional Impacts: Adaptation is cheaper when accounting for these channels, but not everybody can adapt.