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3rd Urbanization and Poverty Reduction Research Conference Session I

Comments by:
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Outline

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

USCPrice Paper #1 – Shlomo Angel

- ➤ Ambitious paper Map and measure urban expansion for 200 cities in the world
 - ➤ <u>Unique</u>: 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 (squattering; affordability; road network); Push to link with discussions of climate adaptation in cities

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Paper#2 - Carrillo et al.

- Fantastic Question: link exposure to high temperature anomalies in-utero with <u>long-term</u> impacts on adult human capital accumulation and productivity
- ➤ <u>Strategy</u>: 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
- ➤ <u>Concern</u>: Ability to make *long-term* statements (without knowing mechanism); Selection into formal sector; Informal sector works do not have strategies for adaption (population of interest): Climate may become a poverty trap

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Paper #3 - Ejaz Ghani et al

- Question: links between India's manufacturing spatial adjustments and electricity usage
- ➤ <u>Highly relevant for public policy</u>: 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

USC Price Policy Paper #4 Desmet et al.

- 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)

USC Price Thoughts for further work

- ➤ <u>Modeling of Climate change</u>: 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