Discussant presentation for
Chen et al., “The socioeconomic impact of land use policy and metro investment in urban India”

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ADBI workshop
Overall observations of the presentation

• Very important research question:
  • How FAR relaxation may improve the effect of transport investments
  • FAR relaxation and infrastructure investment may synergistically unlock urban development (e.g., TOD)

• However, the dynamics that the authors want to describe are highly complex (i.e., multiple variables affect each other in a non-linear, bi-directional manner)
  • Behavior of households, businesses, housing market to relaxing the FAR in the short term and long term are unknown.
    • Do they relocate? What is the impact of such relocation? Do such behavior have cascading effects?
    • How do we anticipate such behavior? Are stated preferences using a survey enough?

• The “simulation” the authors use is not described fully in the slides, however, understanding this complex problem will require a systems-based model (e.g., system dynamics model, dynamical equilibrium model, ...)
  • The solution/approach of the authors seem to disregard such complex dynamics ...
Model assumptions and dynamics were not clear

• The methodology used in the simulation was not fully explained in the slides

Some questions to understand the results better:

• How do you simulate the changes in urban mobility patterns, economic benefits, etc given the alternative urban form as the input?

• What are the assumed dynamics in the simulation?
  • How would the distribution of jobs change due to the change in urban form? Also considering the disparity in the quality of jobs?
  • How would the residential distribution change when we unlock FAR regulations? Is there an underlying housing market model to simulate the relocation of households?
Considering the costs of vertical expansion

• Benefits vs costs need to be assessed to conclude that relaxing FARs could greatly enhance economic returns.

• How do you compute the additional costs (or externalities) of building vertically and additional infrastructure systems for maintaining livability in the dense urban areas?
  • Regulatory frameworks may be inadequate to enable vertical urban development in Indian cities
  • Environmental safeguards? Pollution and congestion in urban areas
  • Social safeguards to compensate for relocation?
    • Land prices rise in city center, people need to live in suburbs with longer commute time
Considering other dimensions of urban development (e.g., inclusiveness)

- Gentrification is often a result of rapid urban development
- What are the social costs for gentrification and increased social segregation?
Use of mobile phone data to understand urban segregation

• Using mobility data, we can quantify how wealthy and poor people encounter in urban areas.
  • “segregation” = when wealthy (poor) people only meet wealthy (poor) people

https://inequality.media.mit.edu/
World Bank report on vertical growth

Data-driven approach compared to counterfactual

Data driven approach, using data from >100 cities across developing and developed countries.

<-> different from a counterfactual modeling approach, which could be very complex.
Summary of discussions

• Very important research topic and questions
• Complexity of questions and dynamics may be underestimated
  • More details on the methodology is needed for me to make more concrete suggestions
  • Model assumptions?
• Considering the costs and externalities of vertical expansion
  • Urban segregation, gentrification, environmental pollution, ...
  • WB report could be helpful in painting a more comprehensive picture
• More generally, what is preventing FAR relaxation in Indian cities?
  • My hunch – factors other than economic productivity; e.g., politics
Thank you!

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