Secondary Towns and Poverty Reduction: Refocusing the Urbanization Agenda

Luc Christiaensen and Ravi Kanbur

World Bank-Cornell Conference
Washington, DC
18-19May, 2016
Introduction (1)

• Conference is motivated by the exploration of a central hypothesis:

• A shift in public investment towards secondary towns from big cities will improve poverty reduction performance.
Introduction (2)

• Of course the hypothesis itself raises many questions:
• What exactly is the dichotomy between secondary towns versus big cities?
• What is the evidence for the contribution of secondary towns versus cities to poverty reduction?
• What are the economic mechanisms for such a differential contribution and how does policy interact with them?
Introduction (3)

• The papers in this conference contribute in many different ways to answering one or more of these questions.

• In these opening remarks we will develop the questions a little further and suggest sub-questions and sub-hypotheses for structuring a discussion on the composition of urbanization.
Town-City Dichotomy (1)

• What exactly is the dichotomy between secondary towns versus big cities?

• Till ten or fifteen years ago the only definitions available were administrative ones. In India, for example, the hierarchy from state capitals, to district capitals, to talukas, etc. Or other administrative entities like Urban Local Bodies (ULBs).

• This has led, and still leads, to inconsistency and incoherency in characterizing “urban” or “urbanization” across countries, or even within countries over time as definitions change (egg China).
Town-City Dichotomy (2)

• Geo-spatial methods married to census data have added an entirely new set of methodologies to definitions. But they are not without their own issues.

• The central conceptual approach is to marry density and size.

• eg Afropolis: “The definition of urban agglomerations is based on two criteria, the land use and the quantity of the population: 1. An agglomeration is a continuously built-up and developed area, with less than 200 metres between two buildings. 2. An agglomeration is considered urban if it has a minimum of 10 000 agglomerated inhabitants.”
Town-City Dichotomy (3)

• Eg OECD Functional Urban Area (FUA):
• Start with residential net density for each 1-square-kilometre cell of a regular grid structure.
• Cells with a population of at least 1,500 inhabitants are “urban core cells”.
• The urban core is aggregation of all contiguous regions whose share of area covered by urban core cells is higher than 50% and whose total population is higher than 50,000 inhabitants.
• [T]wo or more cores are considered as part of the same functional region if at least 15% of resident population in one core commute to the other core...
• All municipalities whose shares of resident population that commute to the core exceed 15% are considered as composing the hinterland of the metro region.”
Town-City Dichotomy (4)

• Issues:
  • Questions about”
    • Density definition
    • Density threshold
    • Size threshold
    • Interlinkage criterion
  • How exactly to delineate small town from big city—just size threshold? Or size cum density?
  • Administrative jurisdictions are still the categories for official data collection and collation.
  • Also, might not administrative jurisdictions still be relevant as the locus of policy formulation and implementation?
Town-City Dichotomy (5)

• Overall, worth being clear about the exact definition of “rural”, “small town”, and “city” in the papers in the conference, and whether the definition matters for results and their comparability.

• However, modulo the definitional issues, how do the secondary towns differ from cities on the one hand and rural areas on the other?
Poverty Gradients and Poverty Reduction (1)

• What is the evidence for the contribution of secondary towns versus cities to poverty reduction?
• Two types of basically reduced form evidence—static and dynamic.
Poverty Gradients and Poverty Reduction (2)

• First is static “poverty gradient” from rural to small towns to cities.
• The gradient from rural to urban is well established, going back at least as far as Kuznets (1955):
  • “What little we know of the structures of these two component income distributions reveals that: (a) the average per capita income of the rural population is usually lower than that of the urban;' (b) inequality in the percentage shares within the distribution for the rural population is somewhat narrower than in that for the urban population-even when based on annual income.”
• The rural to urban declining poverty gradient, a resolution of the conflicting mean and inequality gradients, is also well established and accepted.
Poverty Gradients and Poverty Reduction (3)

• Much less information on the within-urban gradient by size of agglomeration.

• Mainly because the “big” debates have been about rural versus urban (eg “urban bias”) rather than within-urban. But also because in national household surveys, sample sizes tend to get too small to give within urban patterns.

• Recent important work by Lanjouw and co-authors has used small area poverty estimation techniques to generate poverty gradients.

• Basic finding is that small towns lie in between rural and city on the declining poverty gradient.
Poverty Gradients and Poverty Reduction (4)

• Thus, in this static sense, cities contribute more to lower poverty. Holding everything constant, reallocation of population along the chain rural to town to city would reduce poverty in terms of comparative statics.

• But everything is not constant. What is the reduced from evidence on dynamic patterns?
Poverty Gradients and Poverty Reduction (5)

• First, as a general proposition, there appears to be a consensus that shift of population share from rural to urban contributes to poverty reduction. For example, Ravallion, Chen and Sangraula’s (2007) cross-country regression analysis gives fairly typical findings:
  • “we regressed urban and rural poverty rates on the urban population share including additive fixed effects: that is, the mean level of poverty at a given urban population share is allowed to vary by region or country….Both poverty measures tend to decline as the urban population share rises...Among the six regions of the developing world, sub-Saharan Africa is an exception to our finding that urbanization has been accompanied by falling overall poverty....”
Poverty Gradients and Poverty Reduction (6)

• But does this poverty reduction gradient from rural to urban transfer to within urban, from town to city?

• Christiaensen and Todo (2014) use such disaggregated data from 51 countries to ask the following question: if two economies were to grow at the same speed, would the rate of poverty reduction be faster when people move out of agriculture to larger cities (empirically defined as exceeding 1 million people) or when they move out of agriculture into small towns and the surrounding rural economy?"

• For 1980-2004, they find that there is indeed an additional effect on poverty reduction when people move into secondary towns and the rural non-farm economy when they move out of agriculture.
Poverty Gradients and Poverty Reduction (7)

• Christiaensen, De Weerdt and Kanbur (2015) look at the poverty consequences of outmigration from the Kagera area of Tanzania to the capital city versus small towns.

• They find that although on average city moves reduce poverty by a lot more, there are many more moves to towns. Thus the overall contribution of town moves to total poverty reduction from migration out of Kagera is greater than the overall contribution of city moves.

• Finally, in their paper for this conference, Datt, Gibson, Murgai and Ravallion (2016) find that for India: “The growth of secondary towns appears to have larger direct and indirect effect on rural poverty than does big city growth.”
Poverty Gradients and Poverty Reduction (8)

• Thus there does seem to be preliminary evidence that despite the static declining poverty gradient from rural to town to city, in a dynamic sense towns contribute more to poverty reduction than cities.
• This will need to be developed further and tested in many different settings.
• But what are the mechanisms which might generate this static and dynamic gradients? Getting a handle on these is the first step in testing the policy implication in our hypothesis: A shift in public investment towards secondary towns from big cities will improve poverty reduction performance.
Mechanisms and Policy (1)

• What are the economic mechanisms behind a potentially differential contribution to poverty reduction by towns and cities, and how does policy interact with them?
• This question is not easy to answer and has not really been directly addressed by the literature very satisfactorily.
Mechanisms and Policy (2)

• We have city size distribution models of the Gibrat shocks variety (including for example innovation shocks as in Duranton, 2007), but these are not typically focused on distributional questions.

• We have of course equilibrium models of agglomeration of the Fujita-Krugman-Venables type. These are typically not focused on distributional questions, but they do have conclusions about the potential inefficiency of cities compared to towns.

• We have models of rural-urban migration in response to rural-urban differentials but (i) these not fully play out distributional consequences and (ii) they do not fully incorporate agglomeration aspects.
Mechanisms and Policy (3)

• One exception to the lack of a distributional focus in agglomeration equilibrium models is Behrens and Robert-Nicoud (2014):
  • “We develop a framework that integrates natural advantage, agglomeration economies and firm selection to explain why large cities are both more productive and more unequal than small towns.....A larger city size increases productivity via selection and higher urban productivity provides incentives for rural–urban migration. Tougher selection increases the returns to skills and earnings inequality in cities.”

• The authors do not draw implications for a poverty gradient or poverty reduction. However, in their model, whatever makes a city more attractive to migrants (public goods, for example), will make a city larger and also more unequal.
Mechanisms and Policy (4)

• There is an older migration literature which can be used to assess income distribution consequences of public investment in cities and towns. But the focus here is on migration and not on agglomeration economies—incomes are kept exogenous.

• Consider then a two destination Todaro model, where the town and the city each have their own modern sectors with high wages, and informal sectors with low incomes (Christiaensen, De Weerdt and Kanbur, 2016)

• The wage income is higher in the city than in the town, and the same relationship holds for informal income. But migration costs are lower to the town than to the city.

• There is then a migration equilibrium if we specify the number of modern sector jobs in each destination, and specify the probability of getting a modern sector job as the modern sector employment rate in that destination.
Mechanisms and Policy (5)

• Taking the five incomes (rural, town modern, town informal, city modern, city informal) and two modern sector employment levels as exogenous, the migration equilibrium defines a five point income distribution, from which poverty can be calculated once the poverty line is specified relative to the five incomes.

• We can then compare, for example, the poverty impact of creating a modern sector job in city versus town.
Mechanisms and Policy (6)

- Consider the case where the poverty line is such that the only incomes above the poverty line are the two modern sector wages. And let the poverty index be the head count ratio.

- In this case, it should be clear that creating a job in the modern sector of the city reduces the head count by exactly one, because those who migrate to the city in the wake of this heightened probability of getting a modern sector job but end up in the informal sector, are still poor—person who escapes poverty is the lucky one who gets the newly create modern sector job in the city.

- By the same, token, however, creating a job in the modern sector of the town also reduces the head count by exactly one.

- The impact of the two policies on poverty is identical. The choice, presumably, will then depend on the relative cost of job creation in the two sectors.
Mechanisms and Policy (7)

- The analysis gets richer, and more complicated, as different poverty lines are used. But we can in this framework, at least in a stylized manner, lay out the poverty reduction benefits of modern sector job creation in town versus city.
- But, to remind once again, there is no economic story here of how the different incomes come to be what they are, and certainly not how they come to be what they are because of agglomeration benefits.
- Integration of these different perspectives presents a rich research agenda to inform our key policy question.
Conclusion (1)

• A shift in public investment towards secondary towns from big cities will improve poverty reduction performance.
• What exactly is the dichotomy between secondary towns versus big cities?
• What is the evidence for the contribution of secondary towns versus cities to poverty reduction?
• What are the economic mechanisms for such a differential contribution and how does policy interact with them?
Conclusion (2)

• On each of these, there has been progress—more in some directions than others.
• But there are also large, interconnected, gaps in theory, empirics, and policy analysis.
• We hope that this conference will help to fill these haps and to provide a platform for refocusing the urbanization agenda.
Thank You!