Discussion of “Urbanization, Structural Transformation and Rural-Urban Disparities in China and India” by Viktoria Hnatkovska and Amartya Lahiri

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November 7, 2015
What HL Do

- Study the role of structural transformation and migration (urbanization) on wage inequality across sectors and space in China and India over time.
- Key empirical fact: space wage inequality (mean urban/rural wage) has increased in China while decreased in India.
- Develop a model with endogenous reallocation across sectors and migration across space.
- Key result: space wage inequality depends on opposite ways on structural transformation and urbanization, quantitatively the model can broadly reproduce the inequality facts in China and India.
Comments
1. Sample of Wage Workers

- Extremely restrictive for the agricultural sector.
- Predominant unit of production in agriculture is the family farm, even in developed countries.
- Limited role of hired (wage) labor, seasonally concentrated, specially during harvesting.
- Wage income of hired labor very different from income of farmers, also difficult to separate from land income.
- This implies that shares of employment in sample very different from national shares since bias is stronger for agriculture.
- Not clear what it does for wage facts in sample.
2. Inequality across Space

- Not entirely clear the relevance of the space vs. sector distinction in practice.
- Alternative is to abstract from space distinction and focus on data with farmer’s income.
- If not, deal with sample bias and explicitly assess relevance of space inequality relative to overall inequality.
3. Consider a Useful Benchmark

- Emphasis on China vs. India distinction, but both China/India are distinct cases from typical structural transformation experiences.
- How does structural change and migration affect income inequality across sectors and space in a benchmark setting.
- A useful setting may be the U.S. where there is relatively more labor mobility across space and sectors.
- How China/India differ from this benchmark may help understanding the frictions and income patterns across sectors and space.
4. Alternative Interpretation

- Constant population normalized to 1.
- Two goods with technologies:
  \[ Y_a = m \kappa A L^\sigma N_a^{1-\sigma}, \]
  \[ Y_n = A N_n. \]
- Preferences such that:
  \[ Y_a = \bar{a}. \]
- Barrier to labor mobility
  \[ w_a = (1 - \theta) w_n. \]
4. Alternative Interpretation

- Sectoral labor allocation

\[ N_a = \left[ \frac{\bar{a}}{m_\kappa AL^\sigma} \right]^{\frac{1}{1-\sigma}}. \]

- Equivalent alternative,

\[ N_a = \frac{\bar{a}}{Y_a/N_a}. \]

- Implies that a 1% growth in real labor agricultural productivity generates a 1% reduction in the share of employment in agriculture.

- Fits cross-country time-series very well, e.g. Duarte and Restuccia (2010).

- Wages,

\[
\frac{w_a}{w_n} = (1 - \theta) \propto \frac{p_a Y_a/N_a}{Y_n/N_n} = \frac{(1 - \theta)}{1 - \sigma},
\]

\[
g(p_a) = g(1 - \theta) + g(y_n) - g(y_a).
\]
### 4. Alternative Interpretation

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<tbody>
<tr>
<td>$N_a$ (%)</td>
<td>81</td>
<td>37</td>
<td>72</td>
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<td>.75</td>
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<tr>
<td>$y_a/y_n$</td>
<td>.23</td>
<td>.16</td>
<td>.36</td>
<td>.19</td>
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</table>
4. Alternative Interpretation

- China/India feature similar qualitative structural transformation.
- India has observed relatively more productivity growth in services than in other sectors.
- Both China/India are strikingly different from many other country experiences in that labor productivity growth in agriculture lower than in other sectors.

**Sectoral Labor Productivity Growth**

- Nominal productivity gap increasing in both countries but not enough to compensate for differential growth across sectors so relative price of agriculture increased.
5. Role of Within-Sector Misallocation

- Key in both China/India is that despite strong growth, agriculture is lagging behind.
- Recent work emphasizes the role of misallocation in agriculture.
- Large effects on aggregate agricultural productivity, important also for inequality.
6. Other Comments

a. Related literatures on urbanization and structural transformation and reallocation across sectors and space, for instance Tasso Adamopoulos or Gollin/Rogerson emphasizing the role of transportation costs.

b. Value of the model, space effects too mechanical, no clear discipline in quantitative experiments by calibrating to each country.
Conclusion

- Fascinating experiences of reallocation across space and sectors in China and India.
- Welfare implications of the reallocation process important.
- Not persuaded by the evidence and analysis that space/sector distinction is crucial.
- In my view, inequality within micro units (sector or space) and factor allocation are likely to be essential, because factor misallocation is keeping aggregate agricultural productivity low in these economies.