Asia’s rural-urban disparity in the context of growing inequality

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Outline

• I. Introduction

• II. Changes in income distribution in Asian Countries (Imai & Malaeb, 2018)

• III. Cross-country evidence (Imai, Gaiha, & Bresciani, 2018)

• V. Vietnam: Detailed Decomposition (Bui & Imai, 2018)

• VI. Conclusion & Policy Implications
I. Introduction

• Rural-Urban disparity is influenced by:

(1) Different growth rates in urban and rural areas (different labour productivity; endowments or infrastructure)

(2) Degree of urbanisation; development of small towns/cities and/or rural modernisation (e.g. development of rural non-farm sector)

(3) Degree of rural-urban interactions (structural transformation e.g. high-value chains, rural-to-urban migration, remittances)
I. Introduction

• Data Limitation: The data disaggregated at the level of rural and urban areas are not widely available across countries.

→ We use the WB data and the data provided by Strategy and Knowledge Department (SKD), IFAD. Based on Imai and Malaeb (2018) and Imai, Gaiha and Bresciani (2018).

• The (limited) cross-country evidence is supplemented by a few country-level studies (Bui and Imai, 2018).
II. Income distribution in Asia (Imai & Malaeb)

Figure 1. Mean household income (2011 PPP)
II. Income distribution in Asian Countries

Figure 1. **Mean hh income (2011 PPP)**
II. Income distribution in Asian Countries

Figure 2. Real daily wages for agricultural labour (US$ 2010 PPP) Wiggins and Keats (2014)
II. Income distribution in Asian Countries

Figure 3. The Gini coefficient for selected countries
II. Income distribution in Asian Countries

Figure 3. The Gini coefficient for selected countries

- India*
- India--Rural
- India--Urban
II. Income distribution in Asian Countries

Figure 3. The Gini coefficient for selected countries

- China*
- India*
- Indonesia*
- Malaysia
- Pakistan
- Philippines
- Sri Lanka
- Thailand
- Vietnam

*Note: The Gini coefficient values and trends vary for each country, indicating varying levels of income inequality.
II. Income distribution (a summary)

1. China: High agri wage growth/rural income growth is observed, but urban income growth is even higher. → Rural-urban disparity increased.

2. India: Agri wage/rural income increased, but not as in China. → Rural-urban disparity was stable. Rural poverty persists in India (27%; $1.90 a day).

3. Evidence on increase in agricultural wages.

III. Cross-country evidence

“The Agricultural Productivity Gap” (Gollin et al. 2013, QJE) has expanded - consistent with Vollrath (2009, JEG) (Imai, Gaiha, and Bresciani, 2018)

Agricultural Labour productivity Gap- South Asia

Graphs by Series
III. Cross-country evidence

“*The Agricultural Productivity Gap*” (Gollin et al. 2013, QJE) has expanded (Imai, Gaiha, and Bresciani, 2018)

**Agricultural Labour productivity Gap - East Asia and the Pacific**

Graphs by Series
### III. Cross-country evidence

**Effects of the labour productivity gap between the agri- and non-agri sectors on poverty and inequality** (The second stage of the IV-FE model) (Imai, Gaiha, and Bresciani, 2018)

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>rural poverty HC USD1.25</th>
<th>rural poverty HC USD2.00</th>
<th>urban poverty HC USD1.25</th>
<th>urban poverty HC USD2.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Labour Productivity Gap between agricultural &amp; non-agricultural sectors [Instrumented, t-1]</td>
<td>-1.62** (0.734)</td>
<td>-1.13** (0.504)</td>
<td>-1.94 (1.274)</td>
<td>-1.864*** (0.488)</td>
</tr>
<tr>
<td>Control Variables</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Observations</td>
<td>45</td>
<td>45</td>
<td>44</td>
<td>43</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.479</td>
<td>0.455</td>
<td>0.271</td>
<td>0.689</td>
</tr>
<tr>
<td>Number of countries</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

Standard errors in parentheses; ***, $p < 0.01$; **, $p < 0.05$; *, $p < 0.1$
III. Cross-country evidence

Effects of the labour productivity gap between the agri- and non-agri sectors on poverty and inequality (The second stage of the IV-FE model) (Imai, Gaiha, and Brescian, 2018)

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>National Gini</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Labour Productivity Gap between agricultural &amp; non-agricultural sectors</td>
<td>-4.636***</td>
</tr>
<tr>
<td>[Instrumented, t-1]</td>
<td>(1.174)</td>
</tr>
<tr>
<td>Control Variables</td>
<td>Yes</td>
</tr>
<tr>
<td>Observations</td>
<td>77</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.063</td>
</tr>
<tr>
<td>Number of countries</td>
<td>12</td>
</tr>
</tbody>
</table>

standard errors in parentheses; ***, p < 0.01; **, p < 0.05; *, p < 0.1
### III. Cross-country evidence

Fixed effects model of the effect of agricultural and non-agricultural value added on the rural Gini coefficient and migration (Imai and Malaeb, 2018)

<table>
<thead>
<tr>
<th>Dep.var</th>
<th>Rural Gini</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-agricultural growth (t-1)</td>
<td>0.703*</td>
</tr>
<tr>
<td></td>
<td>(0.368)</td>
</tr>
<tr>
<td>Agricultural growth (t-1)</td>
<td>−0.823**</td>
</tr>
<tr>
<td></td>
<td>(0.363)</td>
</tr>
</tbody>
</table>

standard errors in parentheses; ***, $p < 0.01$; **, $p < 0.05$; *, $p < 0.1$
III. Cross-country evidence (a summary)

• 1. “The Agricultural Productivity Gap” has expanded over time. The gap has reduced rural and urban poverty as well as the national Gini.

• 2. Agricultural growth reduces rural Gini, but non-agricultural growth increases it.
V. Vietnam: Detailed Decomposition

-Bui and Imai (2018).

-Applied unconditional quantile decomposition (Fortin et al, 2011) combined with the reweighting technique to carry out a version of Oaxaca-Blinder decomposition.

<table>
<thead>
<tr>
<th>2010 VHLSS</th>
<th>10&lt;sup&gt;th&lt;/sup&gt;</th>
<th>Median</th>
<th>90&lt;sup&gt;th&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Households (A)</td>
<td>8.543***</td>
<td>9.347***</td>
<td>10.30***</td>
</tr>
<tr>
<td>Rural Households (B)</td>
<td>8.444***</td>
<td>9.116***</td>
<td>9.812***</td>
</tr>
<tr>
<td>Difference (A)-(B)</td>
<td>0.0995</td>
<td>0.230***</td>
<td>0.488***</td>
</tr>
</tbody>
</table>

**Composition Effects (Differences in Characteristics) (%)**

| Basic education        | -8.03***        | -4.14***     | -0.11           |
| High education         | 18.69***        | 17.17***     | 8.14***         |
| Remittances            | -1.03           | -2.03*       | -1.39*          |

**Structural Effects (Differences in returns to characteristics) (%)**

| Basic education        | 11.56           | -25.78       | -2.77           |
| High education         | 91.26           | 4.43         | -5.55*          |
V. Vietnam: Detailed Decomposition

1. Rural-urban disparity has reduced over the years *over the entire distribution* of household expenditure.

2. Disparity is higher at higher percentiles.

3. Basic education reduces the disparity, while higher education expands it.

4. Remittances are beneficial to rural households (at relatively higher percentiles).
VI. Conclusion & Policy Implications

1. Rural-urban disparity increased in China, but stable in India.

2. “Agricultural Productivity Gap” has increased over the years. The gap reduced rural and urban poverty as well as the national inequality.


4. Rural-urban disparity has fallen in Vietnam. Education and remittances in rural areas would reduce the rural-urban gap in Vietnam.
VI. Conclusion & Policy Implications

Policies:

1. Policies that (a) increase agricultural wages and productivity directly and indirectly (b) that facilitate rural household access to education & remittances would reduce the rural-urban disparity.

2. Policences need to promote cross-sectoral interactions (rural-urban; agri- non-agri).

3. Policies need to address within rural or within urban inequalities as well as rural-urban disparity (agri-growth reduces rural Gini).