Two conflicting views

View 1: The farm sector is the route out of poverty
- “No country has been able to sustain a rapid transition out of poverty without raising productivity in its agricultural sector.” (Timmer and Akkus, in BP for WDR 2008)
- “(Agricultural) growth offers a multiplicity of pathways out of poverty.” (de Janvry and Sadoulet, 2009)

View 2: The non-farm sector is the route out of poverty
- “Labor productivity is lower in agriculture than industry so structural transformation (out of farming) is the route to growth and (hence) poverty reduction.”

Which is right? Might these views be reconciled? What is the evidence?

Evidence from x-country comparisons (old and new) +
Country case studies for China and India +
New evidence for post-reform India

Two sets of hypotheses supporting “agriculture first”

1. The growth hypothesis: There are constraints on long-term growth that higher initial agricultural productivity helps relax
   - Agriculture can generate positive spillover effects on non-farm sectors.
   - “Agriculture first” can create an initial distribution more conducive to long-term growth, such as by relaxing borrowing constraints and making growth-promoting reforms more feasible politically.

2. The elasticity hypothesis: Agriculture can also help alleviate the constraints on making growth more pro-poor (poverty reducing)
   - “Agriculture first” can create a higher growth elasticity of poverty reduction; faster progress against poverty at a given rate of growth.
1: The growth hypothesis

Three arguments for believing that an early stage of agricultural development can promote longer-term aggregate growth:

1. As a generator of positive direct externalities for other sectors.
2. As a generator of pecuniary externalities through keeping wage goods cheap in a relatively closed economy.
3. As a source of the pro-poor distributional shock that can put the economy on a higher subsequent growth path.

Agriculture as a generator of direct positive externalities: Arguments from the literature

- Long-standing view: externalities play a role in development.
  - Rosenstein-Rodan (1943): investment decisions influence the profitability of other firms
  - Case for international assistance for the industrialization of the lagging regions.
- In the context of rural development in poor countries
  - Clarke (1940) argued that higher agricultural productivity was a crucial precondition for industrialization.
  - Mellor (1976); Hazell and Haggblade (1990): seemingly strong effects of agricultural growth on rural nonfarm development (esp., India). Emphasis on market channels.
  - Learning externalities may play an important role within agriculture (Foster and Rosenzweig, 1995).
  - But are there important spillovers from the farm to non-farm sectors?
- Counter arguments too: tradability of non-farm goods sector can mean that higher farm productivity has a negative impact on that sector (Foster and Rosenzweig, 2003)

Some evidence for China

- China in 1980s:
  - Surge in rural nonfarm activity (late '80s), esp., TVEs.
  - This followed a period of exceptionally rapid agricultural growth in first half of 1980s, stemming from agrarian reforms (incl. HRS)
  - Timing is suggestive of strong forward linkage.
  - However, some observers have argued that rural non-farm growth was stimulated by low farm productivity in certain regions.
- Tests using farm-household panel data; 5,600 households in 111 counties over 1985-90.
- Detailed accounting of incomes by source.

Externalities in China cont.,

- Tests for external effects of local economic activity on consumption and income growth at the farm-household level using panel data from four provinces.
- The tests allow for nonstationary fixed effects in the consumption growth process.
- Growth rates of incomes by source are a function of both household and county mean incomes by source in baseline.
- Evidence geographic externalities, stemming from spillover effects of the level and composition of local economic activity and private returns to local human and physical infrastructure endowments.
- Suggests an explanation for rural underdevelopment arising from under-investment in externality-generating activities, of which agricultural development emerges as the most important.

Other arguments for spillovers to non-farm sector

- New farm technologies are risky; higher farm productivity often comes with higher risk.
- Diversification into safer non-farm sectors may then emerge as a form of self-insurance.
- However, non-farm sector can also be risky, and possibly more so than farming.
- Evidence that higher farm risk discouraged investment (though labor migration) in non-farm activities in China (Jalan and Ravallion, 2001).
- This is theoretically possible under certain conditions (Hadar and Seo, 1990).

India’s experience since 1950s

- Higher farm productivity (output/area) reduced rural poverty measures.
- Direct effect (smallholder productivity) + indirect effect via wages and prices.
- Bulk of gain from higher farm yields is through rising average consumption rather than improved distribution.
- Results are consistent with the wage goods argument; higher farm yields meant lower food prices, higher real wages relative to wage goods; higher relative price of non-wage goods.

1.3 The distributional argument

Theories of distribution-dependent growth based on credit-market failures

- Market failure attributed to information asymmetries, notably that lenders are imperfectly informed about borrowers.

- Key analytic feature: a suitably nonlinear relationship between an individual’s initial wealth and her future wealth.
  - With diminishing marginal products of capital, the mean future wealth will be a quasi-concave function of the distribution of current wealth.
  - Thus higher current inequality implies lower future mean wealth at a given value of current mean wealth, i.e., lower growth.


Nonlinear dynamics:
High inequality handicaps growth

Dynamic implication of borrowing constraints: poverty also impedes growth

- Example: Banerjee and Duflo (2003) provide a simple but insightful growth model with a borrowing constraint.
  - Those with sufficient wealth will reach their unconstrained optimum, equating the marginal product of capital with the interest rate.
  - But the “wealth poor,” for whom the borrowing constraint is binding, will not be able to do so.
  - Banerjee and Duflo show that higher inequality in such an economy implies lower growth.

- However, they do not observe that their model also implies that higher current wealth poverty for a given mean also implies lower growth.

- In the Banerjee-Duflo model an unambiguously higher initial headcount index of poverty holding the initial mean constant implies a lower growth rate.
Other theories of distribution-dependent growth

- Inequality restricts efficiency-enhancing cooperation amongst people, such that public goods needed for growth are underprovided or efficiency-enhancing policy reforms are blocked (Bardhan et al., 2000).

- Political-economy models of redistribution argue that high inequality leads democratic governments to implement distortionary redistributive policies, e.g., Alesina and Rodrik (1994).

Past evidence on growth and inequality


- However, not all the evidence has been supportive; also see Li and Zou (1999), Barro (2000) and Forbes (2000).

- The main reason why these studies have been less supportive appears to be that they have allowed for country-level fixed effects.

- Though this estimator can have weak power with time-varying measurement error (Hauk and Wacziarg, 2009); evidence in this context (Ravallion, 2010).

Evidence for rural China

- Provinces started out the reform process in early 1980s with diverse levels of inequality.

- The more rapid subsequent growth rates were in the provinces with less inequality.

- At county level using farm-household panel data: Households living in counties with higher initial wealth inequality saw lower subsequent growth rates.

- Also, dynamics of consumption growth is consistent with nonlinearity such that higher inequality impedes growth at given initial mean (Jalan and Ravallion) =>


Nonlinear dynamics: High inequality handicaps growth

\[ w_{t+1} = \varphi(w_t) \]

New cross-country evidence on growth and poverty

- Benchmark regression:
  \[ g_t(\mu_{it}) = 0.234 - 0.035 \ln \mu_{it} - 0.017 \ln H_{it-t} + \hat{e}_i \]
  \[ (5.183) \quad (-5.131) \quad (-3.626) \]
  where \( g_t(\mu_{it}) = \ln(\mu_{it}/\mu_{it-1})/\tau \)

- Robust to various changes in specification:
  - Consumption surveys only; national accounts consumption;
  - Controls for other factors affecting growth (initial inequality; initial middle class; schooling; life expectancy; policy distortions)
  - GMM estimation using sample with there surveys and excluding lags for identification


Implications for agriculture and poverty

- Strong evidence that agricultural growth brings lower poverty and inequality in the short term.
- China:
  - Agrarian reforms from late 1970s brought large gain in ag. productivity (Lin, Fan)
  - Rapid subsequent poverty reduction largely driven by agricultural growth (Ravallion and Chen, Montalvo and Ravallion)
- India:
  - Green revolution brought large gains in farm productivity which directly reduced poverty (Datt and Ravallion)
  - Labor market played a role

Evidence from cross-country data on agriculture as the leading sector

- Tiffin and Irz (2006): Agricultural value added Granger causes GDP per capita
- “Granger causality” is not causality, but it is arguably relevant concept in this case.
Latin America: “growth reducing structural change”

- Dani Rodrik (web site, Sept. 28, 2010):
  Reallocation of labor out of tradable sectors (incl. agriculture) to nontradables has been growth reducing.
- Compensated for by within sector gains in productivity.

Short-term + Longer-term gains

- In combination with new evidence on how economies with better initial distribution have higher subsequent growth we can see an initial boost to farm productivity can bring both short term and longer-term gains in initially poor rural economies.
- Key caveat: higher farm productivity cannot come at too high a cost to the other factors that matter to growth (human development, policy distortions).

Initial distribution and growth elasticity of poverty reduction

- In general, the growth elasticity of poverty reduction will depend on the initial distribution.
- This can be thought of as the direct effect of the initial distribution on the rate of poverty reduction, as distinct from the indirect effect via the rate of growth.
- Past work has focused on inequality as the relevant aspect of initial distribution.
- Intuition: Higher initial share for the poor => higher share of the gains from growth as long as inequality does not increase too much.
### 2.2: Cross-country evidence

#### Rate of poverty reduction is proportional to the distribution-corrected rate of growth

![Graph showing the relationship between poverty-adjusted rate of growth and poverty-reduction rate.]

#### Regressions for rate of poverty reduction

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OLS IVE</td>
<td>OLS IVE</td>
<td>OLS IVE</td>
<td>OLS IVE</td>
<td>OLS IVE</td>
<td>OLS IVE</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.002</td>
<td>0.008</td>
<td>-0.012</td>
<td>-0.005</td>
<td>-0.012**</td>
<td>-0.008</td>
</tr>
<tr>
<td></td>
<td>(0.078)</td>
<td>(0.267)</td>
<td>(-1.908)</td>
<td>(0.607)</td>
<td>(-2.175)</td>
<td>(-1.365)</td>
</tr>
<tr>
<td>Initial poverty rate</td>
<td>-0.004</td>
<td>0.008</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(-0.792)</td>
<td>(0.267)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth rate (annualized change in log mean)</td>
<td>-2.674**</td>
<td>-3.564**</td>
<td>-2.615**</td>
<td>-3.323**</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(-6.660)</td>
<td>(-4.325)</td>
<td>(-6.608)</td>
<td>(-4.560)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth rate interacted with initial poverty rate (1-Poverty rate) times growth rate</td>
<td>2.780***</td>
<td>3.492**</td>
<td>2.621**</td>
<td>3.101**</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(5.206)</td>
<td>(3.650)</td>
<td>(4.915)</td>
<td>(3.746)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>91</td>
<td>86</td>
<td>91</td>
<td>86</td>
<td>91</td>
<td>86</td>
</tr>
<tr>
<td>R²</td>
<td>0.537</td>
<td>0.439</td>
<td>0.535</td>
<td>0.458</td>
<td>0.535</td>
<td>0.466</td>
</tr>
<tr>
<td>Homogeneity test</td>
<td>0.673</td>
<td>-0.215</td>
<td>0.037</td>
<td>-0.620</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Homogeneity tests passes => the relevant growth rate is the poverty-adjusted rate, as given by the growth rate times one minus the poverty rate. $g_r(H_u) = \eta(1 - H_u, \cdot) g_r(\mu, \cdot) + \epsilon_u$


#### Poverty makes growth less pro-poor

- The (absolute) growth elasticity of poverty reduction tends to be lower in countries with a higher initial poverty rate.
- Poorer countries tend to experience lower proportionate effects on their poverty measures from any given rate of growth.
- At an initial poverty rate of 10% (about one standard deviation below the mean) the elasticity is about -3 (using the IVE) while it falls to about -0.7 at a poverty rate of 80% (about one standard deviation above the mean).
Cross-country evidence on poverty and sectoral composition of growth

- Evidence that not only the rate of economic growth but also its composition matters for poverty alleviation (Bravo-Ortega and Lederman, 2005; Christiaensen and Demery, 2007; Loayza and Raddatz, 2010; Ligon and Sadoulet, 2007).

- For example, Loayza and Raddatz:
  - Largest contributions from unskilled labor-intensive sectors (agriculture, construction, and manufacturing).
  - Results are robust to the influence of outliers, endogeneity concerns, alternative explanations, and various poverty measures.

2.3: Evidence for China and India

Do sectoral imbalances matter to the rate of poverty reduction? Regression decomposition test

- Mean income: $\mu_t = n^r_t \mu^r_t + n^u_t \mu^u_t$

- Growth rate:

  $\Delta \ln \mu_t = s^r_t \Delta \ln \mu^r_t + s^u_t \Delta \ln \mu^u_t + [s^r_t - s^u_t (n^r_t / n^u_t)] \Delta \ln n^r_t$

- Test equation:

  $\Delta \ln P_t = \eta_0 + \eta^r s^r_t \Delta \ln \mu^r_t + \eta^u s^u_t \Delta \ln \mu^u_t$

  $+ \eta^n (s^r_t - s^u_t \cdot \frac{n^r_t}{n^u_t}) \Delta \ln n^u_t + \varepsilon_t$

- Null hypothesis:

  $H_0: \eta^i = \eta^0 \text{ for } i = r,u,n$

China and India: Sectoral imbalances matter to the rate of poverty reduction

Poverty reduction and the urban-rural composition of growth

$\Delta \ln P_t = \eta_0 + \eta^r s^r_t \Delta \ln \mu^r_t + \eta^u s^u_t \Delta \ln \mu^u_t + \eta^n (s^r_t - s^u_t \cdot \frac{n^r_t}{n^u_t}) \Delta \ln n^u_t + \varepsilon_t$

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth rate of mean rural income (share-weighted)</td>
<td>-2.56 (-8.43)</td>
<td>-1.46 (12.64)</td>
</tr>
<tr>
<td>Growth rate of mean urban income (share-weighted)</td>
<td>0.09 (0.20)</td>
<td>-0.55 (-1.37)</td>
</tr>
<tr>
<td>Population shift effect</td>
<td>0.74 (0.16)</td>
<td>-4.46 (-1.31)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.82</td>
<td>0.90</td>
</tr>
</tbody>
</table>
China and India: Sectoral imbalances cont.,

Poverty reduction and the sectoral composition of growth

\[ \Delta \ln P_t = \pi_0 + \sum_{i=1}^{n} \pi_i s_{it} \Delta \ln Y_{it} + \varepsilon_t \]

<table>
<thead>
<tr>
<th>Sector</th>
<th>China</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth rate of GDP per capita</td>
<td>-2.60 (2.16)</td>
<td>-0.99 n.a.</td>
</tr>
<tr>
<td>Primary (share-weighted)</td>
<td>n.a. (-3.97)</td>
<td>-1.16 (2.96)</td>
</tr>
<tr>
<td>Secondary (share-weighted)</td>
<td>-1.75 (1.21)</td>
<td>3.41 (1.84)</td>
</tr>
<tr>
<td>Tertiary (share-weighted)</td>
<td>-3.08 (-1.24)</td>
<td>-3.42 (-2.74)</td>
</tr>
<tr>
<td>Secondary+tertiary</td>
<td>-2.25 (-2.20)</td>
<td>n.a. n.a.</td>
</tr>
</tbody>
</table>

\( R^2 \) 0.21 0.43 0.42 0.75

Conditionality in impact of farm growth

- Importance of agricultural productivity growth varies across settings (WDR, 2008; de Janvry and Sadoulet, 2009).
- Why has agricultural growth been more pro-poor in China than India?
  - Hypothesis: Relatively greater importance of agricultural growth in China reflects lower inequality of agricultural land holdings than found in India.
    - Starting with a less unequal distribution of this crucial asset (due to initial agrarian reforms in late 1970s) meant that agricultural growth could be a more powerful force in reducing poverty in China.
    - This puts larger weight on the direct channels though own-farm productivity than indirect channels though wages and prices.

Dismantling of the “license raj”

- While the reform process can be dated back to the early 1980s, “large-scale” reform started in the aftermath of the macroeconomic crisis of 1991
  - Trade liberalization
    - Reduction in tariff and non-tariff barriers on imports
    - Flexible exchange rate and convertibility of the rupee on the current account
  - Easing of restrictions on both the domestic and foreign private sector
  - Dilution of state control of banking and insurance
  - Dismantling of public sector monopolies

Growth of real NDP per capita since 1950s
(growth rate, 5-year moving average)

Have the reforms left India’s poor behind?

- New inequality-increasing forces—grounded in the disparities in the endowments that allow people to take up new opportunities.
  - Antecedent inequalities in (especially) human capital—as evident in low adult literacy rates—can mean that the poorest may be largely left behind.
  - These inequalities were far greater in India at the outset of its reform period than most other reforming developing countries, including China (even when compared to the time China started its reforms, 10+ years earlier than India).
- While past research pointed to the importance of rural economic growth to poverty reduction in India, the post-reform process of economic growth does not appear to have favored the rural sector.
- There are worrying signs of rising inequality and signs of geographic and sectoral divergence in India’s growth process.
  - India’s booming sectors in the post-reform period (such as business services) require skilled labor, not unskilled.
- However, the non-farm sectors intensive in unskilled labor—trade, construction and the informal manufacturing sector—fared better in the post-1991 period (Kotawal, Ramaswami and Wadhwa, 2009).

Debates about whether economic growth has helped reduce poverty

- Old but formative debate over whether the agricultural growth stimulated by green revolution brought gains to the rural poor.
- Also debate about how much urban economic growth has benefited the poor.
  - India’s post-independence planners hoped that the country’s largely urban-based and heavily protected industrialization process would bring lasting longer-term gains to both the urban and rural poor.
  - But the pre-reform non-farm growth process was not very effective in reducing poverty.
- Supporters of reforms argued that the reforms will enable India to better exploit its comparative advantage in labor-intensive goods and services, which will directly benefit the poor.
  - E.g. Joshi and Little (1996): the reforms would “…favor the poor by beginning to remove the pervasive bias that exists against the employment of unskilled labor.”

Key questions

- Has India’s higher growth rate since the early 1990s delivered a higher pace of poverty reduction?
- Is there any change in the responsiveness of poverty to economic growth in the post-reform period?
- Has the impact of the urban-rural composition of growth on poverty changed in the post-reform period?
  - Is there any sign that the post-reform urban economic growth has been more pro-poor than in the pre-reform period?
Descriptive statistics

Rising inequality within and between urban and rural areas

Nonetheless, India seems to be back on track in its progress against poverty

• 14 rounds of the NSS since 1991, on top of the prior 33 rounds.
• Uneven progress over time and slowed somewhat in the early 1990s.
• But long-run trend decline in the incidence of poverty is evident.
• India appears to have returned to its pre-crisis trajectory in terms of the annual % point reduction in H

• Higher growth rates have delivered a steeper proportionate rate of decline in poverty in the post-1991 period.
• But no robust case for believing that the growth process of the reform period has been more poverty reducing at a given rate of growth.

Trends and elasticities over a longer period

Trends in national poverty measures and their elasticities with respect to economic growth in India: 1958-2006

<table>
<thead>
<tr>
<th></th>
<th>Annual trend rate of decline in headcount index of poverty</th>
<th>Elasticity of headcount index of poverty with respect to growth in:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Linear (%age points)</td>
<td>Exponential (%)</td>
</tr>
<tr>
<td>Whole period</td>
<td>0.56</td>
<td>1.3</td>
</tr>
<tr>
<td>1958-1991</td>
<td>0.53</td>
<td>1.1</td>
</tr>
<tr>
<td>After 1991</td>
<td>0.77</td>
<td>2.4</td>
</tr>
</tbody>
</table>
Total elasticity rather than partial elasticity

- Since growth can seldom be assumed to be distributionally-neutral, it is the TOTAL elasticity we will be interested in estimating.
- We use the following model:
  \[ \ln P_t = \text{constant} + \pi \ln \mu_t + \text{other controls} + \nu_t \]
  where the error term is allowed to be autocorrelated and heteroskedastic.
- Since the mean and the poverty measures are derived from the same survey data, any measurement error in the mean will be passed on to the poverty measures.
- Hence we also use instrumental variable (IV) estimation methods, in particular the two-step GMM estimator:
  - the instruments exclude any variable derived from the same survey as the dependent variable.

Cross-sectoral effects

We also test how growth in the two sectors (and population shift) affects changes in sectoral poverty measures:

1. \[ s_u^a \Delta \ln P_u = \pi_w s_u^m \Delta \ln \mu_u + \pi_{u2} s_u^r \Delta \ln \mu_r + \pi_{u3} (s_u^m - s_u^r n_r / n_u) \Delta \ln n_r + \varepsilon_u \]
2. \[ s_r^a \Delta \ln P_r = \pi_{r2} s_u^m \Delta \ln \mu_u + \pi_{r3} s_r^m \Delta \ln \mu_r + \pi_{r4} (s_r^m - s_r^u n_u / n_r) \Delta \ln n_r + \varepsilon_r \]
3. \[ (s_u^m - s_r^m n_r / n_u) \Delta \ln n_r = \pi_{u1} s_u^m \Delta \ln \mu_u + \pi_{u2} s_u^r \Delta \ln \mu_r + \pi_{u3} (s_u^m - s_r^m n_r / n_u) \Delta \ln n_r + \varepsilon_u \]
   where \[ s_u^m = n_u P_u / P_i \]
   and \[ \pi_i = \pi_{u1} + \pi_{r1} + \pi_{m} \]

Thus, summing up (1), (2) and (3) yields:

4. \[ \Delta \ln P_i = \pi_{u1} s_u^m \Delta \ln \mu_u + \pi_{u2} s_u^r \Delta \ln \mu_r + \pi_{u3} (s_{n-1}^m - s_{n-1}^{m-1} n_{n-1} / n_{n-1}) \Delta \ln n_r + \varepsilon_i \]

Hence, we estimate (1), (2) and (4).
Growth elasticities of national headcount index

<table>
<thead>
<tr>
<th></th>
<th>Per capita consumption from NSS (IVE)</th>
<th>Per capita private consumption from NA (Adjusted)</th>
<th>Per capita net domestic product (Adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole period</td>
<td>Value: -1.6</td>
<td>t-ratio: (-61.4)</td>
<td>t-ratio: (-9.27)</td>
</tr>
<tr>
<td></td>
<td>Up to 1991</td>
<td>Value: -1.57</td>
<td>t-ratio: (-75.2)</td>
</tr>
<tr>
<td></td>
<td>After 1991</td>
<td>Value: -2.07</td>
<td>t-ratio: (-22.9)</td>
</tr>
<tr>
<td></td>
<td>Ho: pre-91 elast. = post-91 elast.</td>
<td>F(1,34 or 32)</td>
<td>Prob.: 0.25</td>
</tr>
</tbody>
</table>

Elasticities of poverty with respect to urban and rural growth: 1951-2006

<table>
<thead>
<tr>
<th></th>
<th>National poverty</th>
<th>Urban poverty</th>
<th>Rural poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Headcount index)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban growth</td>
<td>Pre-91</td>
<td>-0.09</td>
<td>-0.85</td>
</tr>
<tr>
<td>Rural growth</td>
<td>Pre-91</td>
<td>-1.11</td>
<td>-0.35</td>
</tr>
<tr>
<td>Urban growth</td>
<td>Post-91</td>
<td>-1.21</td>
<td>-1.26</td>
</tr>
<tr>
<td>Rural growth</td>
<td>Post-91</td>
<td>-0.66</td>
<td>-0.08</td>
</tr>
</tbody>
</table>

While agriculture has lagged, India’s urban economic growth has become more pro-poor

- Estimated from regressions of national PRPR on urban and rural economic growth, with controls for changes in survey design.
Encouraging signs that urban economic growth is benefiting the rural poor

- The fortunes of the poor in each of the urban and rural sectors are linked in various ways—through trade, migration, and transfers—and those linkages may well be stronger amongst poor and middle income people than amongst the rich.
- **Pre-1991**: Urban economic growth helped reduce urban poverty but brought little or no overall benefit to the rural poor.
- The main driving force for overall poverty reduction was rural economic growth.
- **Post-1991**: As before, urban growth reduced urban poverty, and rural growth reduced rural poverty.
- But we find much stronger evidence of a positive feedback effect from urban economic growth to rural poverty reduction than we had found in the pre-1991 data.
- And this is happening through improvements in the rural distribution—essentially, urban economic growth is starting to help to reduce inequities within rural India.

The sectoral pattern of economic growth may be less important in the future

- Urban growth process is now more pro-poor.
- Post-reform growth process more balanced in its impact on poverty across sectors.
- Looking forward the pattern of growth matters less than in past.