Implications of Slowing Growth for Global Poverty Reduction

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Dramatic progress in poverty reduction under the MDGs

- Linked to more rapid economic growth in developing countries
- Sustainable Development Goals (SDGs) -- eliminate poverty & hunger by 2030

Global Economic Outlook has deteriorated since 2012

Implications for eliminating global poverty & hunger?

- Methodology
- Results
Progress & Background
MDGs & Sustainable Dev Goals

• MDG 1 set a target of halving the proportion of people under $1/day (now $1.90) – between 1990 & 2015

• This goal was very easily achieved – Essentially by 2008 – 7 years early – And the poverty headcount has since halved again

• Between 2012 & 2015, the SDGs were agreed – With a target of eliminating poverty by 2030
Past Progress: Poverty Headcount %

- 1990: 37.1%
- 2008: 18.65%
- 2015: 9.6%
<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Headcount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>2014</td>
<td>2.3</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>2008</td>
<td>0.5</td>
</tr>
<tr>
<td>Georgia</td>
<td>2014</td>
<td>9.8</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>2013</td>
<td>0.04</td>
</tr>
<tr>
<td>Kyrgyz Republic</td>
<td>2014</td>
<td>1.3</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>2012</td>
<td>0.04</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>2014</td>
<td>19.5</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>1998</td>
<td>42.3</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>2003</td>
<td>66.8</td>
</tr>
</tbody>
</table>
Convergence since 1990 – reversing 200 years of divergence
The Deteriorating Global Outlook
Comparing 2012 & 2015 GDP growth projections to 2017
Growth in Per Capita GDP, 2012-30, %

- **HIC**: Previous Forecast
- **LMIC**: Updated Forecast
Methodology
Analytical framework

- Macro scenarios based on IMF WEO forecasts:
  - Use MIRAGRODEP model to track implications for prices & wages
  - Household survey models for 285,000 households to capture impacts
## Scenarios & implementation

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Scenario 0</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP- (HIC, Russia, Brazil, China)</td>
<td>2012 forecast</td>
<td>2015 forecasts</td>
<td>2015 forecast</td>
</tr>
<tr>
<td>GDP Others</td>
<td>2012 forecast</td>
<td>2015 forecasts</td>
<td>2015 forecasts</td>
</tr>
<tr>
<td>Savings rate</td>
<td>Unchanged</td>
<td>China: 50% to 40% by 2020, 40% to 35% by 2030. Oil exporters stabilize consumption</td>
<td>As in Scenario 1</td>
</tr>
<tr>
<td>Current Account Balance</td>
<td>Unchanged</td>
<td>Surplus Redn in China, Strong Surplus Redn in oil exporters</td>
<td>As in scenario 1</td>
</tr>
<tr>
<td>Remittances</td>
<td>As % of source ctry unskilled wages</td>
<td>% of source ctry unskilled wages</td>
<td>% of source ctry unskilled wages</td>
</tr>
<tr>
<td>Natural Resource endowments</td>
<td>Unchanged</td>
<td>Calibrated for Gulf ctries, US, Russia, Australia, China to target oil, gas, coal prices</td>
<td>As in scenario 1</td>
</tr>
</tbody>
</table>
MIRAGRODEP framework

- Global dynamic CGE model
- Distinguishes private & government households
  - Extended to include international remittances
- Major drivers
  - Total Factor productivity
  - Terms of trade, including changes in mineral prices
  - Saving rates
  - Current account imbalances
  - Remittances
Household modelling

- Based on processed, harmonized household surveys
- Detailed consumption patterns: price effects
- Different income sources:
  - Business sales (production patterns, price effects, productivity effects)
  - Wages (price effects, fixed per capita endowments)
  - Other factor incomes (price & quantity effects thru accumulation)
  - Remittances (value changes)
- Scale up results from 76% of the world’s poor to all using kmeans clusters
Household framework

\[ W = \pi(p, w, \tau) - e(p, w, u) \]

- \( W \) is household real income
- \( e \) is cost of expenditure
- \( \pi \) is profit from household business
- \( p \) is commodity prices
- \( w \) is factor prices
- \( \tau \) is productivity level
1st order impacts of change in $\tau$

\[ dW = \pi_\tau \Delta \tau \]

\[ + (\pi_p - e_p) \Delta p \]

\[ + (e_w - \pi_w) \Delta w \]

Direct impact on profit
Net sales*Δprice
Net Labor Sales* wage change
Results
Average TFP growth rate 2012-30
Real Unskilled Wages 2012-30, %
## Real Prices in 2030 vs Baseline, %

<table>
<thead>
<tr>
<th></th>
<th>S1</th>
<th>S2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>World Agric Prices</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oilseeds</td>
<td>4.81</td>
<td>6.32</td>
</tr>
<tr>
<td>Processed Food</td>
<td>1.97</td>
<td>2.67</td>
</tr>
<tr>
<td>Wheat</td>
<td>3.75</td>
<td>4.00</td>
</tr>
<tr>
<td>Sugar</td>
<td>5.36</td>
<td>5.89</td>
</tr>
<tr>
<td>Dairy</td>
<td>1.51</td>
<td>1.79</td>
</tr>
<tr>
<td><strong>Non Agricultural World Prices</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>-26.96</td>
<td>-24.36</td>
</tr>
<tr>
<td>Minerals</td>
<td>-9.30</td>
<td>-8.20</td>
</tr>
<tr>
<td>Capital Goods</td>
<td>1.65</td>
<td>1.79</td>
</tr>
<tr>
<td><strong>Aggregate World Prices</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>2.39</td>
<td>3.19</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.77</td>
<td>1.16</td>
</tr>
<tr>
<td>Services</td>
<td>0.82</td>
<td>1.00</td>
</tr>
<tr>
<td>Extraction</td>
<td>-22.34</td>
<td>-20.04</td>
</tr>
</tbody>
</table>
Global Poverty Headcount under $S0, S1, S2$

$1.90, a day, 2011 PPP
Key findings

Updated 2030 Extreme poverty rate projection: 5.2% vs 4.8%

38 million people will not leave extreme poverty compared to previous projections

Average extreme poverty rate in rural areas will be 7.5% rather than 7.1%
Why so small impact on overall poverty?

- Poverty reduction is very robust
  - Given the large decline in growth
- Many countries reach very low poverty rates
- Higher growth in some vulnerable economies
- But many countries—especially in Africa—still have sizeable poverty rates
  - Business as usual does not get us to zero poverty
Conclusions

- The growth slowdown is likely to reduce the rate of poverty reduction to 2030
  - Leaves us far from SDG1 goal of eliminating poverty
    - Although the change from the baseline is surprisingly small

- Poverty rates remain high in a few countries
  - And higher in rural than in urban areas
  - Pointing to a need for targeted poverty reduction measures