Factor Income Distribution: The Story Behind the Statistics
Chong-En Bai & Zhenjie Qian

Discussant Comments

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Summary (1)

1. About China only

2. Calculate aggregate labor share since 1978
   • Use GDP by income approach at the provincial level

1. Large drop in the labor share between 2003 and 2004 mainly caused by change in categorization of income of state-owned and collective-owned farms and the self-employed

2. Analyze relative importance of each of two forces driving the movement in the labor share: sectoral transformations and changes in labor share within sectors
   • Solow decomposition method
Summary (2)

5. Structural transformation from agriculture to non-agriculture sectors since the mid-1980 has had a negative impact on aggregate labor share.

6. Main reason for the accelerated decline of the aggregate labor share since the mid-1990s is that the labor share in the industry sector, which had been rising, began declining from its 1995 peak after 1998.

7. Main reasons for the shift in factor income shares within the industry sector are decline of the SOEs and increase in monopoly power.
8. Relative price shifts, the factor input ratio, and biased technological progress are all insignificant forces in the decline in labor share in the industry sector

• Because the substitution between factors in the industry sector is nearly unit elastic
Motivation

- The significant decline in the labor share may explain the steady increase in income inequality in China
  - In turn might hinder China’s future development
- Studying changes in factor income shares improves our understanding of the investment ratio
  - Increase in the investment ratio in China might be related to the increase in the capital share since the mid-1990s.
International Comparisons (1)

- Advanced economies have also seen declining labor shares
  - Technological change
  - Globalization of labor
  - Labor market policies
- Very different reasons from China
Advanced Economies: Labor Shares

Figure 8. Advanced Economies: Labor Income Shares
(Percent of GDP unless otherwise noted)

Income share of employees\(^1\)  Income share of labor\(^2\)

Advanced Economies\(^3\) (weighted)  G-7 Economies\(^4\) (weighted)

How Has The Globalization of Labor Affected the Labor Income Share in Advanced Countries?

Florence Jaumotte and Irina Tytell

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September 1, 2010
**Advanced Economies: Decomposition**

**Figure 14a. Explaining the Annual Change in the Labor Share**

*(Average annual percent change)*

- **All Advanced Countries**
  - Change in the labor share
  - Technological change
  - Labor globalization
  - Labor market policies
  - Other

- **Japan**

- **Anglo-Saxon Countries**

- **Europe**

*September 1, 2010*

*UC SANTA CRUZ*
International Comparisons (2)

- Capital account openness may decrease labor shares in middle income countries
  - Mechanism not clear
  - Does capital flow towards lowest-cost labor?
## Capital openness and labor share

<table>
<thead>
<tr>
<th>Dependent variable: Compensation of employees /GDP</th>
<th>Low income countries</th>
<th>Lower middle income countries</th>
<th>Upper middle income countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trend</td>
<td>-0.001 (-1.6)</td>
<td>-0.002** (-2.0)</td>
<td>0.001 (0.79)</td>
</tr>
<tr>
<td>Real GDP per capita</td>
<td>0.00075 (0.42)</td>
<td>0.0037* (6.4)</td>
<td>0.0009 (2.8)</td>
</tr>
<tr>
<td>Capital account openness</td>
<td>0.019 (1.5)</td>
<td>-0.018** (-2.5)</td>
<td>-0.023** (-2.4)</td>
</tr>
<tr>
<td>Current account restrictions</td>
<td>0.0027** (1.9)</td>
<td>-0.0069 (0.1)</td>
<td>-0.0089 (-0.89)</td>
</tr>
<tr>
<td>Crisis</td>
<td>0.012 (1.13)</td>
<td>-0.023* (-3.2)</td>
<td>0.012 (1.3)</td>
</tr>
<tr>
<td>Government share of GDP</td>
<td>0.60* (4.17)</td>
<td>0.13 (1.2)</td>
<td>-0.13 (-1.03)</td>
</tr>
<tr>
<td>Budget surplus</td>
<td>0.0006 (0.55)</td>
<td>-0.007 (-10.3)</td>
<td>-0.003 (-3.11)</td>
</tr>
<tr>
<td>Real interest rate</td>
<td>0.001** (2.22)</td>
<td>0.0005* (2.97)</td>
<td>0.001 (3.5)</td>
</tr>
<tr>
<td>Nominal exchange rate</td>
<td>-0.00075 (-0.83)</td>
<td>-0.00022 (-1.07)</td>
<td>-0.00013 (-1.8)</td>
</tr>
<tr>
<td>Liquid liabilities to GDP</td>
<td>-0.22** (-2.1)</td>
<td>0.044 (1.3)</td>
<td>-0.00049 (0.01)</td>
</tr>
</tbody>
</table>

Where is China Heading?

- Rising wages
  - Recent *Economist* magazine article
- Would normally lead to rising labor share
  - Could globalization effects kick in?
    - Vietnam, Indonesia?
- Capital and productivity matter
Emerging Asia: Wages

Figure 11. Catch-Up by Emerging Markets' Manufacturing Wages
(Percent of U.S. manufacturing wages in constant PPP dollars)
Industry Structure and Mix

- Model does not fully deal with changing composition of industry, particularly exports
- China moving up the value-added ladder
  - Greater complexity of products (Hausmann, Hwang and Rodrik)
  - Greater capital intensity
  - Impact on labor share depends on elasticity of substitution
Industry sector model

\[
\alpha_{l,jt} = a \cdot mkp_{jt} + b \cdot KtY_{jt} + \sum_{x=s,c,lp,f,hmt} \gamma_x \cdot req_x_{jt} + \gamma_{st} \cdot rs_t \\
+ \sum \theta_i D_t + \sum \theta_i D_i j + \sum \theta_p Dp_j + c + a_j + v_{jt}
\]

Mkp: Markup or proxy  
KtY: Capital-output ratio  
Req_x: Ownership shares of different owner-types

Model presumes that labor does not share any of the monopolistic profit.
Changing export patterns

Figure 2: The Reallocation of Manufacturing Exports Across Major Two-digit Sectors*

* A sector is defined as major if the sector’s share of total trade is above 3% in 1992 and/or 2005. These sectors account for about 70 percent of manufacturing exports.

“An Anatomy of China’s Export Growth,” Mary Amiti and Caroline Freund
Conclusion

- Exceptionally thorough and detailed paper
- Sheds a great deal of light on evolution of China’s economy
- Can be put more in context of processes of globalization, with respect to
  - Developed countries
  - Other developing countries
  - Patterns of trade