Introduction

The World Wealth and Income Database (WID.world) aims to provide open and convenient access to the historical evolution of
- the world distribution of income and wealth, both within countries and between countries.
- National and regional level Wealth income ratio

The overall long-run objective is
- to be able to produce Distributional National Accounts (DINA)
  - DINA: annual estimates of the distribution of income and wealth using concepts of income and wealth that are consistent with the macroeconomic national accounts

Data Source and Literature

Methodology and Findings

Where We Stand


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Bangkok, 6th, October
UN ESCAP

China Growth

Figure 1  National Income (2016 PPP USD)

<table>
<thead>
<tr>
<th>Year</th>
<th>USA</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>6.00</td>
<td>0.94</td>
</tr>
<tr>
<td>2016</td>
<td>16.05</td>
<td>19.55</td>
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</tbody>
</table>

National Income
Unit trillion USD (2016 PPP)

Strategic Dialogue on Poverty and Inequality in Asia and the Pacific
Bangkok, Thailand, October 2017
Questions

- What Matters: Who Benefits from the Growth?
  - Public Sector vs. Private Sector
  - Rich vs. Poor
- These are the fundamental questions which are not only relevant for China but for all the nations.
Main Findings: Public Sector vs. Private Sector

**Figure 3**

Public vs private property in China 1978-2015 (% national income)

- Net national wealth (public + private)
- Net public wealth (government)
- Net private wealth (households)

**Figure 4**

The rise of private property in China 1978-2015

- Total national wealth
- Housing
- Other domestic capital and net financial assets
- Domestic corporate equity (listed and unlisted)

Privatization

- Housing Privatization
  - Starts in 1992
- States Owned Enterprises privatized through re-structuring, bankruptcy, and acquisition
  - 1998-2006
**Main Findings: Rich vs. Poor**

**Figure 5**


- **Top 10%**
- **Middle 40%**
- **Bottom 50%**

Distribution of pretax national income (before taxes and transfers, except pensions and unempl. insurance) among adults.
Corrected estimates (combining survey, fiscal, wealth and national accounts data).
Equal-split adults series (income of married couples divided by two).

**Privatization and Income Inequality**

Income inequality increased dramatically during 1998-2006 SOEs privatizing and reforming periods.
It became stable since 2006 after SOEs finished restructuring.

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**Figure 6**

Bottom 50% vs Top 1% income share: China vs USA

- **China: Bottom 50%**
- **China: Top 1%**
- **USA: Bottom 50%**
- **USA: Top 1%**

Distribution of pretax national income (before taxes and transfers, except pensions and unempl. insurance) among adults.
Corrected estimates (combining survey, fiscal, wealth and national accounts data).
Equal-split adults series (income of married couples divided by two).
Main Findings: Rich vs. Poor

Figure 7

Bottom 50% vs Top 1% income share: China vs France

Distribution of pre-tax national income (before taxes and transfers, except pensions and unemployment insurance) among adults. Corrected estimates (combining survey, fiscal, wealth and national accounts data). Equal-split adults series (income of married couples divided by two).

Figure 8

Rising inequality and income growth: China vs others

Average annual growth rate of real per adult pre-tax national income, 1978-2015

China

USA

France
Methodology

Estimating DINA Income Distribution

1. Estimating survey income distribution ($y_s$)
   - Income survey data
   - Generalized Pareto interpolation techniques (Blanchet-Fournier-Piketty, 2016)

2. Estimating fiscal income distribution ($y_f$)
   - Correcting survey income distribution using income tax data

3. Estimating distribution of total personal income ($y_p$)
   - $y_p = y_f + y_{nf}$
   - Correcting tax-exempt capital income $y_{nf}$
   - $y_{nf}$: private share of undistributed profits and imputed rent

4. Transform the distribution of personal income ($y_p$) into the distribution of national income $y$ (normalize the distribution by national income)

Figure 9

Income inequality in China: corrected vs raw estimates

Distribution of pre-tax national income (before taxes and transfers, except pensions and unemployment insurance) among adults. Corrected estimates combine survey, fiscal, wealth and national accounts data. Raw estimates rely only on self-reported survey data. Equal-split adults series (income of married couples divided by two).
**Contribution**

- First attempt to connect national accounts with research on distribution (inequality)
  - Possibility to revise, correct and improve estimates (new raw data sources, better methods)

- Provide the first systematic estimates of the level and structure of China’s national wealth since the beginning of the market reform process
  - By combining official and non-official sources

- First research to correct survey-based income inequality estimations using income tax data in China
  - Providing sharp upward revision of official inequality estimates

**Challenge - Data Availability for Measuring Inequality**

- Income tax data in China is extremely limited

- Only available data: **Income tax data on high-income taxpayers**
  - In 2006, the Chinese tax administration issued a circular
  - All taxpayers with individual taxable income higher than 120,000 yuan (about 18,000 USD) to file a special declaration
  - Release the total number and taxable income of these taxpayers (about 0.5% of urban adults)
    - At the **national level** annually for income years **2006 to 2010**
    - The publication at national level was **interrupted in 2011**, although the circular still applies
    - From **2011 to 2015** the publication of the data continued at the **provincial level** in a large number of provinces
      - We collected all these tabulations, which together provide useful information about top incomes in China
No official National balance sheets published

- Official National Balance Sheets
  - NBS since 1997, never published (Shi, 2011)
- Unofficial national balance sheets
  - 2002-2010 (Ma et al, 2012, PBC team)
  - 2007-2011, (Li et al 2013, CASS team)

Based on previous studies, we combined official and non-official sources and estimated national balance sheets for China for the period 1978-2015.

Our main findings have been presented in economic conferences, such as the American Economic Association Meeting, European Economic Association, etc.

- reported by various major international media, such as Washington Post, the Economist, the Wall Street Journal, etc.
- The research paper is available in NBER working paper series.

Our main findings will also be included in the World Inequality Report 2018

- Will be released by the World Inequality Lab in January 2018
- will be translated into 9 different languages and be published by Harvard University Press.
Thank You

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