Indonesia’s Challenges toward Industrial Upgrading

11 August 2017
Yuri Sato
Executive Vice President
Institute of Developing Economies
Japan External Trade Organization
(IDE-JETRO)
1. Indonesia’s Advantages
2. Challenges Facing Indonesia
   - From Deindustrialization to Reindustrialization
   - Weak Productivity
   - Weak Financial Intermediation
3. Assessing Economic Reform Policies
4. Conclusion
1. Indonesia’s Advantages are Double-edged Swords ….

1. The world 4\textsuperscript{th} largest population
   (+) Demand & supply base
   (−) Hotbed of poverty and unemployment

2. Demographic bonus (1970s～2030s)
   (+) Locomotive of growth
   (−) One chance, hard to catch up after that

3. Rich natural resource endowment
   (+) Resource booms repeat
   (−) Dutch disease risk → Discontinuous industrial development
cf. East Asia
1. Indonesia’s Advantages are Double-edged Swords …. 

Needs right policy intervention for promoting 
- Growth 
- Industrial upgrading 
- Equity 

investment
2. Challenges Facing Indonesia

Rise and Fall of Manufacturing Share

- Under the authoritarian developmental regime, the manufacturing share constantly increased, even in the oil booms.
- "Full-set industrialization" (resource-based + labor-intensive + capital-intensive industries) progressed.
- However, in the 2000s commodity boom, Indonesia moved to deindustrialization.

Shares in GDP (1970-2016)

- Authoritarian Developmental Regime (Soeharto Regime)
- Transition period
- Democracy
- Agriculture, Fishery, Forestry
- Manufacturing
- Service industries
- Mining

Note: Base year of GDP is 2000 up to 2012, and 2010 after 2013.
Source: BPS Indonesia (Central Agency of Statistics).
2. Challenges Facing Indonesia

Export: Repeated Dependency on Resource

Export Structure: 1975 - 2010

After the oil boom, exports shifted from crude oil to manufactured goods (5% in 1982 to 59% in 2000).

In the 2000s commodity boom, manufactured exports decreased to 41% (2010). Minerals (coal), vegetable oil (CPO), and low-processed resources dominated exports.

Source: UN Comtrade. Manufactured goods = SITC 5 - 8
The 2000s Commodity Boom was Over...

Source: Compiled based on data from World Trade Atlas.
Some Manufactured Exports Picking Up

Source: Compiled based on data from *World Trade Atlas*. 
## Challenge 1: From Deindustrialization to Reindustrialization

### Indonesia’s Top 10 Exports (HS4 digit)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Export</th>
<th>1993</th>
<th>2011</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Petroleum oil</td>
<td>Coal</td>
<td>Coal</td>
<td>Coal</td>
</tr>
<tr>
<td>2</td>
<td>Plywood</td>
<td>Natural gas</td>
<td>Palm oil</td>
<td>Palm oil</td>
</tr>
<tr>
<td>3</td>
<td>Natural gas</td>
<td>Palm oil</td>
<td>Natural gas</td>
<td>Natural gas</td>
</tr>
<tr>
<td>4</td>
<td>Garment</td>
<td>Petroleum oil</td>
<td>Petroleum oil</td>
<td>Petroleum oil</td>
</tr>
<tr>
<td>5</td>
<td>Electrical appliance</td>
<td>Natural rubber</td>
<td>Natural rubber</td>
<td>Natural rubber</td>
</tr>
<tr>
<td>6</td>
<td>Textile fabric</td>
<td>Copper ore</td>
<td>Motor cars</td>
<td>Palm kernel oil</td>
</tr>
<tr>
<td>7</td>
<td>Rubber products</td>
<td>Palm kernel oil</td>
<td>Plywood</td>
<td>Fatty acids/alcohols</td>
</tr>
<tr>
<td>8</td>
<td>Petroleum oil products</td>
<td>Petroleum oil products</td>
<td>Petroleum oil products</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Shrimp</td>
<td>Copper</td>
<td>Fatty acids/alcohols</td>
<td>Unwrought tin</td>
</tr>
<tr>
<td>10</td>
<td>Other textile products</td>
<td>Unwrought tin</td>
<td>Petroleum coke</td>
<td>Petroleum coke</td>
</tr>
</tbody>
</table>

### Details
- **Top 10 (% of total)**: 63, 52, 45
- **Total exports ($bil)**: 37, 203, 176

**Source:** World Trade Atlas and BPS.

---

The peak and the end of the 2000s commodity boom
Sources of Economic Growth
Labor, Capital, and Productivity (TFP)

• China’s source of growth shifted from labor to capital, and to productivity.
• Indonesia’s source of growth started from capital, moved to labor. Productivity has made the least contribution.

= “The Myth of Asia’s Miracle”

Indonesia should focus on enhancing productivity.

Challenge 2: Weak Productivity

### Selected Indicators of Technological Capabilities in ASEAN and other Asian countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of ISO 9001 certification</th>
<th>High-technology exports (% of manufactured exports)</th>
<th>R &amp; D expenditure (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>1</td>
<td>6</td>
<td>n.a.</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>0</td>
<td>9</td>
<td>n.a.</td>
</tr>
<tr>
<td>Myanmar</td>
<td>4</td>
<td>26</td>
<td>n.a.</td>
</tr>
<tr>
<td>Brunei</td>
<td>193</td>
<td>61</td>
<td>9</td>
</tr>
<tr>
<td>Philippines</td>
<td>1,027</td>
<td>944</td>
<td>73</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>184</td>
<td>2,036</td>
<td>11</td>
</tr>
<tr>
<td>Singapore</td>
<td>3,900</td>
<td>3,934</td>
<td>63</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1,860</td>
<td>6,524</td>
<td>16</td>
</tr>
<tr>
<td>Thailand</td>
<td>2,553</td>
<td>6,799</td>
<td>33</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2,355</td>
<td>8,614</td>
<td>60</td>
</tr>
<tr>
<td>Total/ Average</td>
<td>12,077</td>
<td>28,953</td>
<td>49</td>
</tr>
<tr>
<td>Korea</td>
<td>15,424</td>
<td>24,778</td>
<td>35</td>
</tr>
<tr>
<td>India</td>
<td>5,682</td>
<td>33,932</td>
<td>6</td>
</tr>
<tr>
<td>Japan</td>
<td>21,329</td>
<td>58,836</td>
<td>29</td>
</tr>
<tr>
<td>China</td>
<td>25,657</td>
<td>297,037</td>
<td>19</td>
</tr>
</tbody>
</table>

Note: In high-tech exports, the figure of Brunei is at 1998, those of Korea and Viet Nam at 2009 instead of 2010.
In R & D expenditure, figures of Brunei, Lao PDR, Philippines, and Viet Nam are at 2002.
Those of Philippines, Thailand, and India at 2007, Malaysia at 2006, and Indonesia at 2009.
Challenge 3: Weak Financial Intermediation

Indicator of Financial Deepening (M2/GDP) 1995~2014

Source: World Development Indicators.
3. Assessing the Current Economic Reform

aims at domestic-demand-led investment-led economy

1. Mobilize domestic savings
   - Broaden taxation base
   - Mobilize financial savings (deposit)

2. Promote investment = Reindustrialization with higher value added and higher productivity
   - Fiscal incentives
   - Credit expansion
   - R&D promotion
   - FDI utilization

3. Reduce business costs (=improve productivity)
   - Deregulation, rationalization, simplification
   - Improve logistics and infrastructure

but still needed
Conclusion

► Indonesia is amid the phase of critical importance, an unrepeateable chance of demographic bonus.

► Higher growth accompanied with industrial upgrading should be pursued. Reindustrialization with higher value added and higher productivity would be the key indicator.

► It is crucial to make smart policy intervention in order to boost domestic-demand-led growth by mobilizing savings, investing them toward industrial upgrading, and reducing business costs. Government efforts of economic reform need to be more intensified.
Terima kasih !!

Yuri_Sato@ide.go.jp