Governmental Intervention and Manufacture Industrial Policies in Mineral Rich Sub-Saharan Africa: Focused on Botswana and Nigeria

2016.10.11
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※ Please do not circulate.
## Socio-Economic Overview of SSA

<table>
<thead>
<tr>
<th>Indicators (2014)</th>
<th>World</th>
<th>South Asia</th>
<th>SSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (billion)</td>
<td>7.26</td>
<td>1.72</td>
<td>0.97</td>
</tr>
<tr>
<td>Surface Area (million km²)</td>
<td>134.3</td>
<td>5.14</td>
<td>24.29</td>
</tr>
<tr>
<td>GDP (billion USD)</td>
<td>78,106.33</td>
<td>2,583.58</td>
<td>1,754.49</td>
</tr>
<tr>
<td>GDP per capita [PPP] (USD)</td>
<td>15,059</td>
<td>5,294</td>
<td>3,641</td>
</tr>
<tr>
<td>GDP Growth (%)</td>
<td>2.6</td>
<td>6.9</td>
<td>4.6</td>
</tr>
<tr>
<td>Life Expectancy at birth</td>
<td>71.5</td>
<td>68.1</td>
<td>58.6</td>
</tr>
<tr>
<td>Mortality rate under 5 (per 1,000)</td>
<td>43.9</td>
<td>54.6</td>
<td>86.1</td>
</tr>
<tr>
<td>FDI, net inflows (billion USD)</td>
<td>1,780.05</td>
<td>39.59</td>
<td>44.59</td>
</tr>
<tr>
<td>Net official development assist. and aid received (billion USD)</td>
<td>161.07</td>
<td>15.44</td>
<td>46.55</td>
</tr>
</tbody>
</table>

Dutch disease

Some countries with abundant natural resources tend to be in poor economies because:
1) natural resources become major source of corruption
2) high economic dependency on natural resources and negligence in developing other economic growth options.
Curse of Mineral Rich SSA

- Half of population lives a day with less than $2
- Half of SSA countries are among the least developed.
- Conflicts over minerals
Curse of Mineral Rich SSA

Nigeria

- In 2004, 70% of gov. revenue from oil and natural gas (Keichi 2011)
- In 2009, 93.6% of exports was oil and natural gas (Joo 2011)
- In 2010, 46% lived daily with less than $2 (IMF)
Curse-free **BOTSWANA**

- Exceptional economic growth

![Graph showing Botswana's GDP per capita](image)

<table>
<thead>
<tr>
<th>Year</th>
<th>Botswana’s GDP per capita (current USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1967</td>
<td>93</td>
</tr>
<tr>
<td>1985</td>
<td>942</td>
</tr>
<tr>
<td>1995</td>
<td>3,001</td>
</tr>
<tr>
<td>2005</td>
<td>5,328</td>
</tr>
<tr>
<td>2015</td>
<td>6,361</td>
</tr>
<tr>
<td>2011</td>
<td>7,505</td>
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</tbody>
</table>

Source: World Bank, “World Development Indicators”
Q: How Botswana avoided the curse of natural resources and achieved economic development?
Market-centered View on SSA Economy

- **Neo-liberalism:**
  - World Bank (1994; 1996; 1997), IMF
  - Key to success: political and economic liberalization
  - i.e. South Africa, Botswana, etc.

- **State as the source of Underdevelopment:**
  - Incapability of the government
  - Irrationality of planned economy
  - Concentration of power on the central government
  - Lack of private sector
  - i.e. Nigeria and many other SSA countries
Botswana’s Neo-liberalist Success?

- Political and economic liberalization
- **HOWEVER**, the government regulated private sector (i.e. foreign business) and redistributed mineral rents against the market signal
  - Monitoring foreign business
  - Rent Stabilization Fund (1972)
  - Wage control, tightening imports regulation, exchange rate control, etc. to avoid inflation from rent accumulation
  - Mineral rent redistribution toward infrastructure and education
**Institutionalism:**
- State and market are interactive (Polanyi 1944; Gilpin 2001)
- Governmental intervention on market as “given.”
- Economic development plan is products from interaction of the government and various economic agents.
- The intervention can be effective or ineffective.

**Developmental State Model**
- Late developing countries in East Asia
- Governmental intervention on market to achieve capitalist economic development
Developmental State Model

- Late developing countries in East Asia
- Governmental intervention on market to achieve capitalist economic development
  - 1) Political decision to achieve “dynamic comparative advantages”
  - 2) led by the state and certain bureaucrats
  - 3) embedded autonomy of the state and society
  - 4) development of cooperation network between the state and society

Governmental Intervention

Preposition

- Governmental intervention on market as “given.”
  - Peter Evans, 1995, *Embedded Autonomy*
    - “In a globalized economy where most value is added at several removes from natural resources, the global division of labor presents itself as an opportunity for agency, not just an exogenous constraint.”
    - “[…] emergence of advantages on a complex evolution of competitive and cooperative ties among local firms, on government policies, and on a host of other social and political institutions.”
    - “In a world of constructed comparative advantage, social and political institutions – the state among them – shape international specialization. State intervention must be taken as one of sociopolitical determinants of what niche a country ends up occupying in the international division of labor.”
    - “[…] withdrawal and involvement are not the alternatives. **State involvement is a given. The appropriate question is not “how much” but “what kind”.”**
## 4 Types of Governmental involvement

<table>
<thead>
<tr>
<th>1. CUSTODIAN</th>
<th>2. DEMIURGE</th>
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<tbody>
<tr>
<td>• Regulator</td>
<td>• Producer (i.e. infra)</td>
</tr>
<tr>
<td>• Regulatory efforts that privilege policing over promotion</td>
<td>• Assumption about limitations of private capital and try substitute private producers</td>
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<tr>
<td></td>
<td>• Establish enterprises that compete in markets for normal “private” goods</td>
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<th>3. MIDWIFE</th>
<th>4. HUSBANDRY</th>
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<tbody>
<tr>
<td>• Assist in the emergence if new entrepreneurial groups or induce existing groups to venture into more challenging kinds of production</td>
<td>• Cajoling and assisting private entrepreneurial groups to meet the challenges from the global markets.</td>
</tr>
<tr>
<td>• &quot;Greenhouse” to protect infant sectors from external competition</td>
<td>• Overlapping techniques with midwifery.</td>
</tr>
<tr>
<td>• Providing subsidies and incentives</td>
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Botswana vs. Nigeria

Similarities

- Independence in 1960s with extremely poor economy
  - In 1967, less than $100 GDP per capita
- Abundant natural resources
  - Botswana: Diamond
  - Nigeria: Oil and natural gas
- High export dependency on natural resources
  - Botswana: 70% in 1990s (Kim 2007)
  - Nigerian: 90% in 2000s (Keichi 2011, Joo 2011)
- High import dependency on consumer and intermediate products
Similarities?

- Governmental interventions to breed manufacture industry
  - Both failed to achieve industrial diversification *because*...
  - Botswana: sufficient fund but trade disputes with neighboring countries occurred
  - Nigeria: deficit increased and called for IMF bailout

- Governmental interventions to increase and redistribute the rents from natural resources
  - **BUT**, intervention types and redistribution methods were different
## Botswana vs. Nigeria

<table>
<thead>
<tr>
<th>Dev. Path/Policy</th>
<th>Botswana</th>
<th>Nigeria</th>
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| Mineral discover and development | • Demiurge  
• Midwife |                          |                          |
| Mineral rent accumulation | • Custodian  
• Midwife |                          | • Custodian |
| Mineral rent redistribution | • Demiurge |                          |                          |
| Manufacture industrial policy (1) : import substitution | • (limited) Midwife |                          | • (limited) Midwife |
| Manufacture industrial policy (2) : export-led | • Midwife  
• (limited) Husbandry |                          | (After IMF Bail-out)  
• Least intervention  
• Led-by IMF |
1. Rent Accumulation and Redistribution
   1. Mineral Utilization: Demiurge + Midwife
   2. Rent Accumulation: Custodian + Midwife
   3. Rent Redistribution: Demiurge

2. Manufacture Industrial Policy
   1. Import Substitution Strategy until 1970s: Midwife
   2. Export-led Strategy in 1980~1990s: Midwife + Husbandry
1. Rent Accumulation and Redistribution

1. Mineral Utilization: Demiurge + Midwife

- Poor industrialization
  - Mineral utilization was the only growth engine
  - Lack of resources and technologies

- Inviting foreign business
  - Support their tasks (i.e. facility and information provision)
  - Monitoring on foreign business to achieve long-term efficiency on mineral exploration and utilization

- Cooperation of the government and private sectors
  - In mid-1970s, the Botswana gov. became partners of domestic business or founded state-owned companies. Foreign business was also utilized excessively
  - Gov.-Private Sector Committee: balancing national plan and practical opinions from business
Botswana’s Governmental Intervention

1. Rent Accumulation and Redistribution

2. Rent Accumulation: Custodian + Midwife

- Maximization of Mineral Rent
  - Tax reform

- Revenue Stabilization Fund (1972)
  - In 1972, the first rent revenue
  - Preparation for potential diminution of rent upon global mineral price
  - In 1998, the fund was used for the first time after 26-year fiscal surplus

- Economy Revitalization Plans
  - Wage moderation, strengthening regulations on importing goods, and exchange rate adjustment

→ Prevented the “Cures of Natural Resources”
1. Rent Accumulation and Redistribution

3. Rent Redistribution: Demiurge

- Infrastructure Development
  - Even before the first rent revenue
  - Exceptional as other mineral rich SSA countries did not see the need of further economic development

- Human Resource Development
  - Emphasis on Education

→ Botswana shows the highest education level and literacy rate in Africa.
  - In 2008, secondary school entrance rate was 80% (Korea Exim
2. Manufacture Industrial Policy

1. Import Substitution Strategy until 1970s: (limited) Midwife

   Backgrounds
   - In 1970s, trade deficit due to import of consumer and intermediate goods
   - Option (1): exporting more minerals
   - Option (2): import substitution strategy on food process, textile, construction materials

   Import Substitution Strategy
   - Supporting entrepreneurship development
   - Tax favor and other incentives to attract private capital to breed manufacture industry

   Failure of Import Substitution Strategy
   - Breeding manufacture required enormous amounts of money, but industrialization level was too low
   - Most investment concentrated on mineral industry
2. Manufacture Industrial Policy

2. Export-led Strategy in 1980~1990s: Midwife + (limited) Husbandry

- Backgrounds
  - Excessive rent accumulation in 1980s, so government’s capacity increased

- Financial Assistance Policy in 1982
  - Goals: Creation of employment and Industrial diversification
  - Business loans and business activity monitoring
  - Results: increased manufacture exports and increased employment rate

- Export-led Mobile Industrial Policy in 1990s

(Continued)
2. Manufacture Industrial Policy
   2. Export-led Strategy in 1980~1990s: Midwife + (limited) Husbandry
      - Export-led Automobile Industrial Policy in 1990s
        - Automobile export as growth engine
        - The 1st Hyundai Automobile Factory in 1993: the Botswana gov. supported the Factory as it owes biggest numbers of employees and high ratio on exports.
        - Automobile become the 2nd biggest export item in mid-1990s
        - The 2nd Hyundai Automobile Factory in 1998: the Botswana gov. invested 1/3 of establishment expenses
        - Top sales in South Africa beating Toyota in 1999
        - Volvo Automobile Factory in late 1990s

      - Problem: damage on automobile industry in South Africa
2. Manufacture Industrial Policy

2. Export-led Strategy in 1980~1990s: Midwife + (limited) Husbandry

- The End of Automobile Industry
  - South Africa’s declaration of trade war
    - threats to annul custom union
    - Inspection on multinational corporation, the actual owner of the factory
  - Hyundai was under huge debt pressure due to the inspection, the 2nd factory establishment and other kinds of facility expansions.
  - Although the government of Botswana had enough fund to rescue Hyundai, it gave up to.
  - The Botswana government sold Volvo factory and transferred it to South Africa
  - Results: manufacture exports decreased from 12% to 5%
1. Rent Accumulation and Redistribution
   1. Rent Accumulation and Redistribution: Custodian

2. Manufacture Industrial Policy
   1. Import Substitution Strategy until 1980s: (limited) Midwife
   2. IMF Bail-out and Export-led Strategy in 1990s
Resoure Curse Free Botswana

1. Government Intervention as “Given”

2. What matters is “HOW” it intervenes

⇒ Overcoming Dichotomy of State vs. Market
Thank You!