Evolution of Development Paradigms and Economic Development
From the Viewpoint of Development Economics

(For I2ID Part I Lectures)

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GSID, Nagoya University
April 2011
Organization of This Lecture

1. Evolution of Development Paradigms from the Viewpoint of Development Economist
2. Economic Development in “Development”
3. Poverty-Growth-Inequality Triangle
4. Association with Other Subject Areas
   (Human Capital incl. Education, Governance, Democracy, Human Development …)
1. Evolution of Development Paradigms
The Evolution: 1940s to 1960s

<table>
<thead>
<tr>
<th>TIME</th>
<th>1940s–1980s</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>at the end of WWII and after (1944.7–)</td>
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</tbody>
</table>

1. **Global Political /Economic System**
   - Breton Woods System (BWS) and Advancement of Globalization
     - at US NH BW representatives from the United Nations gathered to build post-war global economic system
     - In order to avoid the beggar-thy-neighbor strategies that led to WWII, institutions were developed to
       1. finance reconstruction (BRD 1945–)
       2. maintain stable exchange rates among key currencies (IMF 1947–), and
       3. avoid protectionism (GATT 1948–).

2. **Development Paradigm**
   - Development Planning and Import Substituting Industrialization (ISI)
     - Lack of markets, private sector
     - Pervasive market failure
     - **Capital Fundamentalism**
       - Harrod-Domar growth model
     - **Structuralism**
       - Two-Sector models
     - Dependency Theories (ISI)
       - Prebisch–Singer hypothesis

3. **Agricultural Modernization**
   - lack of Human Capital
     - Solow Growth Accounting/ Growth Model (with exogenous technology)

4. **Role of Government**

5. **Globalization (~1985–)**

6. **Why the poor is poor? Because...**
   - they are irrational
   - they are rational but Short of Capital

7. **(After WWII – 1960s)**
   - Development Planning Import-Substituting Industrialization (ISI)
## The Evolution: 1970s

### Time Periods:
- **1970s**
  - **Early 1970s**
  - **1973-74, 1978-80**

### Global Political/Economic System

- **Collapse of the BWS**
- **1st and 2nd Oil Crises**

#### Global Political/Economic System

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2. Smithsonian System (1971-72)</td>
</tr>
<tr>
<td></td>
<td>3. Fixed to Floating Exchange Rate System (1973-74)</td>
</tr>
<tr>
<td>1973-74</td>
<td>1. The 4th Middle-East War</td>
</tr>
<tr>
<td></td>
<td>OPEC price increase (1973-104; $2.8/b barrel to $11)</td>
</tr>
<tr>
<td></td>
<td>2. Iranian Revolution (1979)</td>
</tr>
<tr>
<td></td>
<td>3. Oil crises created stagflation</td>
</tr>
<tr>
<td></td>
<td>Indian and other oil importing countries</td>
</tr>
<tr>
<td>1978-80</td>
<td>1. Oil crises created stagflation</td>
</tr>
<tr>
<td></td>
<td>(1978-1979)</td>
</tr>
<tr>
<td></td>
<td>2. Oil crises created stagflation</td>
</tr>
<tr>
<td></td>
<td>(1979-1980)</td>
</tr>
</tbody>
</table>

#### Development Paradigm

- **Basic Human Needs (BHN)**
- **New International Economic Order (NIEO)**
- **Export-Oriented Industrialization (EOI)**

### Development Paradigm

<table>
<thead>
<tr>
<th>Event</th>
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<tbody>
<tr>
<td>Basic Human Needs (BHN)</td>
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<tr>
<td>New International Economic Order (NIEO)</td>
</tr>
<tr>
<td>Export-Oriented Industrialization (EOI)</td>
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</tbody>
</table>

### Reasons for Poverty

- **Failure in Excessive Government Policy Intervention**
The Evolution: 1980s

<table>
<thead>
<tr>
<th>TIME</th>
<th>early 1980s</th>
<th>mid 1980s on</th>
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</thead>
<tbody>
<tr>
<td><strong>Global Political/Economic System</strong></td>
<td></td>
<td></td>
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<tr>
<td>Reaganomics</td>
<td>Chaotic Adjustments</td>
<td></td>
</tr>
<tr>
<td>(in search of stronger America) w/ the 40th President Reagan (1981-2)</td>
<td>1) Plaza Accord (1985.9)</td>
<td></td>
</tr>
<tr>
<td>1) Stronger private/business sector, tax rate ↓ → tax revenue ↓ (↑) deregulation &amp; money supply control</td>
<td>GS agreed to further devalue $ (4/$: 2.40 at 1985.8/9; 200 at 1985.12, 150 at 1986.12)</td>
<td></td>
</tr>
<tr>
<td>2) Stronger $ by policies for higher interest</td>
<td>2) Ruble Agreement (1987.2)</td>
<td></td>
</tr>
<tr>
<td>3) Stronger military forces</td>
<td>3) Black Monday (1987.10.19)</td>
<td></td>
</tr>
<tr>
<td>defense exp. ↑ → govt. deficits ↑ → higher int.</td>
<td>NY Wall Street ↓ $500 or 22.6% → global markets ↓ due to the twin deficits in the US</td>
<td></td>
</tr>
<tr>
<td>4) 2360 created trade deficits ↑</td>
<td>4) The US economy suffered stagnation due to the Oil Crisis.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Role of Government</th>
<th>2nd Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Human Needs (BHN)</td>
<td>Development Paradigm</td>
</tr>
<tr>
<td>Export-Oriented Industrialization (EOI)</td>
<td>Resurgence of Neoclassical Economics</td>
</tr>
<tr>
<td>Structural Adjustment Program (SAP)</td>
<td>Structural Adjustments</td>
</tr>
<tr>
<td>(1970s-)</td>
<td>“Getting Policies Right”</td>
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<tr>
<td>(1980s)</td>
<td>Rise of Development Microeconomics</td>
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<table>
<thead>
<tr>
<th>Globalization (~ 1885-</th>
<th>2nd Generation</th>
</tr>
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<tbody>
<tr>
<td>New Int'l Economic Order (NIEO)</td>
<td>Knowledge Capital</td>
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</table>

<table>
<thead>
<tr>
<th>Reason for Poverty of Poor Policies</th>
<th>of Imperfect Information</th>
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The Evolution: 1990s

<table>
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<th>TIME</th>
<th>1990s</th>
<th>1997 to end 20th C.</th>
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<tr>
<td></td>
<td>end of 1980s to 1997</td>
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<tr>
<td>Global Political/Economic System</td>
<td>Rapid Globalization</td>
<td>Asian Financial Crisis</td>
</tr>
<tr>
<td>1) US fiscal consolidation</td>
<td>1) The Myth of Asian Miracle?</td>
<td></td>
</tr>
<tr>
<td>2) Recovery in Latin American economies</td>
<td>2) Current Account crisis to Capital Account crisis</td>
<td></td>
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<tr>
<td>3) Collapse of Berlin Wall (1989 11)</td>
<td>3) Good Governance?</td>
<td></td>
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<tr>
<td>4) Collapse of Soviet Union (1991 12) and the birth of transitional economies</td>
<td>4) National Policy vs. Global Policy</td>
<td></td>
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<tr>
<td>5) Privatization and integration to global economy</td>
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<td>6) Rise of Asian Growth Model (The East Asian Miracle, 1993)</td>
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<td>8) Booming Asian exports</td>
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<td>9) Booming FDIs to Asia</td>
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<td>10) Mexico's Peso Crisis (1994.12.20)</td>
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<td>GATT Uruguay Round (1986-94)</td>
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<td>Establishment of WTO (1995.1.1)</td>
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<td>Surge of Regional Trade Agreements (1990-2)</td>
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<td>UN Conference on Environment and Development (Rio de Janeiro, 1992)</td>
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</tbody>
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Development Paradigm

"Getting Governance Right"

New Institutional Economics (NIE)

New Growth Theories or Endogenous Growth Theories

Globalization and New Liberalism

Human Development and Human Security

Why the poor is poor? Because

<table>
<thead>
<tr>
<th>Reason for Poverty</th>
<th>of</th>
<th>of</th>
</tr>
</thead>
<tbody>
<tr>
<td>lack of Good Governance</td>
<td></td>
<td>lack of Institutions</td>
</tr>
</tbody>
</table>

Neoclassical Growth Theories

(1970s-)

Export-Oriented Industrialization (EOI)

(1980s)

Structural Adjustment Program (SAP)

(late 1990s-)

Poverty Reduction Strategy Paper (PRSP)

(1990s)

Good Governance

Human Development (HDI)

MDGs (<2015)

Social Capital

Role of Government

Globalization (<1985-)

New International Economic Order (NEO)

Basic Human Needs (EHN)

Development Governance

"Getting Institutions Right"

Quality of Growth
### The Evolution: into the 21st Century

<table>
<thead>
<tr>
<th>TIME</th>
<th>21st Century</th>
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<tbody>
<tr>
<td></td>
<td>Unseen and Unstable Process of Globalization?</td>
</tr>
<tr>
<td></td>
<td>1) 9/11 terrorist attacks (2001.9.11)</td>
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<td></td>
<td>2) Afghanistan War (that of 2001.10–)</td>
</tr>
<tr>
<td></td>
<td>i) Rising resource prices due to high real demand and influx of speculative money</td>
</tr>
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<td></td>
<td>ii) Resurgence of Resource Nationalism and Resources Diplomacy</td>
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<td></td>
<td>iii) Chaotic global financial market due to the US subprime mortgage crisis</td>
</tr>
</tbody>
</table>

**WTO Doha Round**
(Development Round)
(2001–)

#### Next Generation Development Paradigm
Establishing New Political Economy of Development

- Multiclarization and Diversification
- Fair institutions
- Fair and equitable incentive structure
- Social Capital and Coordinator's Role of Government

### Why the poor is poor? Because...
they are not supplied with Incentives to get out of poverty in a fair and equitable manner
The Evolution of a Development Paradigm

(After WWII – 1960s)
Development Planning
Import-Substituting Industrialization (ISI)

(1970s –)
Export-Oriented Industrialization (EOI)

(1980s)
Structural Adjustment Program (SAP)

(1990s)
Good Governance

(late 1990s –)
Poverty Reduction Strategy Paper (PRSP)

(21st Century)
New Political Economy of Development

Human Development (HDI)

Basic Human Needs (BHN)
New Intra-Economic Order (NIEO)

Role of Government

Globalization (~1980s)

MDGs (~2015)

Social Capital
The Evolution of a Development Paradigm

(After WWII – 1960s)
Development Planning
Import-Substituting Industrialization (ISI)

(1970s –)
Export-Oriented Industrialization (EOI)

(1980s)
Structural Adjustment Program (SAP)

(1990s)
Good Governance

(late 1990s –)
Poverty Reduction Strategy Paper (PRSP)

(21st Century)
New Political Economy of Development

Basic Human Needs (BHN)

New Intraindustry Economic Order (NIEO)

Human Development (HD)
The Evolution of a Development Paradigm

- Classical Economics
- Structural Approach/Analyses
- Resurgence of Neo-Classical Economics
- Development Microeconomics
- Dependency Theories
- Neo-Classical Growth Theories
- New Institutional Economics (NIE)
- New (Endogenous) Growth Theories

- (After WWII – 1960s) Development Planning
  Import-Substituting Industrialization (ISI)

- (1970s –) Export-Oriented Industrialization (EOI)

- (1980s) Structural Adjustment Program (SAP)

- (1990s) Good Governance

- (late 1990s –)
  Poverty Reduction Strategy Paper (PRSP)

- (21st Century)
  New Political Economy of Development

- Basic Human Needs (BHN)
- New Intrin’Economic Order (NIEO)

- Role of Government

- Globalization (~1985–)

- MDGs (~2015)

- Social Capital
The Evolution of Development Paradigm: A Simplified Review

After WWII
1960s (early 1970s)
ISI

1980s
SAP

End of the 20th C. & Beyond
PRSP

New Political Economy of Development

1989-
Governance

BHN

Role of Government

1985-
Globalization

Social Capital

-2015
MDGs

NIE
2. Economic Development in “Development”
What is Economic Growth?

In the development economics field, the term “economic growth” and “economic development” are distinctively used. Strictly speaking, economic growth is the growth of the size of the real economy in a country, which is measured by the gross domestic product (GDP). The growth rate is what we call the economic growth rate. However, when discussing its effect to poverty reduction, there are times that increase in the average income per capita (GDP divided by population) is considered economic growth. In this case, the rate of per capita income increase is observed.
What is Economic Development?

In economic development, “development” is perceived as a *process*. Economic development is defined as a concept that involves the following structural changes and social transformation that accompany economic growth.

- **Industrial transformation** (shift from an agriculture-dominant society to an industry-dominant society), and **economic structural changes** such as developments in economic/social infrastructure and institutions;

- **Social transformation** and the changes in lifestyles that accompany urbanization (labor migration from rural areas to cities);

- **Cultural transformation** such as the shift from family/relative/tribe-oriented organization/relationship to a more merit-based, contractual organization/relationship;

- **Political transformation** including democratization and (legal) institution building for the establishment of property rights, contract enforcement, and so forth.
What is Economic Development?

When we see “development” as **outcomes**, it is considered that development has happened or has been made, only when human well-being has improved along with economic growth (income growth).

Dadley Seers (1969) discusses as follows:
The questions to ask about a country’s development are therefore: What has been happening to **poverty**? What has been happening to **unemployment**? What has been happening to **inequality**? If all three of these have declined from high levels, then beyond doubt this has been a period of development for the country concerned. If one or two of these central problems have been growing worse, especially if all three have, it would be strange to call the result “development” even if per capita income doubled. (P-G-I Triangle & Pro-Poor Growth)
Income Convergence?

Table 1-2 Changes in Regional Real Per Capita GDP (2000 US$)

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</thead>
<tbody>
<tr>
<td>East Asia &amp; Pacific</td>
<td>145</td>
<td>211</td>
<td>363</td>
<td>481</td>
<td>735</td>
<td>952</td>
<td>1,355</td>
<td>x9.3</td>
<td>x3.7</td>
</tr>
<tr>
<td>China</td>
<td>100</td>
<td>146</td>
<td>290</td>
<td>392</td>
<td>658</td>
<td>949</td>
<td>1,449</td>
<td>x14.5</td>
<td>x5.0</td>
</tr>
<tr>
<td>Europe &amp; Central Asia</td>
<td>2,257</td>
<td>1,763</td>
<td>2,037</td>
<td>2,615</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>2,275</td>
<td>3,088</td>
<td>3,285</td>
<td>3,259</td>
<td>3,554</td>
<td>3,852</td>
<td>4,044</td>
<td>x1.8</td>
<td>x1.2</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>831</td>
<td>1,295</td>
<td>1,431</td>
<td>1,346</td>
<td>1,423</td>
<td>1,605</td>
<td>1,780</td>
<td>x2.1</td>
<td>x1.2</td>
</tr>
<tr>
<td>South Asia</td>
<td>199</td>
<td>221</td>
<td>275</td>
<td>328</td>
<td>379</td>
<td>450</td>
<td>566</td>
<td>x2.8</td>
<td>x2.1</td>
</tr>
<tr>
<td>India</td>
<td>188</td>
<td>215</td>
<td>260</td>
<td>317</td>
<td>372</td>
<td>453</td>
<td>588</td>
<td>x3.1</td>
<td>x2.3</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>494</td>
<td>587</td>
<td>539</td>
<td>531</td>
<td>494</td>
<td>515</td>
<td>569</td>
<td>x1.2</td>
<td>x1.1</td>
</tr>
<tr>
<td>LMIC</td>
<td>550</td>
<td>752</td>
<td>901</td>
<td>963</td>
<td>1,036</td>
<td>1,191</td>
<td>1,440</td>
<td>x2.6</td>
<td>x1.6</td>
</tr>
<tr>
<td>High Income Cos.</td>
<td>10,911</td>
<td>15,044</td>
<td>18,959</td>
<td>21,917</td>
<td>23,466</td>
<td>26,368</td>
<td>28,242</td>
<td>x2.6</td>
<td>x1.5</td>
</tr>
<tr>
<td>World</td>
<td>2,840</td>
<td>3,596</td>
<td>4,158</td>
<td>4,565</td>
<td>4,758</td>
<td>5,241</td>
<td>5,647</td>
<td>x2.0</td>
<td>x1.4</td>
</tr>
</tbody>
</table>

Note: Country compositions of geographical regions are basically fixed. Country compositions of income groups, however, change over years. For tabulation, they are fixed using 2005 World Bank income groupings.

Source: Author’s compilation using World Bank, *World Development Indicators 2007* CD-ROM.
## Income Convergence? *(σ*-convergence)*

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Mean Income</strong></td>
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<td></td>
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<tr>
<td>Low Income Cos. 54)</td>
<td>219</td>
<td>241</td>
<td>246</td>
<td>257</td>
<td>273</td>
<td>312</td>
<td>340</td>
<td>393</td>
<td>481</td>
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<tr>
<td>Low Middle Income Cos. 58)</td>
<td>361</td>
<td>442</td>
<td>570</td>
<td>689</td>
<td>768</td>
<td>861</td>
<td>1,047</td>
<td>1,250</td>
<td>1,614</td>
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<tr>
<td>Upper Middle Income Cos. 40)</td>
<td>2,631</td>
<td>3,016</td>
<td>3,516</td>
<td>3,447</td>
<td>3,498</td>
<td>3,416</td>
<td>3,897</td>
<td>4,480</td>
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<tr>
<td>LMIC (152)</td>
<td>550</td>
<td>644</td>
<td>752</td>
<td>867</td>
<td>901</td>
<td>963</td>
<td>1,036</td>
<td>1,191</td>
<td>1,440</td>
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<tr>
<td>High Income Cos. 56)</td>
<td>10,911</td>
<td>13,375</td>
<td>15,044</td>
<td>17,304</td>
<td>18,959</td>
<td>21,917</td>
<td>23,466</td>
<td>26,368</td>
<td>28,242</td>
</tr>
<tr>
<td>High Income OECD (24)</td>
<td>11,190</td>
<td>13,742</td>
<td>15,419</td>
<td>17,732</td>
<td>19,606</td>
<td>22,712</td>
<td>24,256</td>
<td>27,304</td>
<td>29,251</td>
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<td>Other High Income Cos. 32)</td>
<td>4,570</td>
<td>5,831</td>
<td>8,113</td>
<td>10,324</td>
<td>9,470</td>
<td>11,292</td>
<td>13,535</td>
<td>15,304</td>
<td>17,110</td>
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<td>World (208)</td>
<td>2,840</td>
<td>3,314</td>
<td>3,596</td>
<td>3,981</td>
<td>4,158</td>
<td>4,565</td>
<td>4,768</td>
<td>5,241</td>
<td>5,647</td>
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<td><strong>CV</strong></td>
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<tr>
<td>Low Income Cos. 54)</td>
<td>0.51</td>
<td>0.54</td>
<td>0.56</td>
<td>0.55</td>
<td>0.51</td>
<td>0.49</td>
<td>0.55</td>
<td>0.49</td>
<td>0.49</td>
</tr>
<tr>
<td>Low Middle Income Cos. 58)</td>
<td>0.55</td>
<td>0.62</td>
<td>0.56</td>
<td>0.51</td>
<td>0.47</td>
<td>0.45</td>
<td>0.53</td>
<td>0.47</td>
<td>0.43</td>
</tr>
<tr>
<td>Upper Middle Income Cos. 40)</td>
<td>0.63</td>
<td>0.58</td>
<td>0.51</td>
<td>0.50</td>
<td>0.45</td>
<td>0.35</td>
<td>0.41</td>
<td>0.36</td>
<td>0.30</td>
</tr>
<tr>
<td>LMIC (152)</td>
<td>1.13</td>
<td>1.14</td>
<td>1.06</td>
<td>1.01</td>
<td>0.99</td>
<td>0.96</td>
<td>1.04</td>
<td>1.05</td>
<td>1.04</td>
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<tr>
<td>High Income Cos. 56)</td>
<td>0.78</td>
<td>0.60</td>
<td>0.57</td>
<td>0.52</td>
<td>0.45</td>
<td>0.43</td>
<td>0.42</td>
<td>0.43</td>
<td>0.40</td>
</tr>
<tr>
<td>High Income OECD (24)</td>
<td>0.45</td>
<td>0.42</td>
<td>0.38</td>
<td>0.38</td>
<td>0.38</td>
<td>0.38</td>
<td>0.37</td>
<td>0.37</td>
<td>0.37</td>
</tr>
<tr>
<td>Other High Income Cos. 32)</td>
<td>1.30</td>
<td>0.97</td>
<td>0.85</td>
<td>0.73</td>
<td>0.49</td>
<td>0.38</td>
<td>0.34</td>
<td>0.33</td>
<td>0.38</td>
</tr>
<tr>
<td>World (208)</td>
<td>1.61</td>
<td>1.46</td>
<td>1.40</td>
<td>1.40</td>
<td>1.40</td>
<td>1.47</td>
<td>1.50</td>
<td>1.50</td>
<td>1.58</td>
</tr>
</tbody>
</table>

(Source) Author's own calculations from World Bank, *World Development Indicators 2007* CD-ROM.

\[
c_v = \frac{\sigma}{\mu} \quad \sigma = \sqrt{\frac{1}{N} \sum_{i=1}^{N} (x_i - \mu)^2}.
\]

(from Otsubo (2009), *Globalization and Development*)
3. 所得水準の相対的収束（σ収束）

世界は、高所得諸国間および高中所得途上諸国間の強い所得収束傾向と、低中所得途上諸国間と低所得途上諸国間の弱い所得収束傾向を内包しつつ、1980年代を境に途上国諸国全体として、そして世界全体として所得収束傾向から所得拡散傾向に転じていることになる。なにがしかの条件を共有する各所得グループの構成国間では所得収束が起きて同時に、条件等が異なると思われる所得グループの間の隔たりは拡がっていると考えられる。

表1-7 1人当たり実質GDP水準と変動係数の推移（2000年米ドル値で計算）

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>低所得諸国（54）</td>
<td>0.51</td>
<td>0.54</td>
<td>0.56</td>
<td>0.55</td>
<td>0.51</td>
<td>0.49</td>
<td>0.55</td>
<td>0.49</td>
<td>0.49</td>
</tr>
<tr>
<td>低中所得諸国（58）</td>
<td>0.55</td>
<td>0.62</td>
<td>0.56</td>
<td>0.51</td>
<td>0.47</td>
<td>0.45</td>
<td>0.53</td>
<td>0.47</td>
<td>0.43</td>
</tr>
<tr>
<td>高中所得諸国（40）</td>
<td>0.63</td>
<td>0.58</td>
<td>0.51</td>
<td>0.50</td>
<td>0.45</td>
<td>0.35</td>
<td>0.41</td>
<td>0.36</td>
<td>0.30</td>
</tr>
<tr>
<td>開発途上国全体（152）</td>
<td>1.13</td>
<td>1.14</td>
<td>1.06</td>
<td>1.01</td>
<td>0.99</td>
<td>0.96</td>
<td>1.04</td>
<td>1.05</td>
<td>1.04</td>
</tr>
<tr>
<td>先進国（高所得）（56）</td>
<td>0.78</td>
<td>0.60</td>
<td>0.57</td>
<td>0.52</td>
<td>0.45</td>
<td>0.43</td>
<td>0.42</td>
<td>0.43</td>
<td>0.40</td>
</tr>
<tr>
<td>高所得OECD（24）</td>
<td>0.45</td>
<td>0.42</td>
<td>0.38</td>
<td>0.38</td>
<td>0.38</td>
<td>0.37</td>
<td>0.37</td>
<td>0.37</td>
<td>0.37</td>
</tr>
<tr>
<td>高所得OECD外（32）</td>
<td>1.30</td>
<td>0.97</td>
<td>0.85</td>
<td>0.73</td>
<td>0.49</td>
<td>0.38</td>
<td>0.34</td>
<td>0.33</td>
<td>0.38</td>
</tr>
<tr>
<td>世界（208）</td>
<td>1.61</td>
<td>1.46</td>
<td>1.40</td>
<td>1.40</td>
<td>1.40</td>
<td>1.47</td>
<td>1.50</td>
<td>1.50</td>
<td>1.58</td>
</tr>
</tbody>
</table>

（出所）World Bank, World Development Indicators 2007 CD-ROMより筆者作成。
Income Convergence?
(Absolute $\beta$-convergence)

All Countries: 1960-2005
High Income OECD 24 Countries: 1960-2005

(Source) Otsubo (2009), *Globalization and Development*.

(Barro's Ad Hoc Growth Equation Estimation)
### Factors for Higher Income Growth & Catch-Up?

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Exploratory Variables</th>
<th>Estimated Coefficients</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conditional Income Convergence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Initial level of income (in log)</td>
<td></td>
<td>-0.0254</td>
<td>0.0031</td>
</tr>
<tr>
<td><strong>Initial Human Capital</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Male secondary and higher years of schooling (of persons aged 25 and over)</td>
<td></td>
<td>0.0118</td>
<td>0.0025</td>
</tr>
<tr>
<td>(3) Life expectancy (in log)</td>
<td></td>
<td>0.0423</td>
<td>0.0137</td>
</tr>
<tr>
<td>(4) (1) X (2)</td>
<td></td>
<td>-0.0062</td>
<td>0.0017</td>
</tr>
<tr>
<td><strong>Population Pressure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Fertility rate (in log)</td>
<td></td>
<td>-0.0161</td>
<td>0.0053</td>
</tr>
<tr>
<td><strong>Governance - Institutions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) Government consumption to GDP ratio (excl. spending on education and defense)</td>
<td></td>
<td>-0.136</td>
<td>0.026</td>
</tr>
<tr>
<td>(7) Rule of law index (subjective composite indicator)</td>
<td></td>
<td>0.0293</td>
<td>0.0054</td>
</tr>
<tr>
<td>(8) Democracy index (index of political rights)</td>
<td></td>
<td>0.090</td>
<td>0.027</td>
</tr>
<tr>
<td>(9) Democracy index squared</td>
<td></td>
<td>-0.088</td>
<td>0.024</td>
</tr>
<tr>
<td>(10) Inflation rate (economic governance/m anagement)</td>
<td></td>
<td>-0.043</td>
<td>0.008</td>
</tr>
<tr>
<td><strong>Other Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(11) Terms of trade change (changes in export price/import price ratio)</td>
<td></td>
<td>0.137</td>
<td>0.030</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R² (for each period)</th>
<th>No. of Observations (for each period)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.58</td>
<td>80</td>
</tr>
<tr>
<td>0.52</td>
<td>87</td>
</tr>
<tr>
<td>0.42</td>
<td>84</td>
</tr>
</tbody>
</table>

**Table 1-4**

**Estimated Ad Hoc Growth Equation**

(Human Capital, Governance, Institutions and Economic Growth)

**Note:** Dependent variables are the growth rates of real per capita GDP for 1965-75, 1975-85, and 1985-90. Estimation is carried out by three-stage least-squares (with different instrumental variables used for each period/equation). p value for joint significance of two democracy variables (items (8) and (9)) is 0.0006 (i.e. jointly significant). Dependent variables are classified by this author in order to facilitate readers’ understanding of the estimated results.

**Source:** Barro (1997), Table 1.1, simplified and re-categorized by this author.
Money alone is not enough!!

But if that Money was not available?

Fig. 1. The gap between the linear aid-investment-growth model and the actual outcome in Zambia.

Predictions by a financial gap model, Minimum Standard Model (MSM), Revised MSM (RMMSM) built on Two-Gap (resource-gap) model and the Harrod-Domar growth model.

3. Poverty-Growth-Inequality Triangle
Figure 0: Poverty-Growth-Inequality Triangle

Growth: Increase in Mean Income Level

Poverty Reduction: In Absolute Poverty

Inequality: Distribution of Income

Elasticity of Poverty Reduction w.r.t. Growth

Policies and Factors: X, Y, Z, ...

‘Pro-Poor’

Trade-off?

Source: Author
Figure 0.5: Decomposition of change in distribution and poverty into growth and distribution effects

Change in Poverty = F( growth, distribution, change in distribution)  (assuming log-normal distribution)

Source: Bourguignon (2003), Figure 1.2; Bourguignon (2004), Figure 1
Figure 4: Growth is good for the poor  (Figure 1-4 in Ch.1)

Source: Dollar and Kraay (2007), Figure 1
Figure 1: Poverty-Growth-Inequality Triangle

- **Growth**: Increases in Mean Income Level
- **Inequality**: Distribution of Income Distribution of Assets
- **Development Governance Institutions**: (common factors?)
- **Poverty Reduction**: in Absolute Poverty

Elasticity of Poverty Reduction w.r.t. Growth

Elasticity of Poverty Reduction w.r.t. Distribution

Figure 1-3 Kuznets’ Inverted U-Curve

Source: Author

Pro-Poor vs. Pro-Growth → Pro-Poor Growth
Ravallion (2005) “Inequality is Bad for the Poor”
Rate of poverty reduction = [-9.33*(1-Inequality index)^3.031] * Ordinary growth rate

Applied to 62 sample cos.
As Gini increases from 20 to 60, the Elasticity of Poverty Reduction w.r.t. Growth declines from -4.3 to -0.6.
**WDR 2006: Equity and Development (2005)**

*With imperfect markets, inequalities in power and wealth translate into unequal opportunities, leading to wasted productive potential and to an inefficient allocation of resources. (p.7)*

Imperfect Capital Markets, Imperfect Land Markets, Imperfect Markets for Human Capital

Economic and political inequalities are associated with **impaired institutional development.** (p.8)

The second channel through which inequality affects long-run processes of development is the shaping of economic and political institutions. (p.9)
A Story of Rich and Poor Dynasties
Overlapping Generations Mode with Inter-Generational Altruism, Originated from Galor and Zeira (1993)

Utility (Happiness) Function:  \[ u = \alpha \log c + (1-\alpha) \log b \]

1) Individuals are assumed to be identical w.r.t. their ‘potential’ skills and preferences and differ only w.r.t. their inherited wealth (unequal asset distribution!).
2) Individuals live for 2 periods. 1\textsuperscript{st} period: either being educated or work as unskilled. 2\textsuperscript{nd} period: work as skilled or as unskilled according to their education levels, consume (enjoy life), and leave bequests.

1) S-T: Imperfect Credit Markets (\(i^b > i^l\), loans on collateral not on the ‘potential’); Wealth distribution affects economic performance.
2) L-T: Indivisibility in Investment in Human Capital (large initiation fees, etc.); inequality persists and the inherited wealth distribution will affect economic/social performance in the long run (not only in the S-L).
Recent Movements in Japan’s Gini Indices

<table>
<thead>
<tr>
<th></th>
<th>1981</th>
<th>2005</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gini Index before Redistribution (当初所得)</td>
<td>0.3491</td>
<td>0.5263</td>
<td>1.51</td>
</tr>
<tr>
<td>Gini Index after Redistribution (再分配所得)</td>
<td>0.3143</td>
<td>0.3873</td>
<td>1.23</td>
</tr>
</tbody>
</table>

Source: 厚生労働省「所得再分配調査」

Source: Author’s unscientific imagination !?
4. Association with Other Subject Areas

(Human Capital incl. Education, Governance, Democracy,
Human Development…)}
Given issues/problems in the field: we are in need of Multidisciplinary Network Studies
### Factors for Higher Income Growth & Catch-Up?

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Period-Average Growth Rate of Mean Real Per-Capita Income</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conditional Income Convergence</strong></td>
<td><strong>Estimated Coefficients</strong></td>
</tr>
<tr>
<td>(1) Initial level of income (in log)</td>
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</tr>
<tr>
<td><strong>Initial Human Capital</strong></td>
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<td></td>
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<tr>
<td>(6) Government consumption to GDP ratio (excl. spending on education and defense)</td>
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<tr>
<td><strong>Other Control Variables</strong></td>
<td></td>
</tr>
<tr>
<td>(11) Terms of trade change (changes in export price/import price ratio)</td>
<td>0.137</td>
</tr>
</tbody>
</table>

| R² (for each period) | .58 .52 .42 |
| No. of Observations (for each period) | 80 87 84 |

**Table 1-4**

**Estimated Ad Hoc Growth Equation**
(Human Capital, Governance, Institutions and Economic Growth)

**Note:** Dependent variables are the growth rates of real per capita GDP for 1965-75, 1975-85, and 1985-90. Estimation is carried out by three-stage least-squares (with different instrumental variables used for each period/equation). p value for joint significance of two democracy variables (items (8) and (9)) is 0.0006 (i.e. jointly significant). Dependent variables are classified by this author in order to facilitate readers’ understanding of the estimated results.

**Source:** Barro (1997), Table 1.1, simplified and re-categorized by this author.
Human Development Index

**Technique Note 1: Calculating the Human Development Indices**

The diagrams here offer a clear overview of how the five human development indices used in the Human Development Report are constructed, highlighting both their similarities and their differences. The text on the following pages provides a detailed explanation.

**Human Development Index (HDI)**

**Dimension:**
- A long and healthy life
- Knowledge
- A decent standard of living

**Indicators:**
- Life expectancy at birth
- Adult literacy rate
- GDP per capita (PPP US$)

**Human Poverty Index (HPI-1)**

**Dimension:**
- A long and healthy life
- Knowledge
- A decent standard of living

**Indicators:**
- Probability at birth of not surviving to age 40
- Adult illiteracy rate
- Percentage of children under five who are underweight

**Human Poverty Index for Developing Countries (HPI-1)**

**Human Poverty Index for Selected OECD Countries (HPI-2)**

**Dimension:**
- A long and healthy life
- Knowledge
- A decent standard of living
- Social exclusion

**Indicators:**
- Probability at birth of not surviving to age 60
- Percentage of adults lacking functional literacy skills
- Percentage of people living below the poverty line
- Long-term unemployment rate

**Human Development Index (HDI)**

**Dimension:**
- Life expectancy index
- Education index
- GDP index

**Indicators:**
- GDP per capita (PPP US$)
- Human development index (HDI)
Economic Growth and Human Development

Figure 1-5
Per Capita Income and Human

Note: Horizontal axis: per capita income levels in the year 2006 (in 2005-based PPP$) shown in deviations from the mean income of Middle-Income countries (PPP $6,649).
Vertical axis: human development indicators in the year 2006 shown in deviations from the mean value of the Middle-Income countries (0.774).
5. In Conclusion ...
What is Development?  

Introduction to International Development Studies:  
An Interdisciplinary Approach

co-editors:  
Prof. S. Otsubo, development economist  
Prof. H. Kimura, political scientist,  
Prof. S. Ito, development sociologist

In this book, we define ‘development’ as the reform of the whole structural system that produces material as well as non-material poverty.
What is Development? 2

When ‘proper incentives to get out of poverty’ so defined by a development economist are given to the ‘structural poor’, if they are equipped with ‘capabilities’ and ‘adaptability’ to respond, those who cannot easily benefit from ‘trickle-down’ may rise to their feet and overcome poverty by themselves.

The ‘potential poor’ who may easily fall into poverty given external economic/social/natural shocks are equipped with resilience supported by social capital including social safety nets, they may not have to fall into poverty repeatedly.

The poor have to be treated as active participants to development. For that end, people have to be ‘empowered’.
What is Development? 3

The state of ‘development’ should be the situation where people are empowered and a country is full of empowered human beings.

‘International development’ should be the international cooperation/collaboration heading for this end.
Three Pillars of Poverty Reduction

Therefore, we set the three pillars of poverty reduction as follows:

1. Attainment of ‘pro-poor’ growth (the growth engine has to be running),
2. Adoption of proper public policies, incl. exercising good governance and building institutions, and
Figure 0: Poverty-Growth-Inequality Triangle

- **Growth**
  - Increases in Mean Income Level

- **Inequality**
  - Distribution of Income
  - Distribution of Assets

**Policies and Factors**
- X, Y, Z, … ?

**Elasticity of Poverty Reduction**
- w.r.t. Growth
  - 'Pro-Poor'
- w.r.t. Distribution

**Poverty Reduction in Absolute Poverty**

Source: Author
Figure 5: Expanded Analyses on the Poverty-Growth-Inequality Triangle

Source: Author
Gross National Happiness?

GNH INDEX methodology

Dasho Karma Ura
The Centre for Bhutan Studies
Gross National Happiness?
Gross National Happiness?

% contribution of weighted domains to GNH Index

- Time use: 13.39
- Good governance: 12.146
- Health: 11.805
- Culture: 11.767
- Community vitality: 11.569
- Living standards: 11.238
- Psychological wellbeing: 10.66
- Ecology: 9.848
- Education: 7.569
Gross National Happiness?

GNH in Policy Making

SINGLE NUMBER GNH INDEX

Influence

GNH INDICATORS

Influence

BUDGET ALLOCATION FORMULA

GNH POLICY SCREENING TOOLS

GNH PROJECT SELECTION TOOLS
“Poverty never sleeps.....

Thank you .....
Meier and Stiglitz, Frontiers of Development Economics (R.3)

Figure 1. The Evolution of Development Thought

**GOALS OF DEVELOPMENT**
- Gross domestic product (GDP) ➔ Real per capita GDP ➔ Nonmonetary indicators (Human Development Index) ➔ Mitigation of poverty ➔ Entitlements and capabilities ➔ Freedom ➔ Sustainable development

**MACROECONOMIC GROWTH THEORY**
- Harrod-Domar analysis ➔ Solow sources of growth ➔ “New growth theory”

**CAPITAL ACCUMULATION**
- Physical capital ➔ Human capital ➔ Knowledge capital ➔ Social capital

**STATE AND MARKET**
- Market failures ➔ Nonmarket failures ➔ New market failures ➔ Institutional failures

**GOVERNMENT INTERVENTIONS**
- Programming and planning ➔ Minimalist government ➔ Complementarity of government and market

**POLICY REFORM**
- “Poor because poor” ➔ Poor because poor policies “get prices right” ➔ “Get all policies right” ➔ “Get institutions right”
The Poverty-Growth-Inequality Triangle

Remaining slides …..
Kuznetz (1955)

The paper is perhaps 5 per cent empirical information and 95 per cent speculation, some of it possibly tainted by wishful thinking. (p.26)

Fields (2001)

Although the two early studies by Kuznetz (1955 and 1963) are widely cited as providing evidence in favor of the Kuznetz curve, the actual data he presents do not support this. His key table, reproduced here as table 3.2, reveals only two countries (Prussia and Saxony) in which the inverted-U pattern held; in the other seven (United Kingdom, Germany, Netherlands, Denmark, Norway, Sweden, and the United States), inequality fell. (p.47)
Theoretical Studies

Stiglitz (1969) – Neoclassical Model of Growth and distribution

Simple model of accumulation w/ i) a linear savings fn., ii) a constant reproduction rate, iii) homogeneous labor, iv) equal inheritance, then, all wealth and income is asymptotically evenly distributed.

Forces of inequality are then 1) heterogeneity of labor force, 2) class savings behavior (advent of capitalist and workers classes), and 3) alternative inheritance policies (such as primogeniture).

Fields (1980) – Limiting Cases of Dualistic Development (Two-Sector Models)

i) Modern-Sector Enlargement → Lorenz curves cross, but most likely ‘Inverted U’

Lewis’ (1954) two-sector model with unlimited supply of labor

ii) Modern-Sector Enrichment

iii) Traditional-Sector Enrichment
Empirical Studies

1970s-80s  
Kuznetz’ inverted U-curve  
Confirmed  
In Cross-Country Studies

e.g.  Paukert (1973), Ahluwalia (1976), Ahluwalia, Carter and Chenery (1976), etc.

1990s  
Rejected  
In Panel & Cross-Country w/ Fixed Effects Studies

### Table 1: Growth, Inequality, and Poverty

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Periods of growth (88)</th>
<th>Periods of decline (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Improved</td>
<td>Worsened</td>
</tr>
<tr>
<td>Inequality</td>
<td>45</td>
<td>43</td>
</tr>
<tr>
<td>Income of the poor</td>
<td>77</td>
<td>11</td>
</tr>
</tbody>
</table>

**Note:** “Improved” in the income distribution implies a decrease of the Gini coefficient; “worsened” implies an increase. The sample includes ninety-five economies.

a. The income of the lowest quintile.

**Source:** Deininger and Squire 1996 Table 7

Deininger and Squire (1996) constructed a data set of Gini coefficients and other income distribution measures with 682 observations for 108 countries from the 1960s to the 1990s. (decadal changes/growths)

Table 1 (their Table 7) summarize movements in Gini coefficients and real income of the poorest quintile during decadal growth episodes (defined by the availability of distribution data that span at least one decade).

First, there appears to be little systematic relationship between growth and changes in aggregate inequality (inequality as measured in Gini coefficients). ... The simple correlation between contemporaneous as well as lagged income growth and the change in the Gini coefficient is insignificant for the whole sample as well as for subsamples defined in terms of country characteristics (rich or poor, equal or unequal, fast-growing or slow growing economies).

The average annual percentage change in the Gini coefficient in our sample was only 0.28 points, compared with an average growth rate in per capita income of 2.16 percent.

Second. Although we do not find significant correlations between aggregate growth and changes in inequality, there is a strong correlation between aggregate growth and changes in the income of all quintiles except the top one. (p. 587)
Figure 3: Cross-country estimates of the Kuznets curve

Source: Bourguignon 2004, Figure 5
Data come from an unbalanced panel, with several observations for each country at approximately 10 year intervals.

When all the observations are pooled together and a simple regression of the Gini coefficient over income per capita and the inverse of income per capita is run, then a clear inverted-U curve is obtained.

However curvature loses significance when the estimation is made on decadal differences for each country in the sample, that is to say when only time changes are taken into account.

Finally, when fixed country effects are introduced in the original estimate, so that all countries are assumed to follow parallel paths rather than the same path, then the inverted-U shape disappears. In effect the curve becomes practically flat, and even the decline in inequality for low incomes fails to be statistically significant.

This shows that:

These results certainly do not imply that growth has no significant impact on distribution. Rather they indicate that there is too much country specificity in the way growth affects distribution for any generalization to be possible. Indeed, case studies, as opposed to cross-sectional studies, show that distributional changes have very much to do with the pace and structural features of economic growth in the period under analysis. (p. 13)
Inequality in Income/Assets → Growth 2

Figure 1: Poverty-Growth-Inequality Triangle

Theoretical Studies  (Inequality is bad for growth) (mostly on Assets Inequality)

Galor and Zeira (1993), Banerjee and Newman (1993), Benabou (1996), Aghion et al. (1999), Bardhan et al. (1999), etc.

Galor and Zeira (1993)

An equilibrium model of open economies with overlapping generations and inter-generational altruism. Individuals live for two periods. In the first they may either invest in human capital and acquire education or else work as unskilled. In the second period they work as skilled or unskilled—according to their education level, consume and leave bequests.

\[ u = \alpha \log c + (1-\alpha) \log b, \quad 0<\alpha<1, \]

where \( c \) is consumption in the second period, \( b \) is bequest

In the presence of credit market imperfections and indivisibilities in investment in human capital, the initial distribution of wealth affects aggregate output and investment both in the short and in the long run. This is in addition to the

\[ 59 \]
Empirical Studies  (Inequality in initial *Income/Consumption* is bad for growth)


This led to fear that the “empirical regularity” of a negative inequality-growth relationship may be similar to the famous Kuznets curve—very robust in a cross section but disappearing once country level fixed effects were introduced (Deininger and Squire 1998). (p.8)
Empirical Studies  (Inequality in initial **Assets** is bad for growth)

Deininger and Olinto (2000) uses assets (land) rather than income (and a GMM estimator) in a panel study of interrelationship between inequality and growth. (261 observations from 103 countries)

Deininger and Olinto (2000) find evidence that asset inequality—but not income inequality—has a significant and relatively large negative impact on growth. They also find that a highly unequal distribution of assets reduces the effectiveness of educational interventions (as it reduces attractiveness/returns to investment in human capital.)

Use of a **micro panel data of harm-household** for rural areas in four provinces of southern China, spanning the period 1985-90, covering 6651 farm households living in 131 counties. Ravallion (1998) finds a significant and negative effect of local asset distribution on individuals’ consumption growth. Comparing the coefficient attached to the initial inequality in assets, individual micro estimation of consumption growth returns almost three times larger negative impacts of asset inequality on consumption path, as compared to that in country aggregate consumption growth regression. Pointing to the needs of micro studies.
This indicates that the gains are not confined to those near the poverty line.

(Bruno, Ravallion, and Squire, 1996, p.10).
Elasticity of Poverty Reduction w.r.t. Distribution

Bourguignon (2003)
1980s-1990s 50 cos. 114 periods Poverty Rate (headcount, 1$PPP a day)
Rate of change in Poverty Rate on Rate of change in Survey Means --- -1.65
Rate of change in Poverty Rate on Rate of change in Survey Means & Gini --- -2.01 & 4.72

Use of Cross Terms -- As expected, both a lesser level of development and a higher level of inequality reduce the growth elasticity of poverty.

1984-1993 20cos. Poverty Rate (headcount, 1$PPP a day)
Rate of change in Poverty Rate on Rate of change in Survey Means & Gini --- -2.28 & 3.86

Elasticity of Poverty Reduction w.r.t Distribution is Two Times Larger as compared to Elasticity of Poverty Reduction w.r.t Growth !!
Figure 5: Expanded Analyses on the Poverty-Growth-Inequality Triangle

Source: Author
Figure 6: Poverty incidence in China and India, 1981-2001

Source: Ravallion (2005), Figure 12
Figure 7: Inequality and average income in India

Source: Bruno, Ravallion, and Squire (1996), Figure 1
Figure 8: Inequality over time in India (more recent years)

Source: Ravallion (2005), Figure 9
Figure 9: Income inequality in rural and urban areas and nationally (China)

Source: Ravallion and Chen (2004), Figure 5