Inequality and the Process of Development

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The Classical Theory

Inequality is beneficial for growth (in the post-industrialization stage)

Keynes (1920), Kaldor (1957)

- The marginal propensity to save increases with income
- Inequality channels resources towards individuals whose marginal propensity to save is higher

$\Longrightarrow$ increases aggregate savings & capital accumulation

$\Longrightarrow$ enhances the development process

The Neoclassical Paradigm

The Representative Agent Approach

- Rejects the role of heterogeneity, and thus income distribution, in economic growth
  - Growth Process $\Rightarrow$ Income Distribution
  - Income Distribution $\not\Rightarrow$ Growth Process

The Modern Perspective: Origins

Galor and Zeira (1988, 1993)

- Unlike the Neoclassical Paradigm

  Income Distribution $\Rightarrow$ the growth process

- Unlike the Classical Perspective

  Underlined the adverse effect of Inequality on the growth process

The Credit Market Imperfections Approach: Assumptions

Main assumptions:

- Credit market imperfections
  - Differences in the interest rates for borrowers and lenders

and either

- Fixed investment cost in education or in other individual-specific projects

or

- Saving and bequest rates are increasing function of wealth (Moav, (2002) Galor and Moav (2004))

The Credit Market Imperfections Approach: Mechanism

- Inequality affects occupational choices: skilled vs. unskilled workers or entrepreneurs vs. workers
  - Non-poor economies:
    - Inequality $\Longrightarrow$ under-investment in human capital (inv't projects) that is transmitted across generations $\Longrightarrow$ lower output growth in the short-run and in the long-run
  - Poor economies:
    - Inequality permits some investment in HC (inv't projects) and may thus promote output growth
- The human capital channel is consistent with evidence (Perotti (1996))

The Political Economy Approach

Echoes the hypothesis of the CMI Approach

- Inequality is harmful for the growth process
  - Inequality $\Longrightarrow$ political pressure for redistribution
  - Higher (distortionary) taxation $\Longrightarrow$ lower investment and slower economic growth

Alesina and Rodrik, (1994) Persson and Tabellini (1994)

- This channel is inconsistent with evidence (Perotti (1996))

The Political Economy Approach: An Alternative Channel

- Inequality is harmful for the growth process
  - Inequality $\Longrightarrow$ incentive for better endowed agents (landowners) to block redistribution
  - Efficient redistribution policies are not implemented

Benabou, (2000), Galor-Moav-Vollrath (2009)

The Socio-Political Instability Approach

Echoes the hypothesis of the CMI Approach

- Inequality is harmful for the growth process
  - Inequality $\Longrightarrow$ Socio-Political instability
  - Socio-Political instability $\Longrightarrow$ reduces the security of property rights $\Longrightarrow$ lower investment and slower economic growth (Alesina and Perotti (1996))
- This channel is consistent with evidence (Perotti (1996))

Gender Inequality

Gender inequality is harmful for the growth process

Galor-Weil (AER 1996)

- Gender inequality reduces the opportunity cost of raising children more than it reduces household income

$\Longrightarrow$ increases fertility

$\Longrightarrow$ reduces human capital investment (quantity-quality trade-off)

$\Longrightarrow$ lowers female labor force participation

$\Longrightarrow$ slows the growth process

A unified theory of inequality and economic development

Galor and Moav (2004):

- Captures the changing role of inequality in the growth process
- Unifies the Classical and the Modern Paradigms
- Provides an intertemporal reconciliation between conflicting viewpoints about the effect of inequality on economic growth
- Underlines the role of inequality in triggering socio-political transition (Galor-Moav-Vollrath (2009), Galor-Moav (2006))

A Unified Theory of Inequality and Development

- A unified theory of the dynamic implications of inequality on the growth process
- Places the dominating modern theories within a broader unified structure
- Provides an intertemporal reconciliation between the Classical viewpoint and the Modern perspective

Main Hypothesis

- The replacement of physical capital accumulation by human capital accumulation as a prime engine of economic growth has changed the qualitative impact of inequality on the process of development
- Early stages of industrialization: physical capital accumulation is a main engine of growth $\Longrightarrow$
  - Inequality enhanced development by channeling resources towards individuals whose marginal propensity to save is higher
- Later stages of development: the return to human capital increases due to capital-skill complementarity and human capital became the prime engine of growth $\Longrightarrow$
  - Inequality, due to credit constraints, is harmful for growth

Central Argument

Fundamental asymmetry between:

- Human capital accumulation
- Physical capital accumulation

Human Capital vs. Physical Capital Accumulation

- Human capital is embodied in humans $\Longrightarrow$
  - Physiological constraints subjects its accumulation *at the individual level* to diminishing returns
  - The accumulation of human capital would be larger if it would be widely distributed among individuals in society
- Physical capital is not embodied in humans $\Longrightarrow$
  - Physical capital accumulation may benefit from the concentration of wealth among individuals whose marginal propensity to save is larger

Inequality and Physical and Human Capital Accumulation

- **Inequality** is conducive for **physical capital** accumulation, as long as the marginal propensity to save rises with income
- **Inequality** is harmful for **human capital** accumulation, as long as credit constraints are binding

Inequality and Growth in Different Stages of Development

- **Inequality** stimulates economic growth in stages of development in which **physical capital** accumulation is the prime engine of growth
- **Inequality** is harmful for economic growth in stages of development in which **human capital** accumulation is the prime engine of economic growth and credit constraints are still binding