Growing Together with Growth Polarization and Income Inequality

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Tackling inequality, eradicating poverty and promoting shared prosperity must be at the heart of the UN sustainable development agenda.
Outline

- Stylized facts: Issues and trends
- Database and methodology
- Key results and analysis
- Conclusions and way forward
Stylized facts: Issues and trends
Source: SRBasu-2013, computed from Google Scholar site, accessed on 18 October 4 pm Bangkok, Thailand.
Global Output: A comparison
GDP per capita, $PPP 2005[ normalization 1950=100]

• Global convergence: Moving up but still a long way to go…

Source: PW 8.0 data
It’s a Billionaires World
Comparing with developing world

- Billionaires net worth increasing significantly
- Several regions and LDCs worth less than billionaires

Measuring inequality trends
Gini index: Difference between early 1990s and late 2000s

Note: Author’s compilation of the two sources below, using gross income at the household level
Source: The World Bank, Branco Milanovic 2013; Frederick Solt 2013
Inequality promotes risks

- **Social and economic inequalities** can tear the social fabric, undermine social cohesion and prevent nations from thriving
  - Societies where opportunities are scarce are vulnerable to **upheaval and conflict**
  - Can jeopardize the well-being of large segments of the population through **low earnings/wages**, and leads to decrease in healthy life and development
  - Vulnerable populations have lower levels of education, lack skills and abilities that can allow them to compete in labour market
  - Structural barrier **constraining domestic markets**
  - Can breed crime, disease and environmental degradation and **hamper economic growth** and thereby poverty reduction
- Inequality of opportunities impede development of **capabilities**
- If inequalities continue to widen, development may **not be sustainable**
Policies to promote **equity**

A suggested framework

**Forward-looking macroeconomic policies**
- Provisioning of quality basic public services
- Investing in people, their growth and capabilities
- Employment generation, sufficient, productive and decent
- Financial Market Policies
- Trade Policies

**Institutional and governance policies**
- Institution Building Policies
- Promoting women’s empowerment
- Strengthening regulations and judiciary
- Reforming public finance system including income tax base/ tax administrations & corporate tax

**Social welfare programmes**
- Welfare enhancing programmes for education, health, food, housing and social security/legislations
- Employment guarantee programmes
- Minimum wages
- Land reforms

Source: SRBasu-2013
Types of Inequality

• **Social and economic inequalities**
  • Social: Education & health services, wages and land assets
  • Income: GDP per capita, or household income/expenditure

• **Spatial inequalities**
  • Inequalities between regions, subregions and countries
  • Inequalities within countries at subnational level
  • Rural and urban areas

• **Horizontal inequalities**
  • Social groups such as youth, older persons, indigenous persons,
  • Also, minorities, persons with disabilities and migrants workers
Database and methodology
### UN country groupings

Selected 157 economies from all UN regional commissions

<table>
<thead>
<tr>
<th>ECE (Europe)</th>
<th>ESCAP (Asia-Pacific)</th>
<th>ECA (Africa)</th>
<th>ECLAC (Latin America &amp; Caribbean)</th>
<th>ESCWA (Western Asia)</th>
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|            |                      |              | Note: Gini index information available for 147 countries and GDP per capita for 157 countries |  
| LDCs: 34 countries; Emerging: 25 countries, Developing: 83 countries; Developed: 34; Transition: 15 |
Methodology

• Gini coefficient of inequality

• Generalized entropy class (GE)
  • to allow inequality across groups to be broken down into within group inequality and between group inequality
  • Polarization index (Basu 2009) as ratio of between group inequality in total inequality (within group inequality + between group inequality)

• Composite measure
  • Composite index (Basu, Klein and Nagar 2005; and Nagar and Basu 2002), a weighted average measure of standardized indicators for each country for each period defined
  • Using a multivariate statistical method of latent variable
  • Higher values of indices imply higher/better quality

• Regression analysis
  • Dep. var: Gini index, Indep. vars: Institutions, policies, geography, etc
  • OLS, 2SLS, Panel Data/GMM
Human capital and Policies
Measuring by using indicators

• Human Capital
  - Adult literacy, Combined enrolment, Mean years of schooling & education expenditure

• Macroeconomic Policies:
  - Inflation, Real exchange rates, Current account & public debt

• Financial Market Policies:
  - Liquid Liabilities, Financial System Deposits and Private Credit

• Trade Policies:
  - Tariff, Peaks (international & national peaks) & Specific rates
  - 4 indicators to reflect the effective foreign market access

• Institutions:
  - Economic (Law & Order, Corruption, Regulations), Social (Civil liberties, Women’s rights & empowerment, and Political (Political rights, democracy, decentralisations) Institutions
  - 23 Indicators to capture comprehensive nature of institutions
Databases

• GDP per capita, expenditure based:
  – The Next Generation of the Penn World Table (Feenstra, Robert C., Robert Inklaar and Marcel Timmer, 2013)
  – UN National accounts statistics, World Bank ICP, PPP exchange rates

• Gini index:
  – Description of all the Ginis dataset, Branko Milanovic, the World Bank, Summer 2013
  – Standardizing the World Income Inequality Database, Frederick Solt, 2012
  – Compilation by author, based on gross income per household database

• Composite measures:
  – PRS ICRG, POLCON Henisz Dataset, Freedom House, CIRI Human Rights, PRIO, Polity IV Project and other sources, UN Agencies

• Time series:
  – 1950 to 2011 (Inequality/Polarization analysis)
  – 1995-2007 (Regression analysis)
Key results and analysis
1: Global inequality
Inequality trends: Global
GDP per capita, computing Gini Index and Theil entropy measure

- Inequality remains elevated globally over the decades

Source: SRBasu-2013
Inequality trends: Developing GDP per capita, computing Gini Index and Theil entropy measure

- Inequality shows increasing trends in developing countries


Source: SRBasu-2013
2: Regional inequality
Inequality trends: Regions
GDP per capita, computing Gini Index

- Inequality shows increasing trends across regions

ECA= 44 , ECE=36 , ECLAC=27 , ESCAP=32 , ESCWA=8
Source: SRBasu-2013
Inequality trends: Developing Regions
GDP per capita, computing Gini Index

- Asia-Pacific shows increasing inequality trends over the past decades, and remains stubbornly high in Africa


Developing: Developing 73, Emerging 25 and Transition 15= Total 113 countries
ECA=44, ECE=7, ECLAC=25, ESCAP=29, ESCWA=8
Source: SRBasu-2013
3: Estimating “polarization”
Polarization: Divide continues

GDP per capita, based on Theil Entropy measure

- Income gap is increasing between developed and developing countries


Developing: Developing 73, Emerging 25 and Transition 15 = Total 113 countries

Source: SRBasu-2013
Polarization: Asia-Pacific

GDP per capita, based on Theil Entropy measure [UN ESCAP]

- Income gap is declining between Asia-Pacific and rest of the world


Developing: Developing 73, Emerging 25 and Transition 15= Total 113 countries, ECA=44, ECE=7, ECLAC=25, ESCAP=29, ESCWA=8

Source: SRBasu-2013
Polarization: Africa

GDP per capita, based on Theil Entropy measure [UN ECA]

- Income gap is increasing between Africa and rest of the world

Source: SRBasu-2013


Developing: Developing 73, Emerging 25 and Transition 15= Total 113 countries, ECA=44, ECE=7, ECLAC=25, ESCAP=29, ESCWA=8

Source: SRBasu-2013
Polarization: Americas

GDP per capita, based on Theil Entropy measure [UN ECLAC]

- Flattening of income gap between Americas and rest of the world


Developing: Developing 73, Emerging 25 and Transition 15= Total 113 countries, ECA=44, ECE=7, ECLAC=25, ESCAP=29, ESCWA=8

Source: SRBasu-2013
Polarization: Europe
GDP per capita, based on Theil Entropy measure [UN ECLAC]

- Income gap remains between Europe and rest of the world


Developing: Developing 73, Emerging 25 and Transition 15= **Total 113 countries**, ECA=44, ECE=7, ECLAC=25, ESCAP=29, ESCWA=8

Source: SRBasu-2013
Polarization: Western Asia
GDP per capita, based on Theil Entropy measure [UN ESCWA]

- Moderate increase in income gap between Western Asia and rest of the world%

Developing: Developing 73, Emerging 25 and Transition 15= Total 113 countries, ECA=44, ECE=7, ECLAC=25, ESCAP=29, ESCWA=8
Source: SRBasu-2013
4: Inequality, but \textit{why}?
Better human capital remains key to addressing inequality
• Investment in human capital is the most important factor for tackling scourge of inequality in developing countries

Source: SRBasu, 2013
Policy variability...

Policy variability, based on four measures, higher value worse [World]

- Reducing policy uncertainties make a difference for inequality reduction

Source: SRBasu, 2013
Policy variability, Developing

Policy variability, based on four measures, higher value worse

- Better and improved policymaking pays off significantly in developing countries for promoting equity

Gini = 40.6 + 0.19*policy (p=0.05)

Source: SRBasu, 2013
Institutions variability, based on three measures, higher value worse [World]

- Also, institution building efforts need to continue

Source: SRBasu, 2013
Institutions variability, Developing Institutions variability, based on three measures, higher value worse

- Institution building must continue to be a focus in confronting damaging effects of inequality in developing countries

Source: SRBasu, 2013
Conclusions and way forward
1: Key messages
Policy messages

Global analysis

• Income inequality increasing across countries and within countries in many regions
  – Subregional variations remain critical
• Polarization among developing and developed countries continues
• Income gap across regions show disturbing trends:
  – Asia-Pacific declining
  – Africa significantly increasing
  – Western Asia increasing recently
  – Europe some increase
  – Americas low
• Investment in education is key to reduce income inequality
• Policies and institutions need to be strengthened
2: Suggested research tasks
Inequality research
Data and policy research

• Inequality computation
  – Gini index (1912) got several limitations though most widely available
  – Palma measure (2006): Ratio of top 10% to ration of poorest 40% of population
  – Still lacks to compute inequality in education, health and other forms of asset globally in the time series format

• Measurements and comparability of income Gini inequality measures due to definition, sources and household survey information
  – Need to formulate statistical framework to standardised,
  – UN Task Team on inequality: ECE, ESCAP, DESA, UNICEF, UNRISD, UN Women

• Impact assessment of inequality
  – Need model framework to capture and analyse impact of income as well as other forms of social inequalities

• Inequality, macro modelling and sustainable development
3: Global Agenda on “inequality”
‘Equality” for shared prosperity

Realizing the Future We Want for All

• A moral duty, a political necessity, and an imperative for the due protection of human rights
  • ESCAP/ADB/UNDP Asia-Pacific Regional MDG Report 2012/13
  • Inequality issue was one of the key policy message that came out from Asia-Pacific sub-regional stakeholders consultations on post-2015 development agenda
  • The Secretary-General's High-Level Panel of eminent persons on the Post-2015 Development Agenda, noted that “Yet inequality remains and opportunity is not open to all.”

• If inequalities continue to widen, development may not be sustainable

• Reducing inequality will need great transformative change

• Globally (in) equity is emerging as a central plank in discussions on the United Nations post-2015 development agenda
References


• Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer (2013), "The Next Generation of the Penn World Table“. Available for download at www.ggdc.net/pwt

Thank you

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