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Analytical techniques and considerations for evaluating Performance of SPL Programs

Welfare, Living Standards and Poverty Assessments

Ruslan Yemtsov

Global Practice for
"Social Protection and Labor"

April 25, 2016

Public Disclosure Authorized

Outline

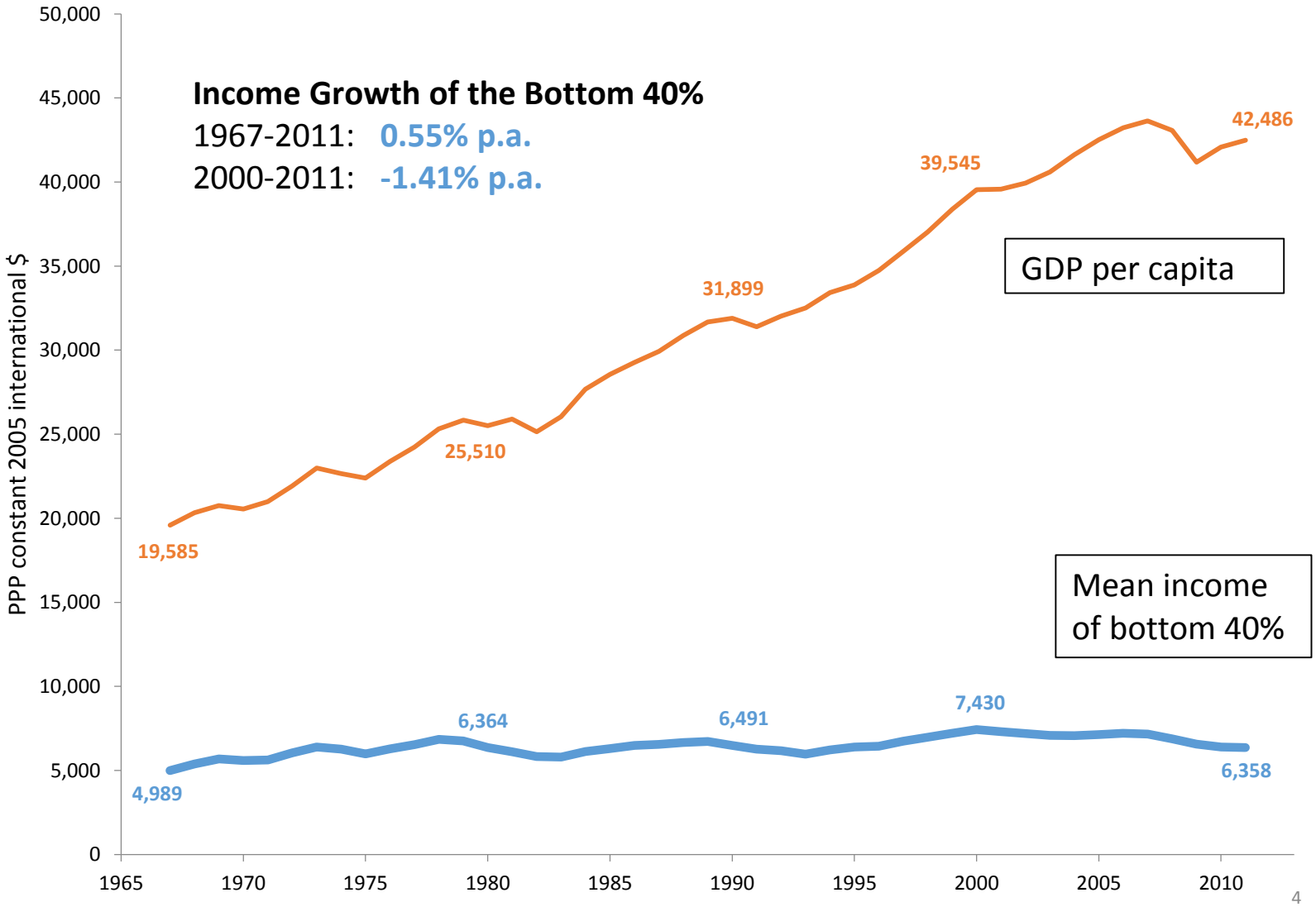
1. Basic welfare concepts
   - Welfare: income, consumption, assets
   - Poverty
   - Vulnerability
2. How to measure performance of social protection?
   - Definitions: mapping of SPL
   - Performance indicators
     - Pensions
     - SSN
   - Examples
   - Global benchmarking

Levels of welfare analysis

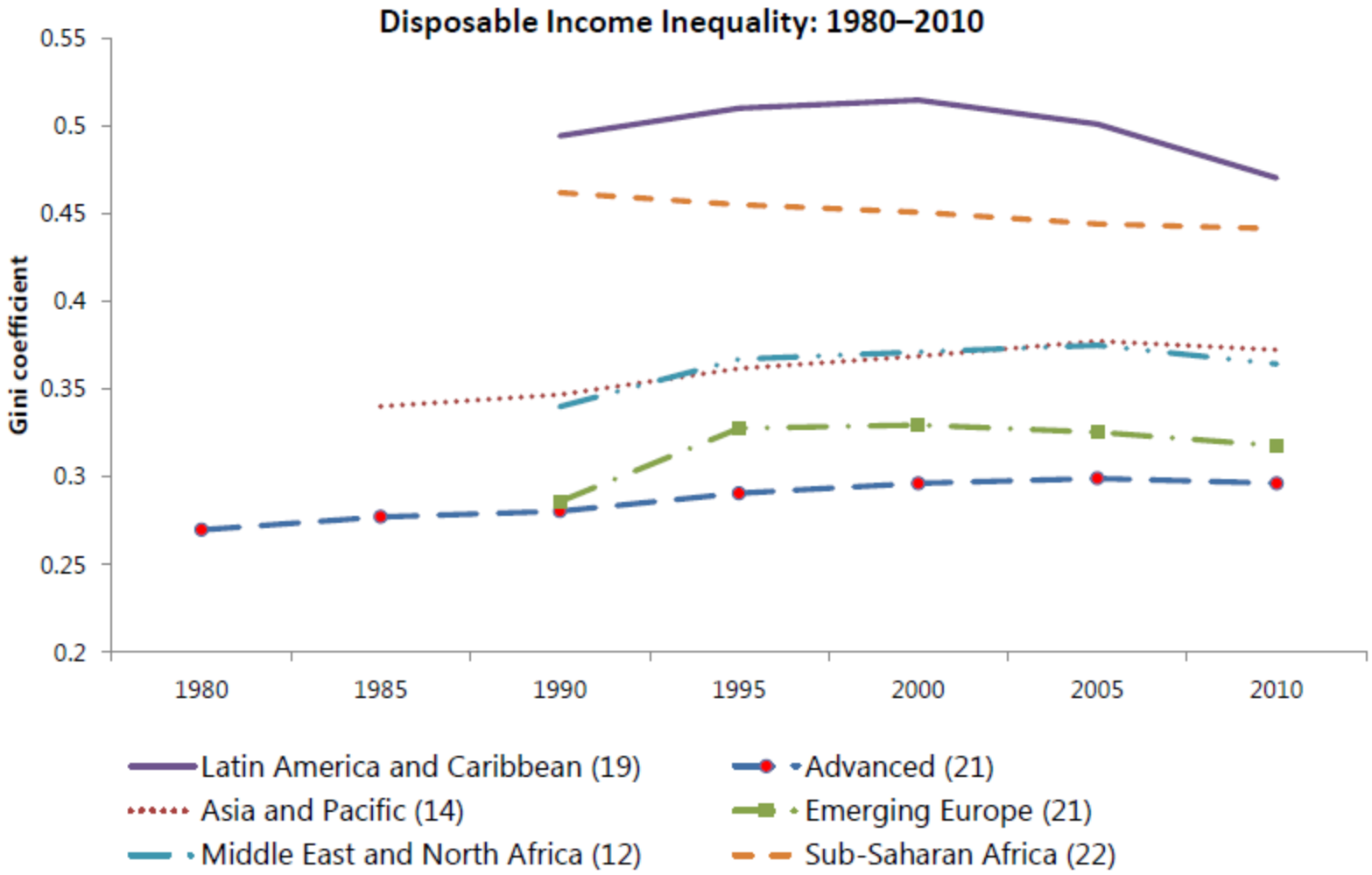
- Country welfare/living standards
- Welfare/living standards of population groups (deciles, quintiles, urban/rural..)
- Composition of welfare/income
- Policies and programs and their effect on welfare/poverty

- Indicators of welfare
  - Labor market indicators: employment, wages, productivity
  - Asset indicators: financial wealth, housing wealth, consumer durables, productive assets
  - Access indicators: coverage by social services, distances to services, out-of–pocket cost of services, access to social protection
  - Risk/opportunities indicators: unemployment statistics, catastrophic health care spending, hazard rates for natural disasters. Human opportunities indices (HOI)
  - Inclusion/voice/political power indicators
  - Subjective well being indicators
  - Poverty and its dimensions

United States



Concerns on the growth of inequality that has happened in many economies…



Source: Lipton (2014).

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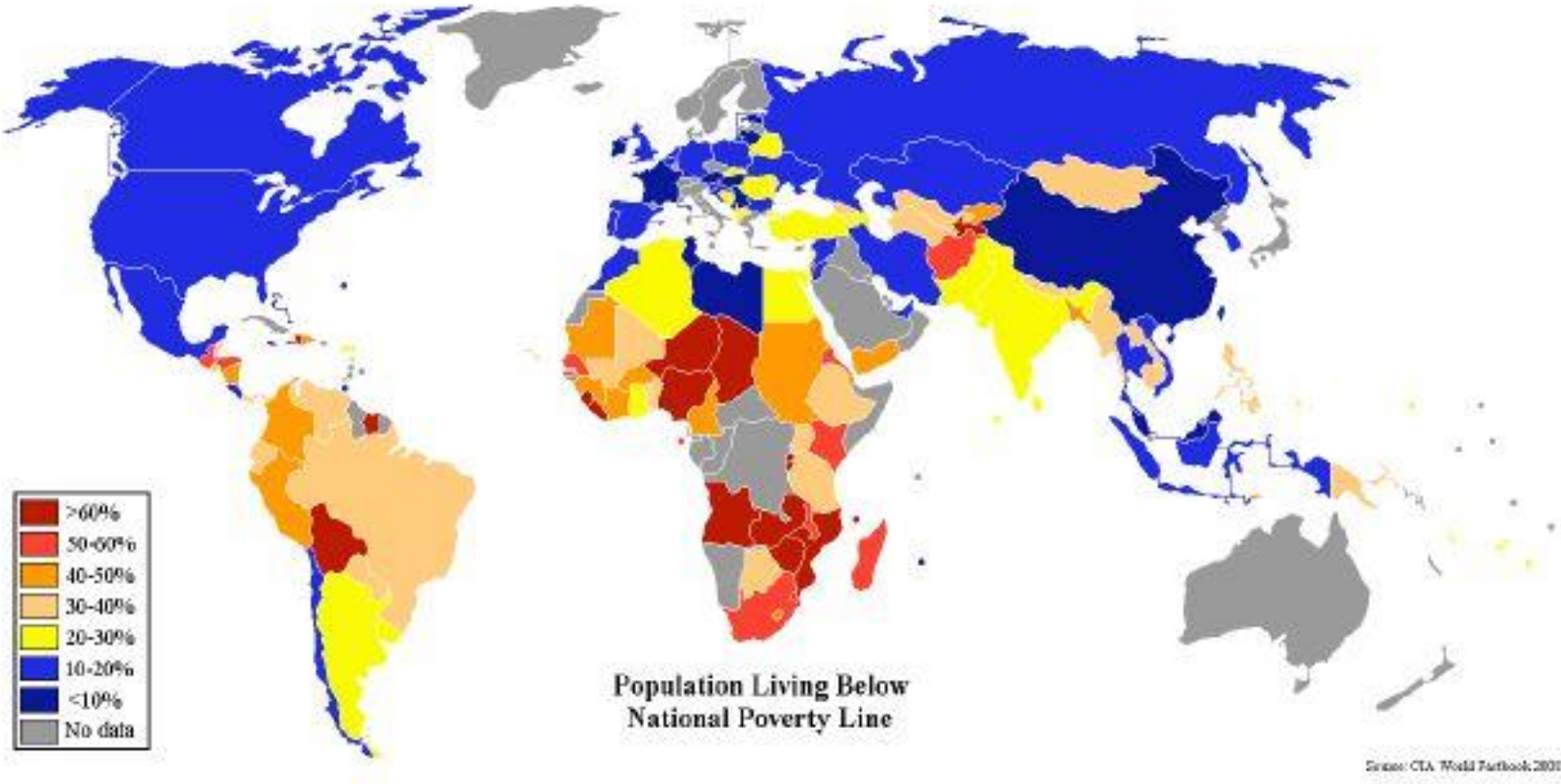
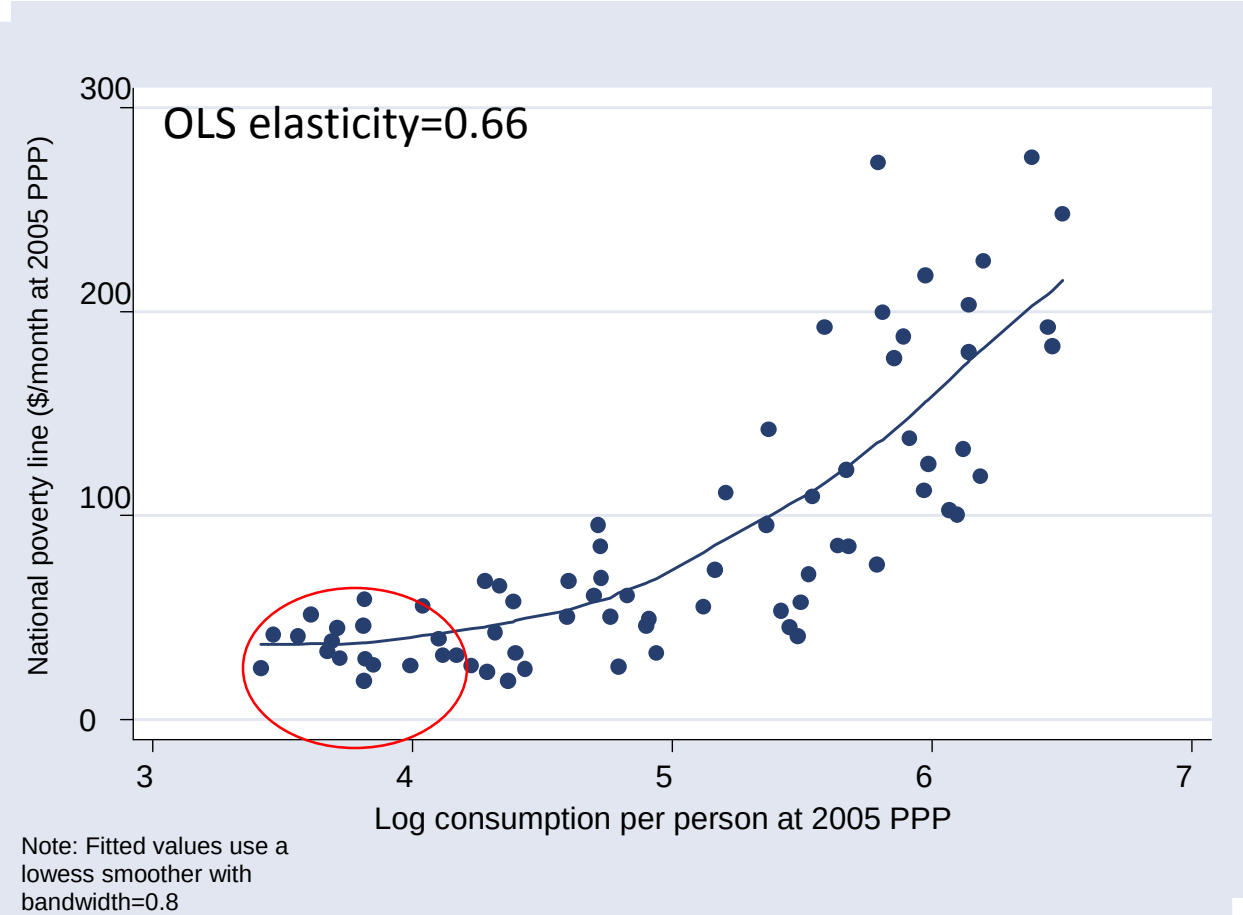
Poverty rates for different countries



Where $- a day is coming from:

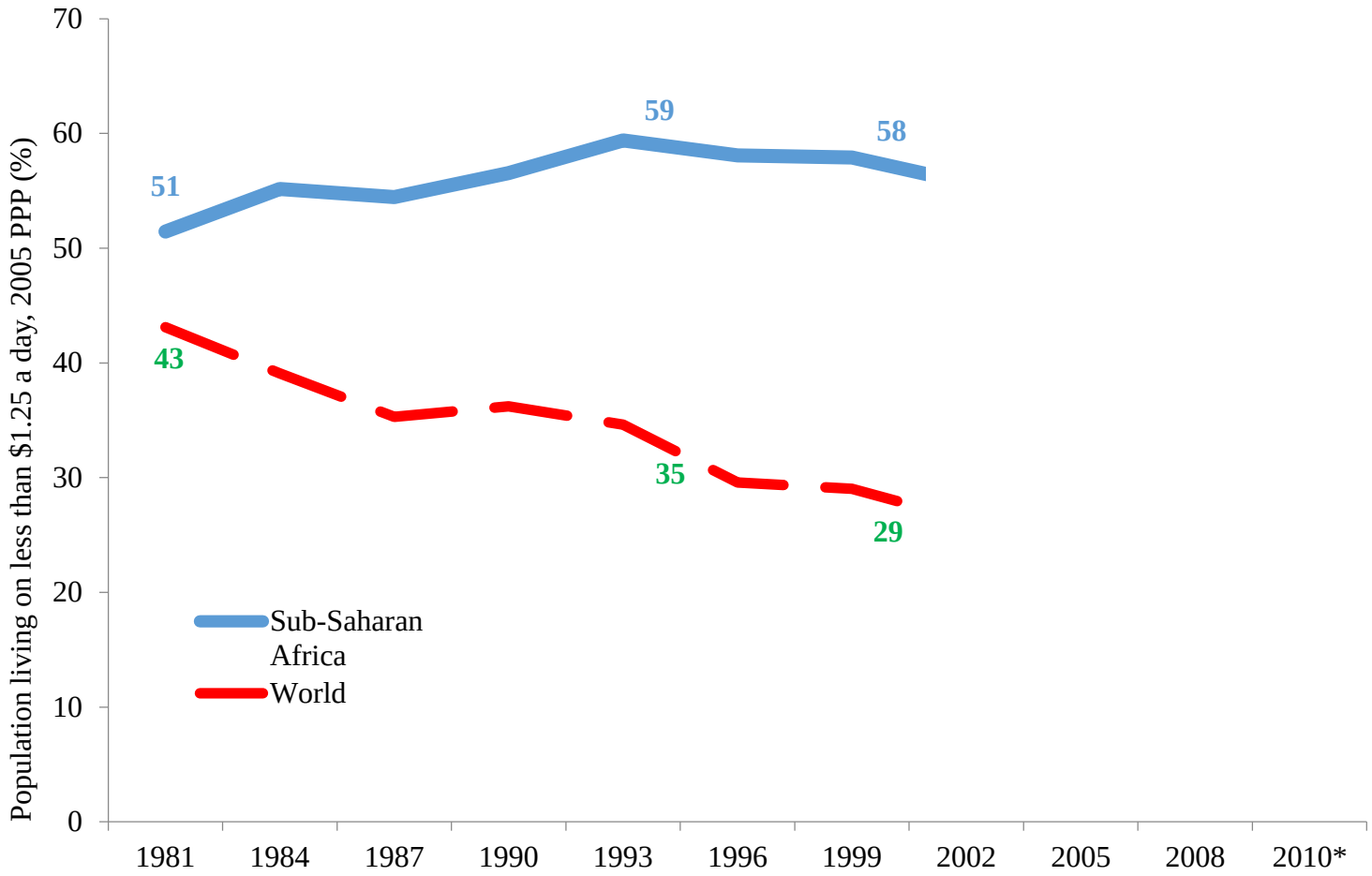
National poverty lines plotted against mean consumption using consumption PPPs for 2005



Absolute
Is
relative

Source: Chen and Ravallion (2009)

Global poverty



* Preliminary

Other dimensions of poverty

Monetary poverty:

- Income poverty
- Consumption poverty

Non-monetary poverty:

- Insecurity
- Poor health
- Low education or illiteracy
- Lack of basic services
- Social exclusion
- Lack of freedom & voice/ lack of empowerment
- Poor nutritional status*

Dynamics of household welfare:

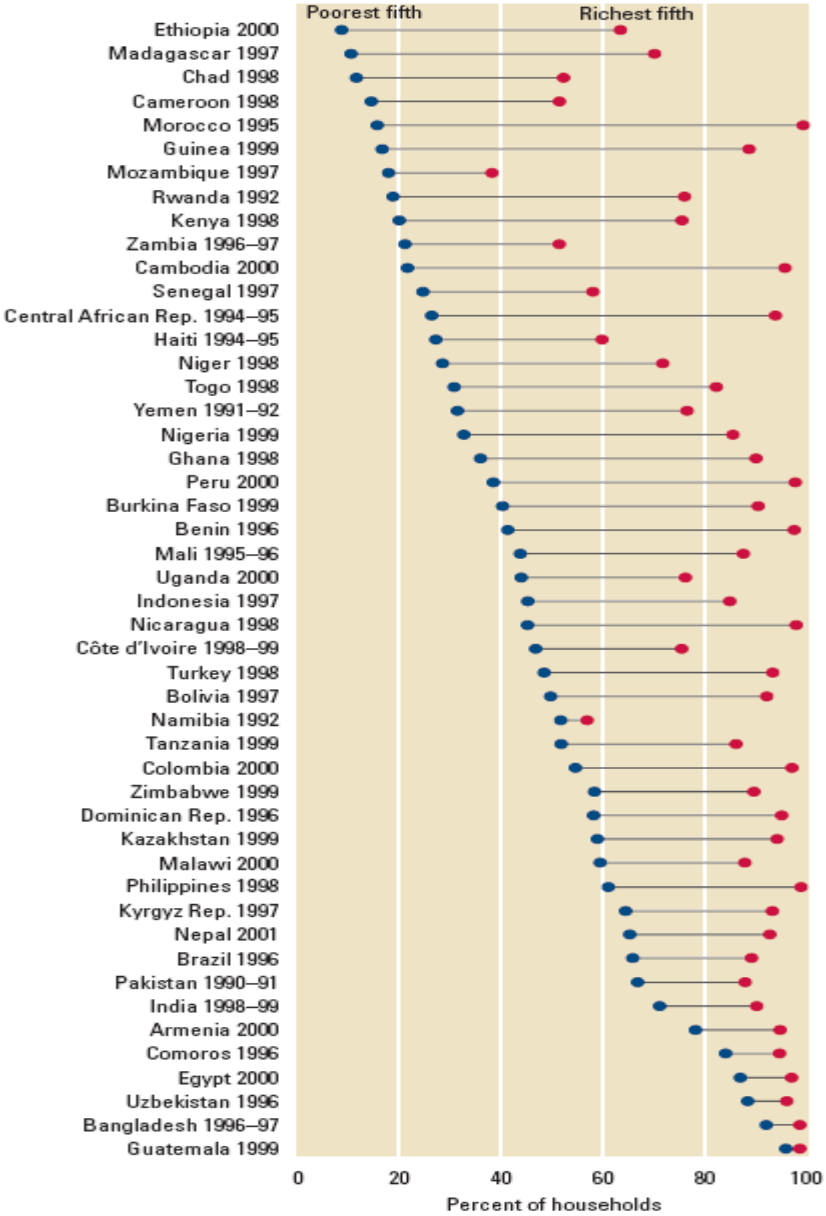
- Duration in poverty
- Chronic vs. transient poverty

Vulnerability to poverty

- Risk-induced vulnerability

* Spans across dimensions

Figure 1.3 Water, water everywhere, nor any drop to drink
Percent of households who use an improved water source, poorest and richest fifths

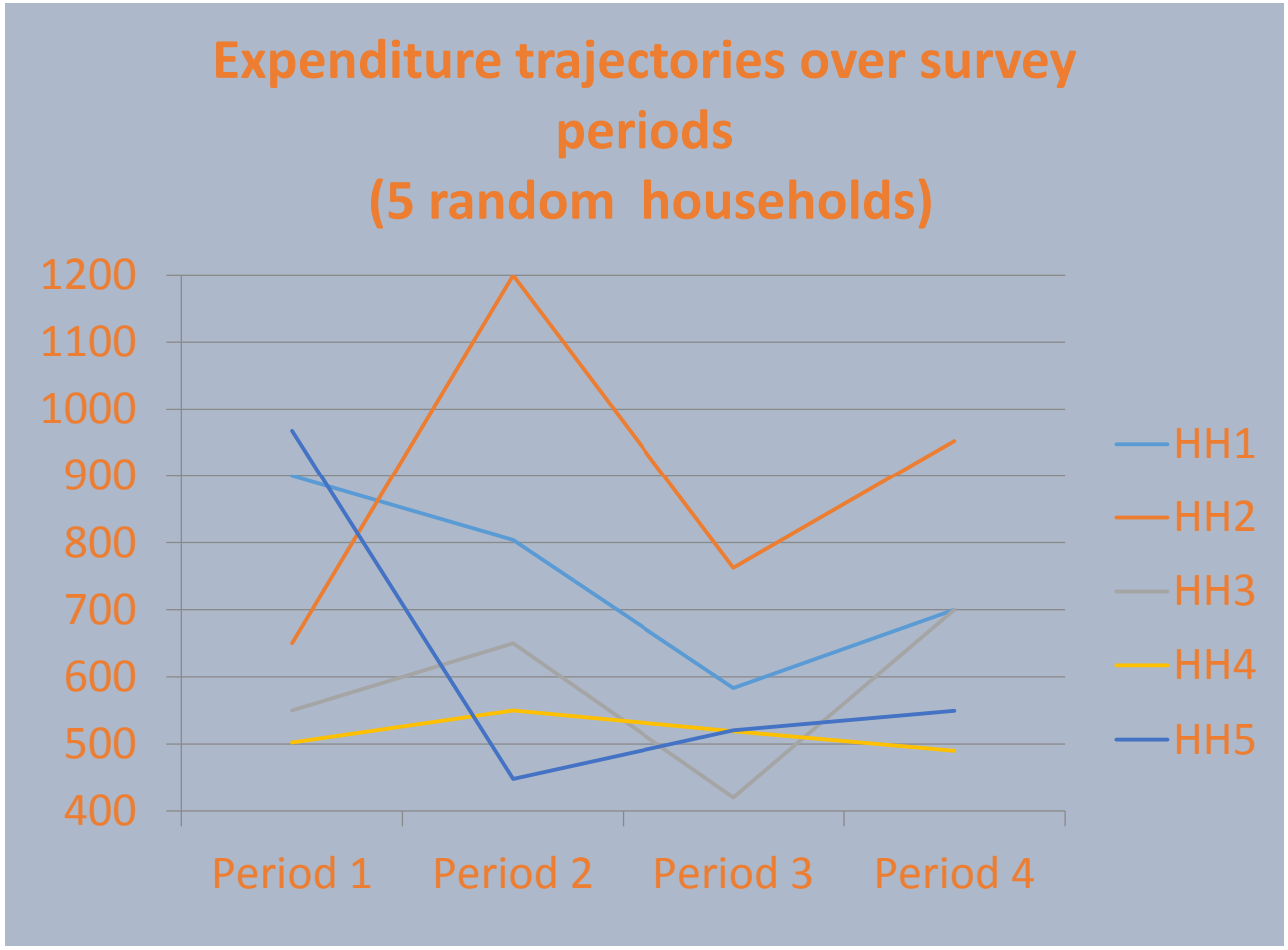


Note: The poorest fifth in one country may correspond to the standard of living in the middle fifth in another country. Within-country inequalities reflect inequality in access to water and in the wealth index used to construct quintiles. An "improved" water source, as defined by UNICEF, provides adequate quality and quantity of water (that is, a household connection or a protected well, not an unprotected well or bottled water).
Source: Analysis of Demographic and Health Survey data.

Non-monetary poverty

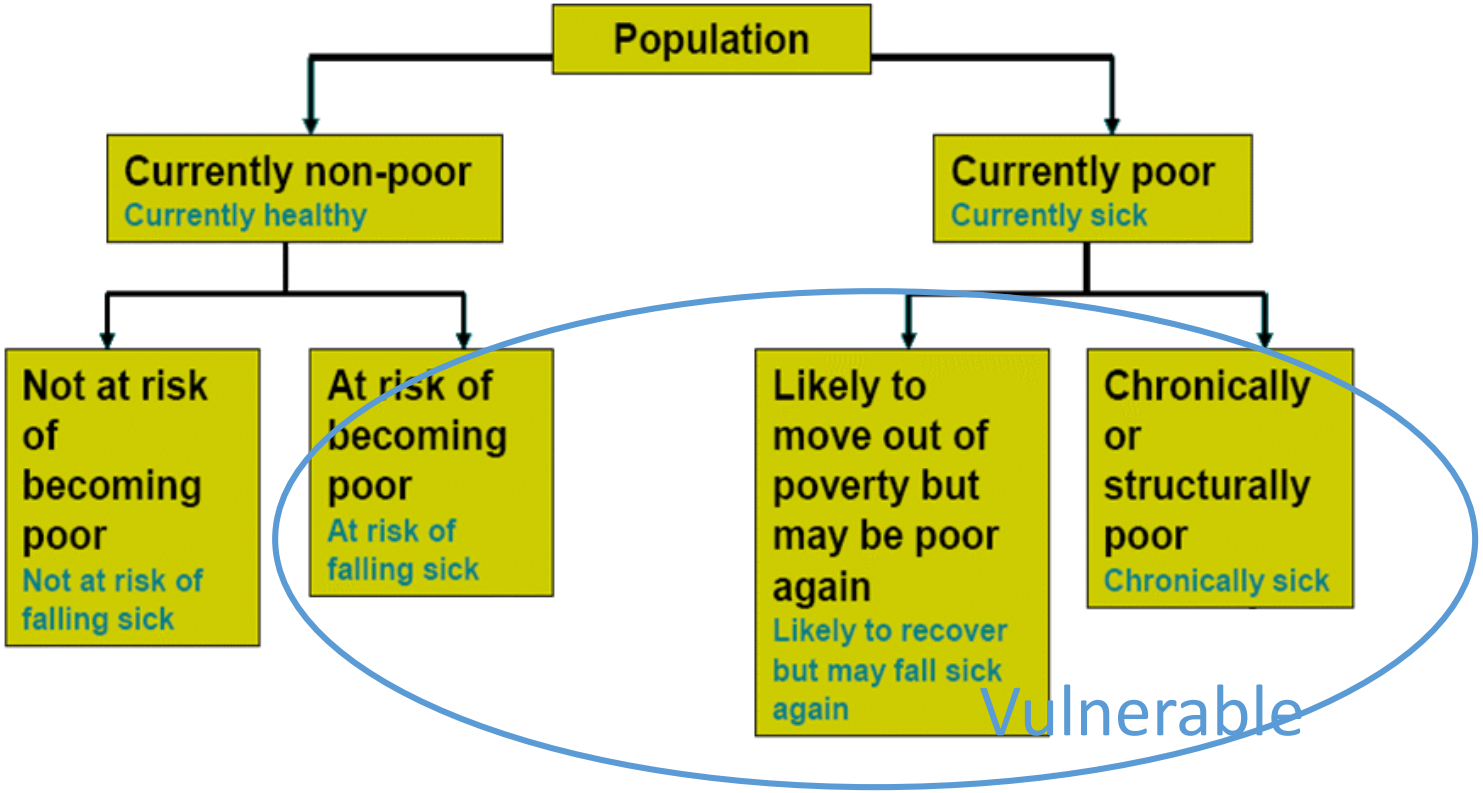
concerns SP policy

Concept of vulnerability : Welfare over time



- Households move up and down in the distribution, some experience large swings
- In this case with poverty line at 600 every one was close or crossed the line, but just one household stayed poor and one – non-poor
- Other hh are "vulnerable" to risk of falling into poverty
- But how reliable are these observations?

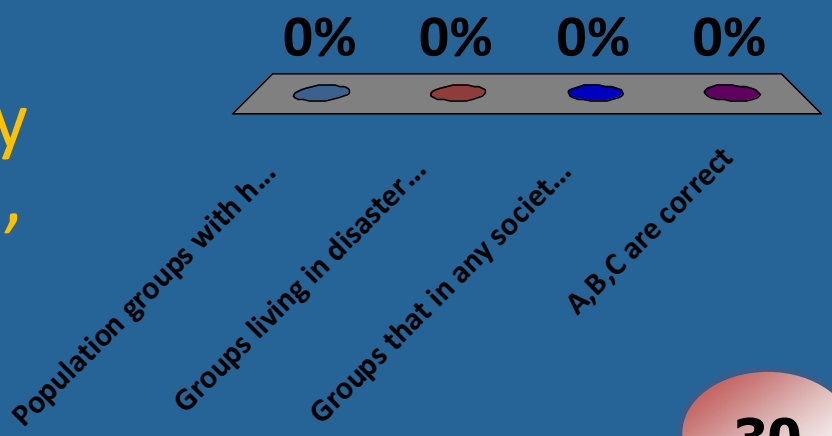
Vulnerability to poverty:



CLICKER QUESTION

Who are the vulnerable groups?

A. Population groups with high exposure to risks, low resilience against shocks, and inability to cope with shocks
B. Groups living in disaster-prone areas, being exposed to diseases, living in remote areas, not owning assets
C. Groups that in any society have challenges: orphans, single mothers, disabled
D. A,B,C are correct



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Performance of SPL Programs

Social Protection can be Quantified, Monitored and Evaluated

Indicators include:

- Inventory (statutory) information: what is out there
- Input indicators (budgets)
- Key performance (output) indicators
- Indicators of impact

- What are programs? How are they financed?

- What are the objective of the programs? Their functions?

- How are programs/ schemes doing in
  - Covering those in need
  - Providing adequate support
  - Preserving incentives for work and contribute
  - Avoiding leakages and maintaining reasonable administrative costs

Social protection: questions to be answered

Diagnostic

1. What's in place?

Mapping national social protection systems

Overview of existing schemes, benefits provided, people covered and for what?

Resources invested in social protection & from which sources

Diagnostic

2. What's missing?

Uncovered population in need for social protection: who they are? What are the needs?

Options for extension?

Impacts & assessment

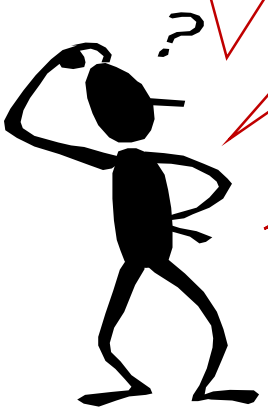
3. Performance of existing provision?

Evaluate effectiveness & efficiency of existing schemes and national social protection system

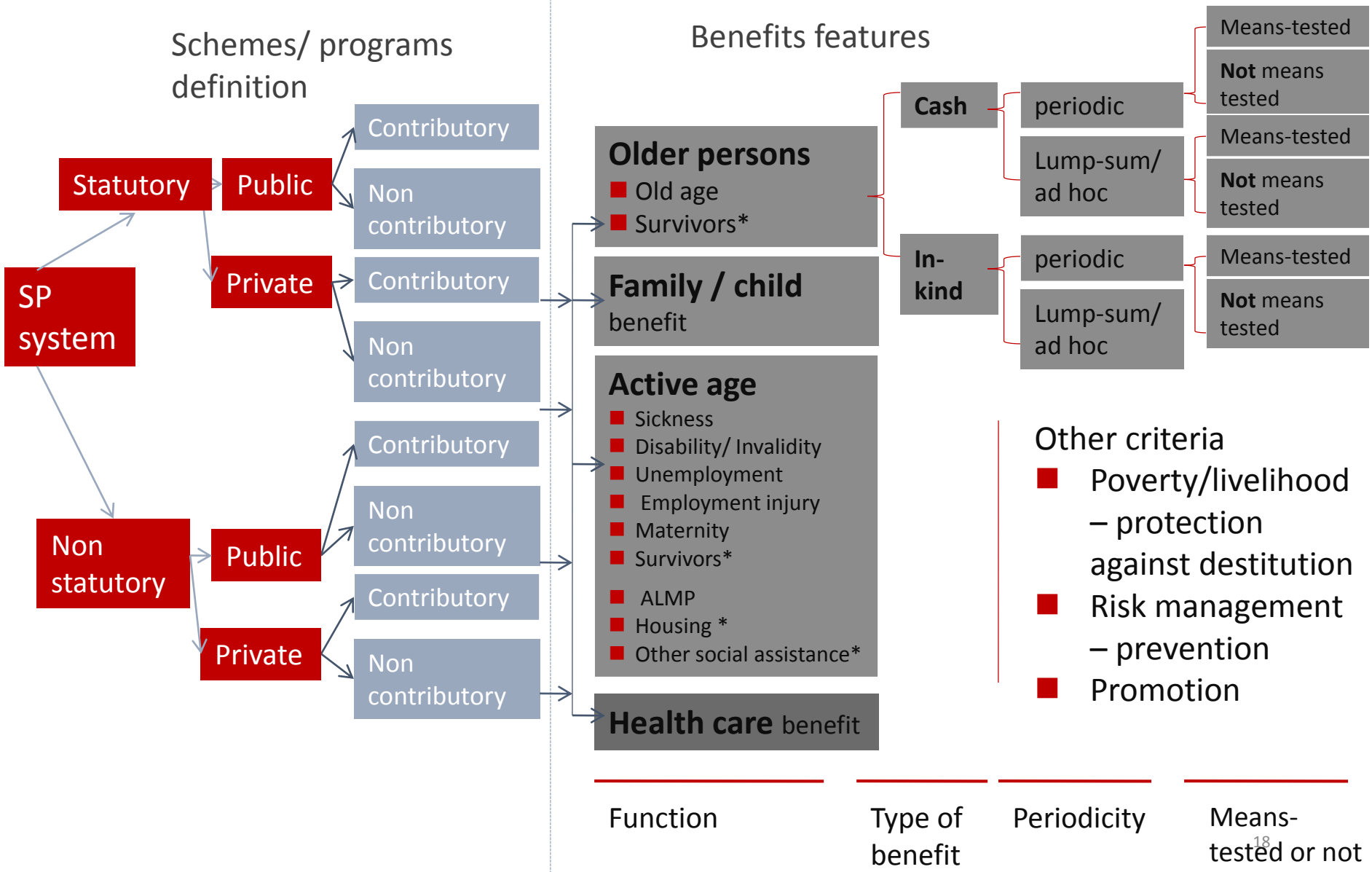
Impacts & Simulation

4.Long impacts?

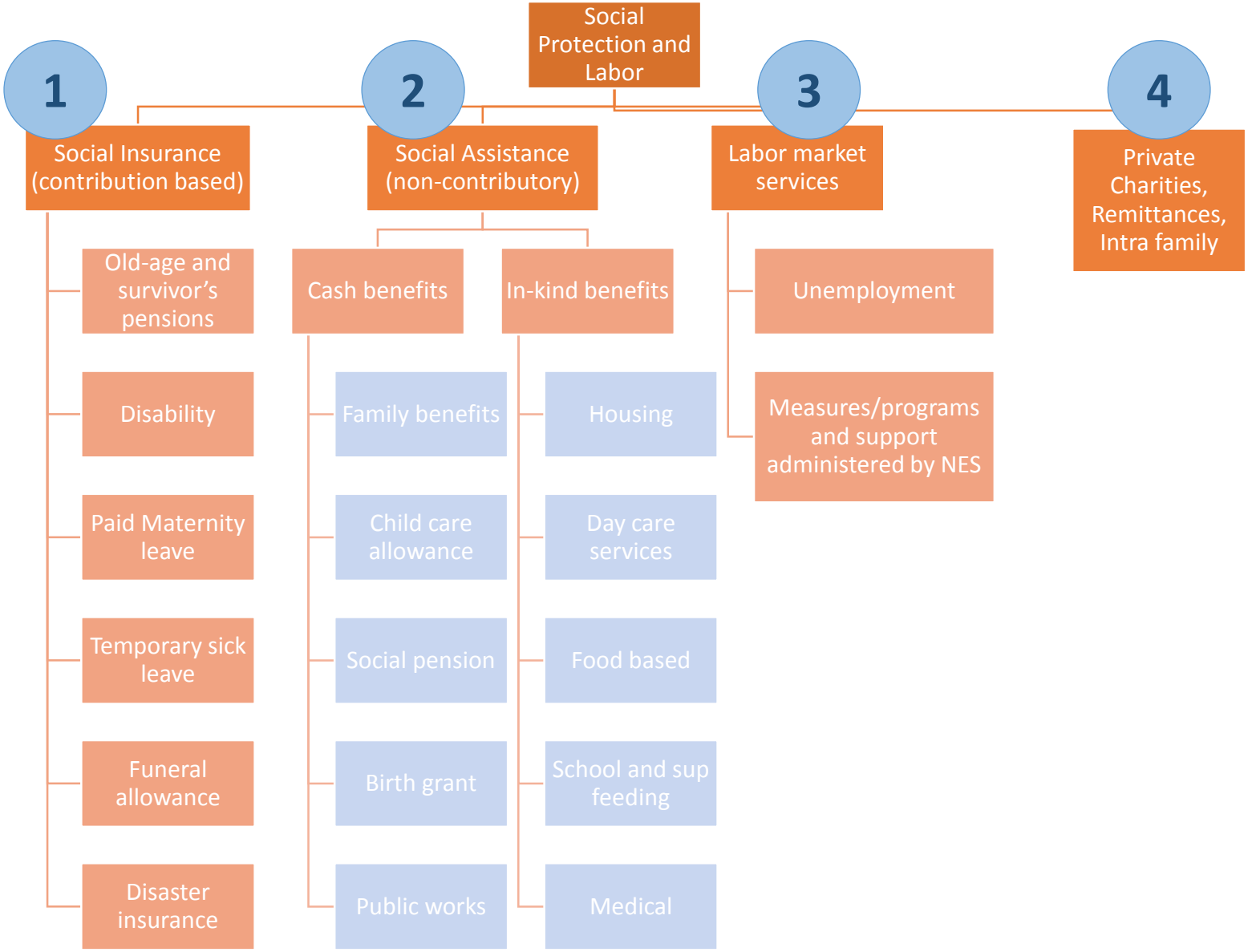
(assessing poverty, labour market and economic impacts)



Categorisation of schemes & benefits- Statistical view (ILO)



Practice- driven approach (WBG)



CLICKER QUESTION

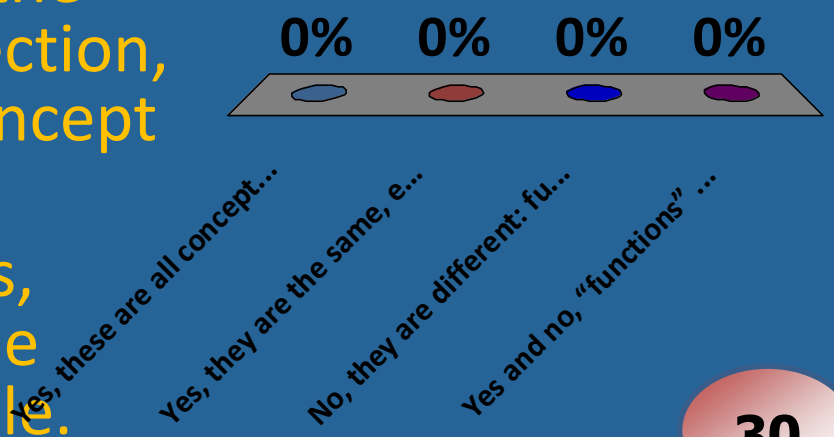
Are functions of social protection the same as stages of life cycle?

A. Yes, these are all concepts of Social protection stasistics

B. Yes, they are the same, every function (child, working age, old) corresponds to a stage in life cycle

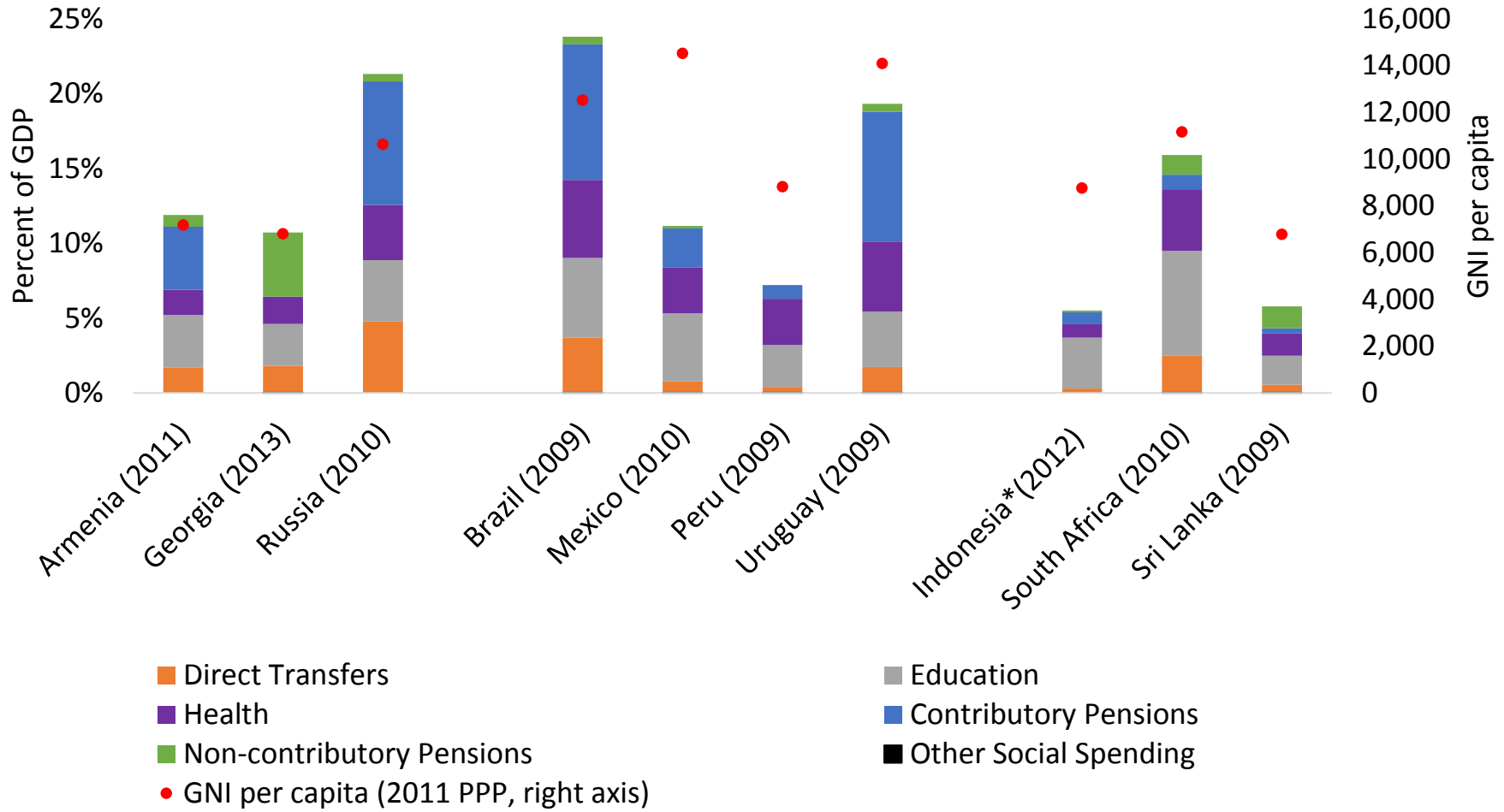
C. No, they are different: functions have evolved historically in the development of social protection, life cycles is a theoretical concept

D. Yes and no, "functions" are detailed descriptions of risks, they do not have one-to-one correspondents with life cycle.



Social spending pattern varies by countries

Composition of Social Spending
(as a share of GDP)



Source: Armenia (Younger and Khachatryan, 2015); Georgia (Cancho and Bondarenko, 2015); Russia (Lopez-Calva et al, 2015); Brazil (Higgins and Pereira, 2014); Indonesia (Jellema et al, 2015), Mexico (Scott, 2014); Peru (Jaramillo, 2014), Uruguay (Bucheli et al, 2014); South Africa (Inchauste et al, 2014); and Sri Lanka (Arunatilake et al, 2015).

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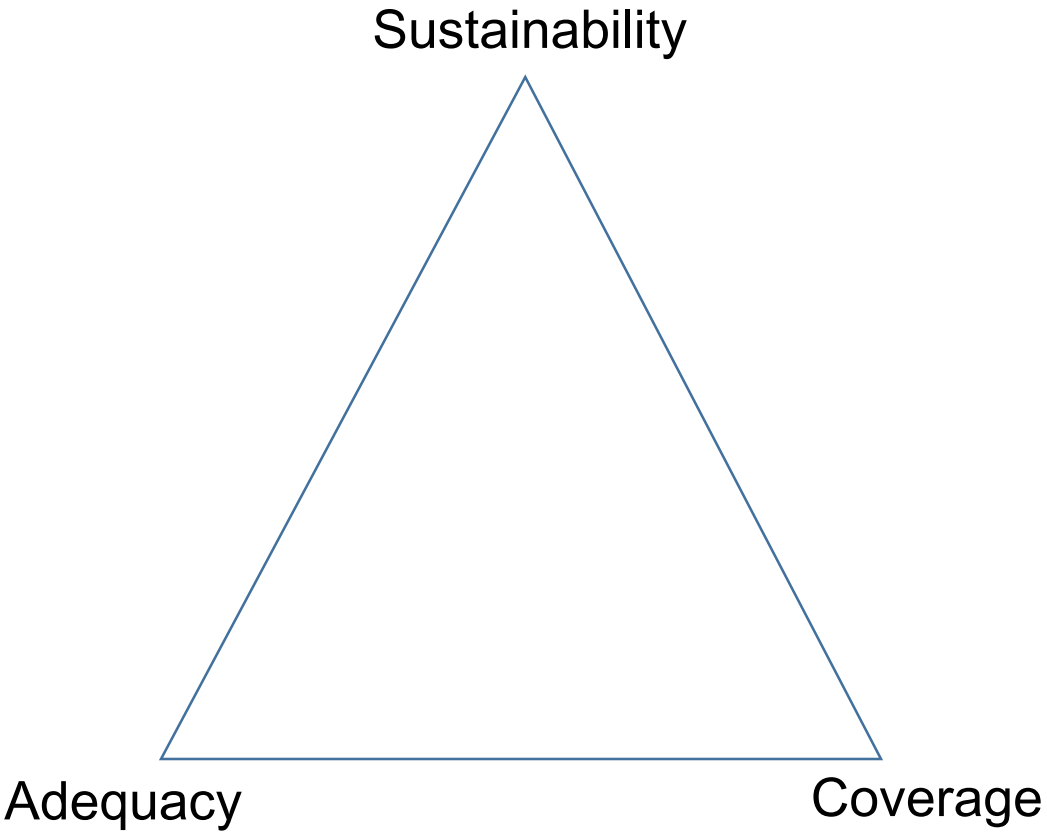
Reminder: pension systems performance - CAS



SSN and Pensions system performance similarities and differences

Pensions

- Pension – provide adequate income replacement for those unable to work in a sustainable and predictable way
- 3 equally important performance indicators:
  - Coverage of everyone (insurance), including contributions/affiliations
  - Adequacy to replace lost income
  - Sustainability to ensure predictable protection
- Additional indicators:
  - Environment design ,performance

SSN

- SSN- provide necessary income support for those who need it as long as they need it to avoid poverty and deprivation
- Main performance outcome – poverty reduction/elimination
- Ways to get there:
  - Cover those in need (poor and vulnerable) – coverage based on receipts of benefits
  - Cover only those in need (targeting)
  - Provide enough money to get out of poverty (adequacy)

Common: administrative efficiency

What is coverage?

- Coverage has two dimensions:
  1) scope of coverage i.e. the number of SP programs / areas to which different population groups have access and
  2) extent of coverage i.e. the share of persons covered within the target group of different SP programs.
- We are interested in the *extent of coverage, which in turns can be:*

a) legal (statutory) coverage, i.e. groups covered by statutory schemes for a given social protection function/branch in national legislation

b) effective coverage, i.e. the proportion of persons covered within the whole population or target group:

i. protected persons, i.e. the number of persons who have benefits guaranteed but are not necessarily currently receiving them (e.g. in contributory schemes those actually contributing/affiliated); and

ii. actual beneficiaries, i.e. the proportion of the population affected by a certain contingency who actually receive the respective benefit

» The distinction between *direct and indirect beneficiaries* versus *direct beneficiaries*

Coverage

It is the percentage of the population *receiving* a benefit or service

$$\text{Coverage} = \frac{\text{Number of beneficiaries in the total population (or group *)}}{\text{Total population (or group)}}$$

Group refers to subsamples of the population, i.e.: income groups (quintiles, poor, non poor), geographical groups (rural vs urban),

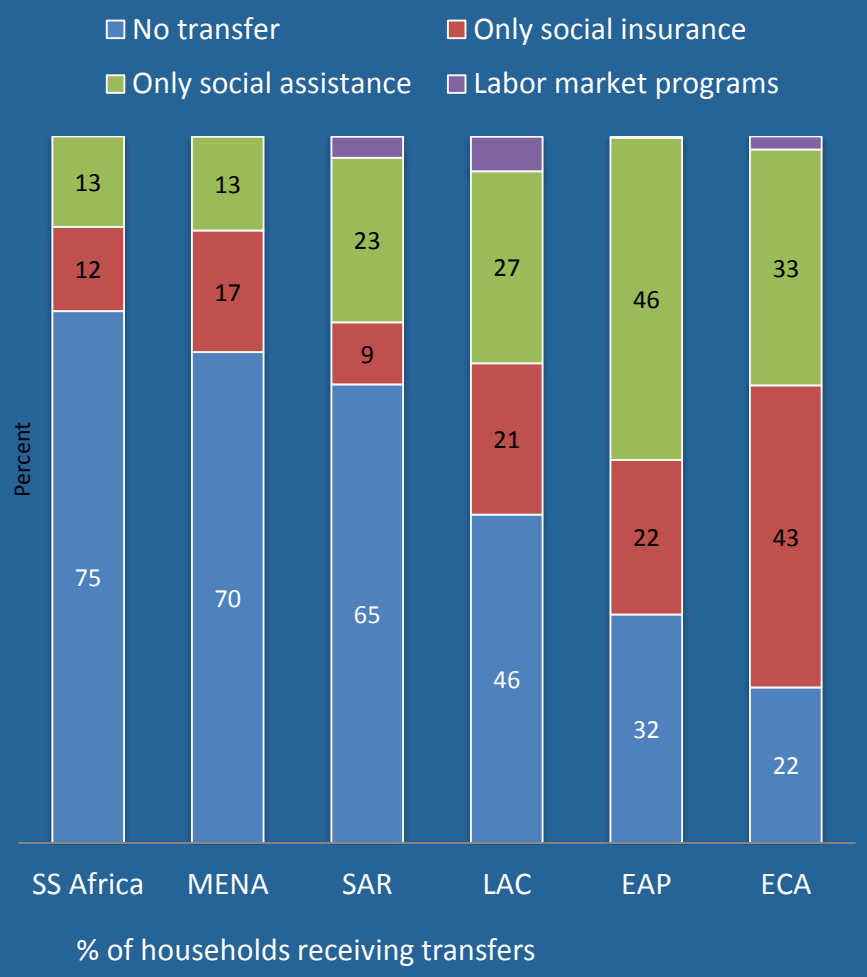
RECAP: Global coverage

Low coverage concentrated among:

- low-income countries and fragile contexts
- poor populations and vulnerable groups, including women
- informal sector

Meeting the coverage challenge

- *Sustainability* -- fiscally and institutionally
- *Adequacy* – appropriate levels of support, inclusive



Source: World Bank ASPIRE database

CLICKER QUESTION

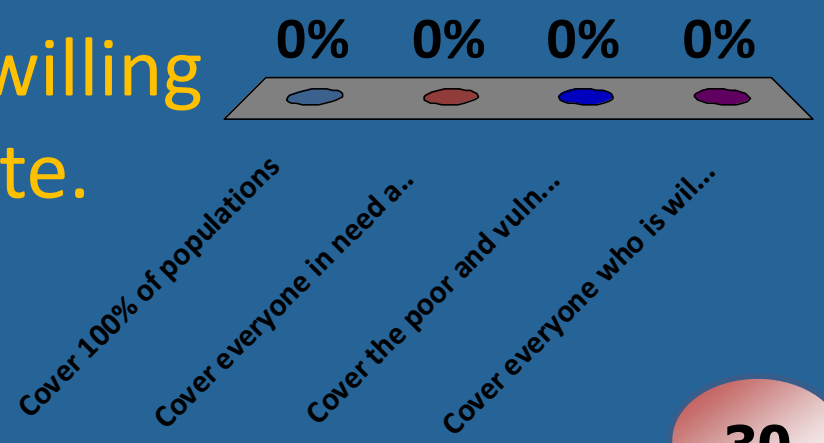
What is the objective of Social Protection in terms of coverage?

A. Cover 100% of populations

B. Cover everyone in need and when they are in need

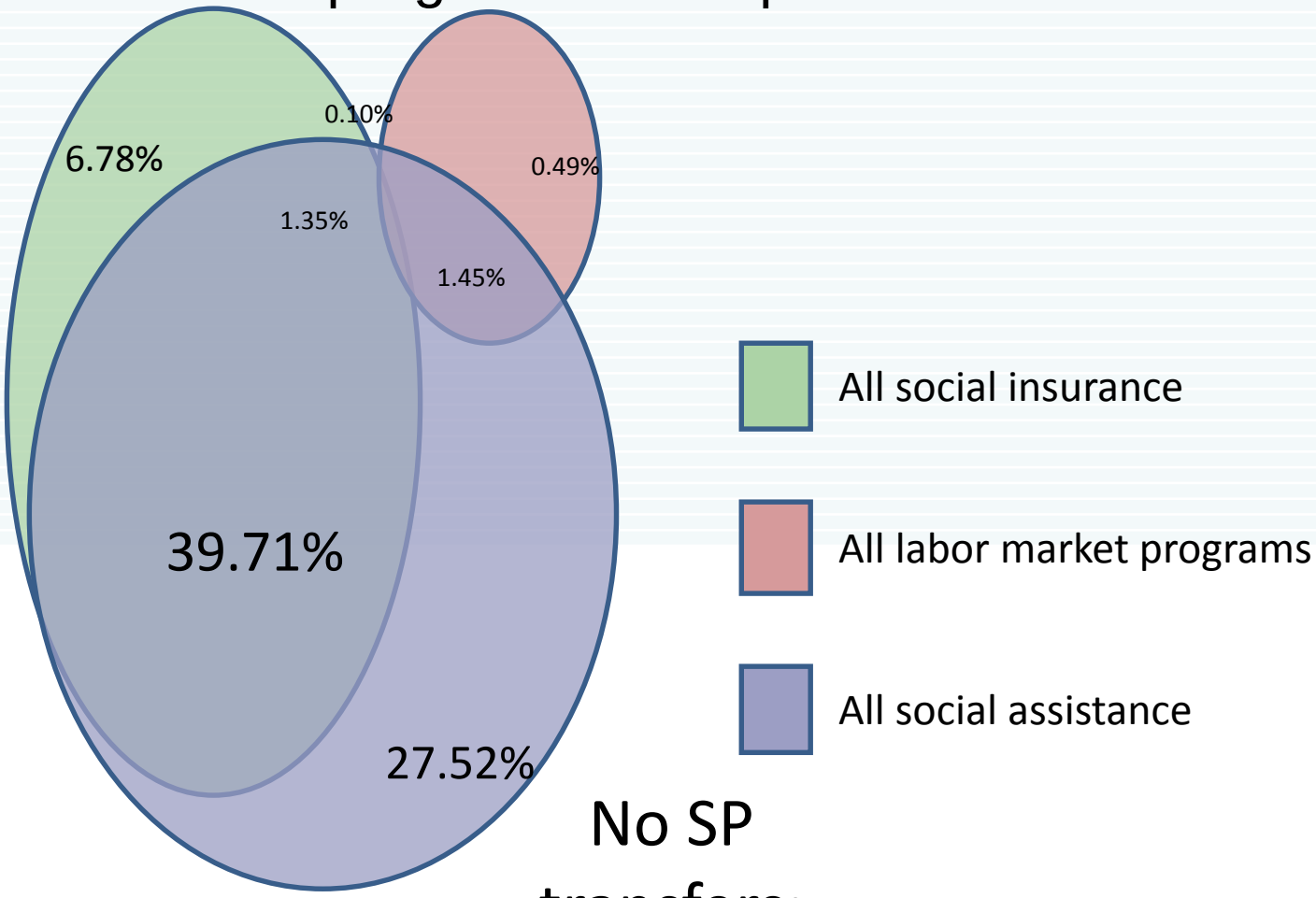
C. Cover the poor and vulnerable

D. Cover everyone who is willing and capable to contribute.



Graph 2: Venn diagrams

Program overlap is the share of households receiving 2 or more programs: example of Russia



No SP transfers: 22.60%

Source: Rosstsat, Income Survey , 2014

Why coverage is not enough? What is adequacy?

- Because what is relevant is "access to adequate and predictable benefits in case of need" Common Principle: Taken together, cash and in kind benefits should secure protection against poverty, vulnerability and social exclusion and enable a decent standard of living
- How to measure?
  - Benefit level
    - Combined across programs (household survey vs. administrative data)
    - Minimum standards (poverty line)
    - Consumption /income
    - International benchmarks

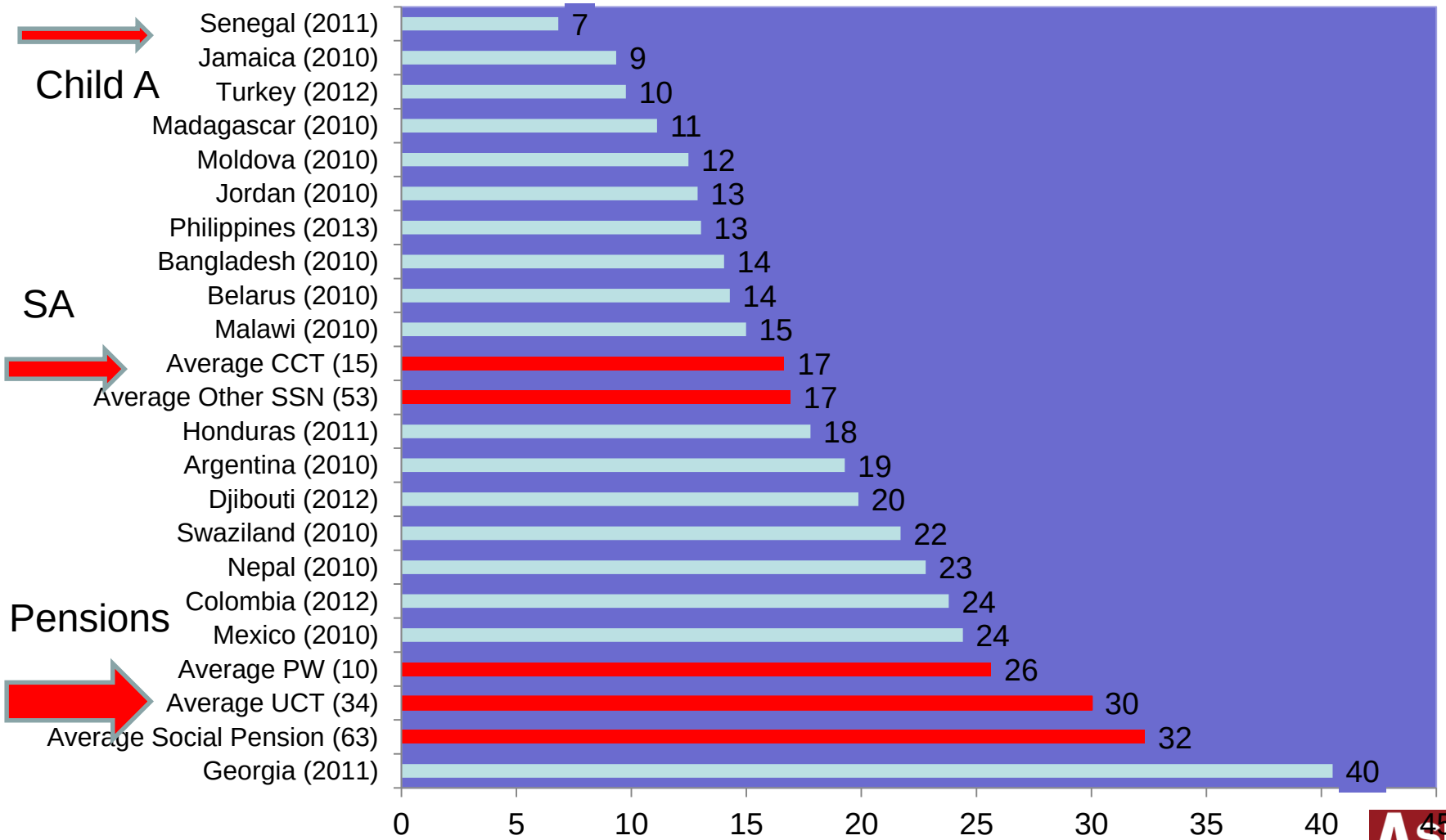
ADEQUACY of Benefits

It is the share of the transfers with respect to total consumption or income of a group

$$\text{Adequacy} = \frac{\text{Amount of transfers received by a group}}{\text{Total income or consumption of the beneficiaries in the group}}$$

Group refers to subsamples of the beneficiaries that belong to specific groups, i.e.: income groups (quintiles, poor, non poor), geographical groups (rural vs urban).

Immustration SSN adequacy for the poor varies by country



Between 2010--2013

CLICKER QUESTION

What determines adequacy of Social Protection transfer?

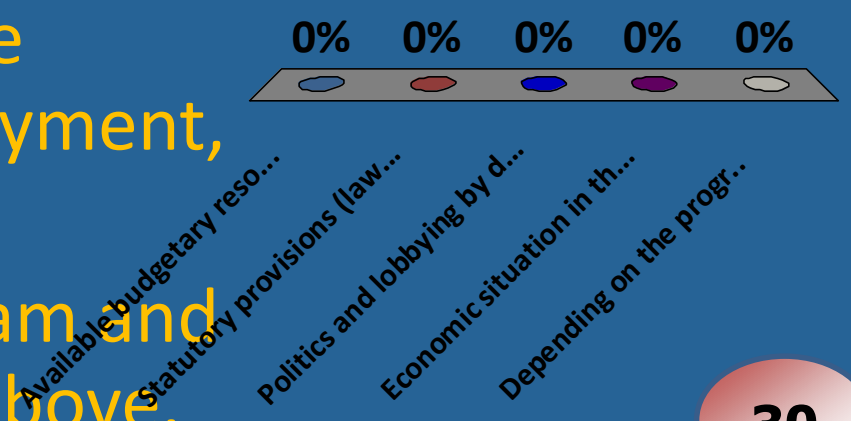
A. Available budgetary resources and number of beneficiaries

B. Statutory provisions (laws and regulations)

C. Politics and lobbying by different groups

D. Economic situation in the country, inflation, employment, wages

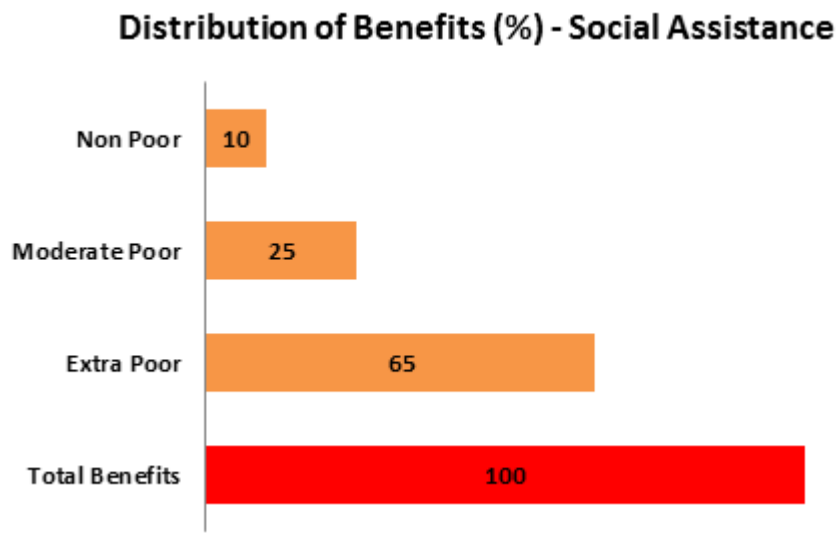
E. Depending on the program and time period, any of the above.



Distribution of Benefits (Benefits incidence)

It is the proportion of benefits received by a group

$$\text{Benefits incidence} = \frac{\text{Amount of benefits received by a group}}{\text{Program total benefits}}$$



Static Distributional Analysis : Income Concepts

MARKET INCOME

↓

PLUS DIRECT TRANSFERS MINUS DIRECT TAXES

↓

DISPOSABLE INCOME

↓

PLUS INDIRECT SUBSIDIES MINUS INDIRECT TAXES

↓

POST-FISCAL or CONSUMABLE INCOME

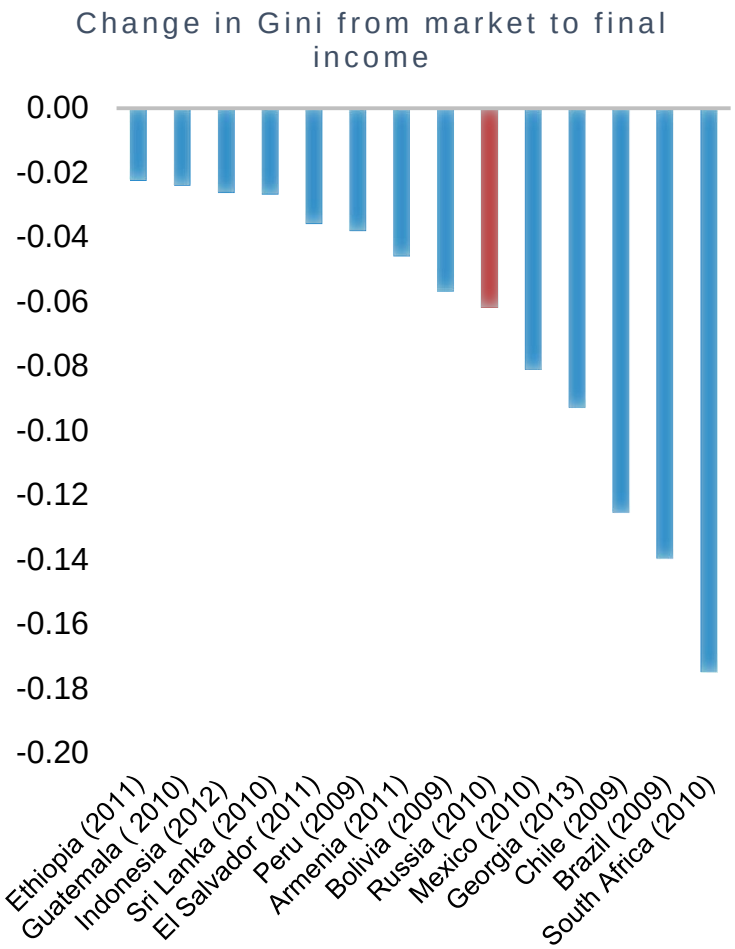
↓

PLUS MONETIZED VALUE OF PUBLIC SERVICES: EDUCATION & HEALTH

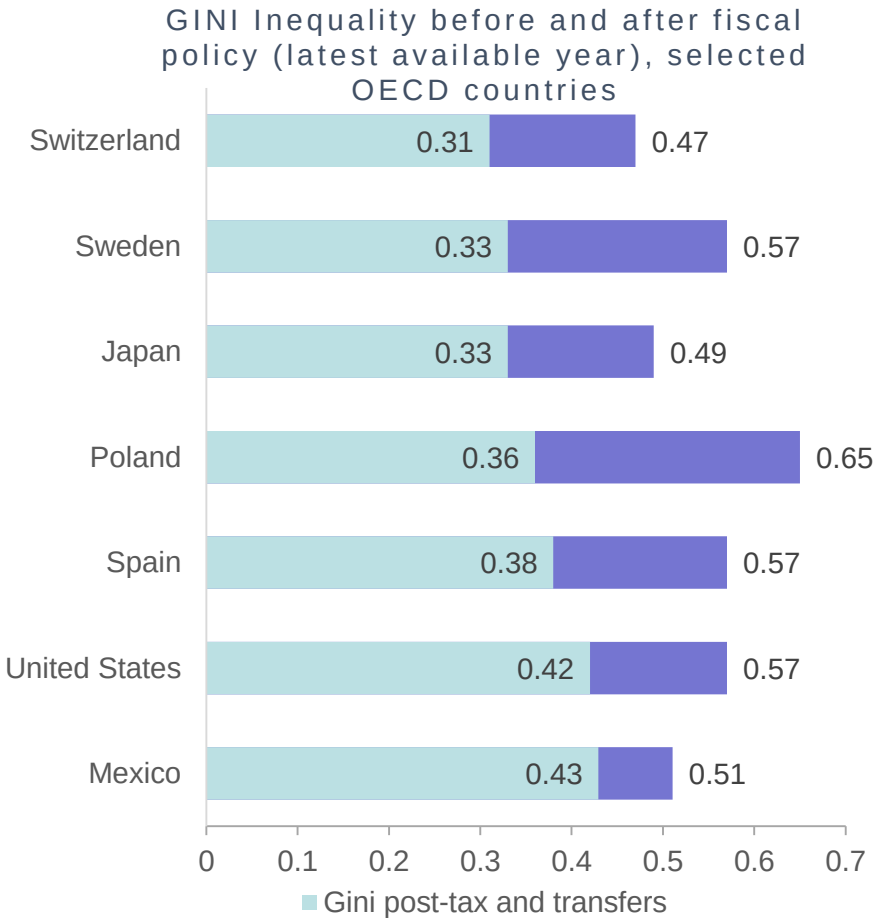
↓

FINAL INCOME

How a government collects and spends money can influence inequality

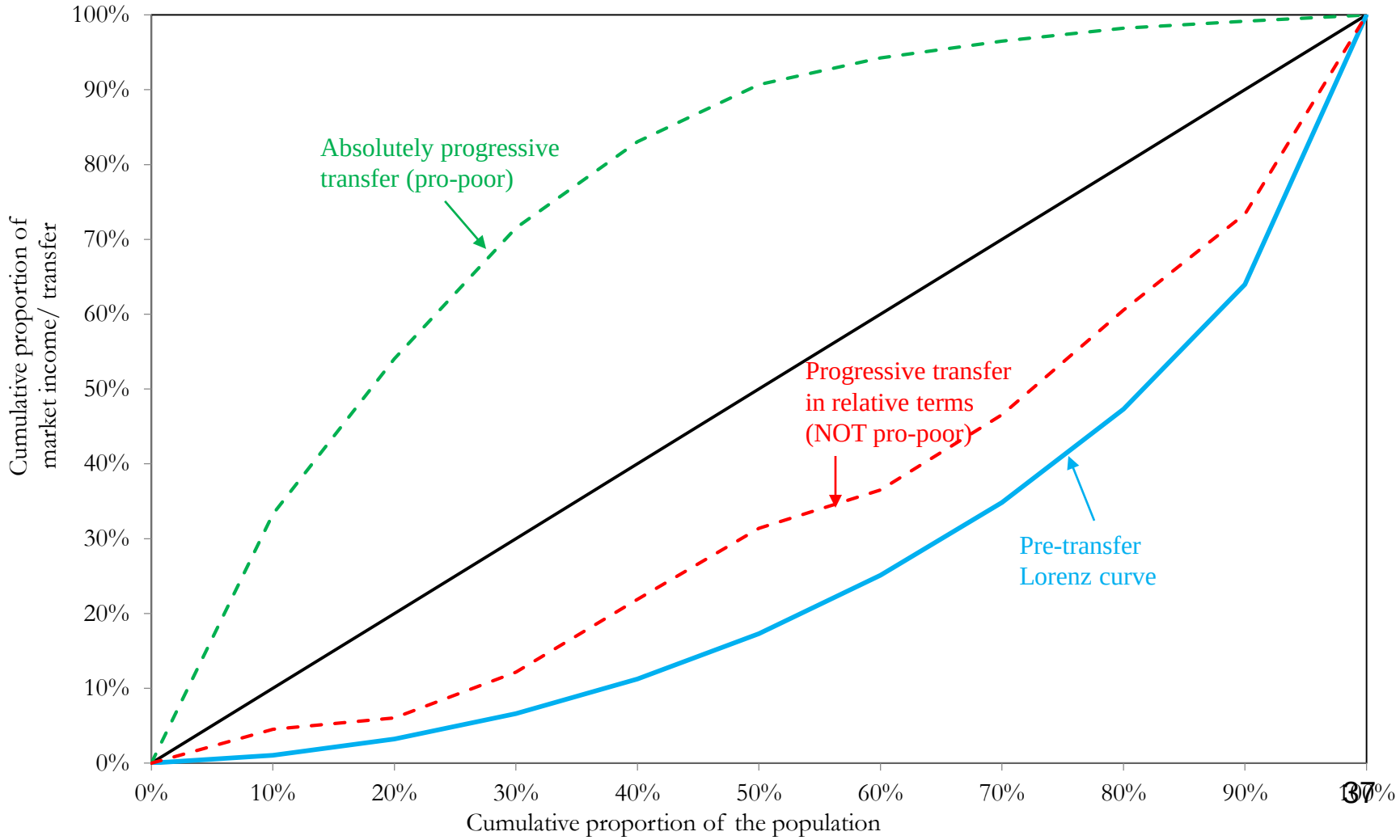


Sources: Armenia (Younger et al, 2014), Brazil (Higgins and Pereira, 2014), Bolivia (Paz Arauco et al, 2014), El Salvador (Beneke et al, 2015), Ethiopia (Woldehanna et al, 2014), Georgia (Cancho and Bondarenko, 2015), Guatemala (Cabrera et al, 2014), Indonesia (Afkar et al, 2015), Mexico (Scott, 2014), Peru (Jaramillo, 2014), Russia (Lopez Calva et al, 2015), Uruguay (Bucheli et al, 2014), South Africa (Inchauste et al, 2015), and Sri Lanka (Arunatilake et al, 2014).



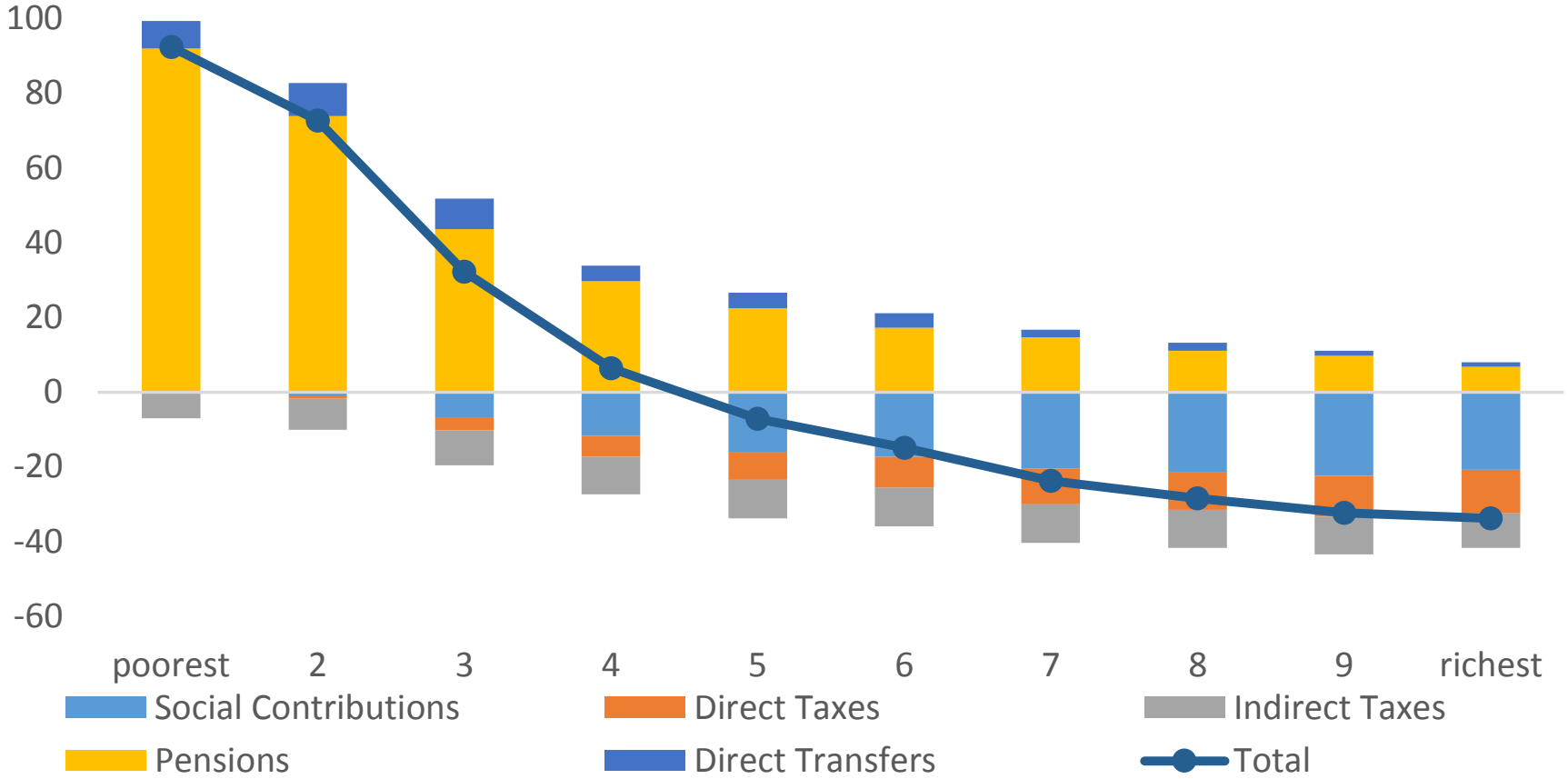
Sources: For Mexico, CEQ; for other OECD countries, Janet Gornick, based on LIS microdata ca 2000-mid2000s, reproduced in The Economist, Nov 2013.

Measuring progressivity



Example of distributional analysis by population groups

Distributional Impact of Different Components of the Tax and Benefit System by Market (Pre-fiscal) Income Deciles, Percent of Disposable Income, 2014

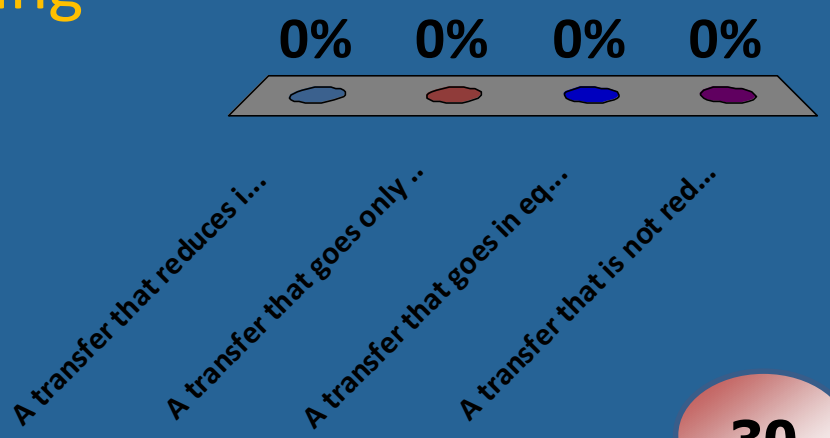


Source: World Bank based on HSE-RLMS data for 2014.

CLICKER QUESTION

What is a progressive transfer?

A. A transfer that reduces inequality
B. A transfer that goes only to the poor
C. A transfer that goes in equal share to everyone in the society
D. A transfer that is not reducing incentives for work.



Social protection Impact

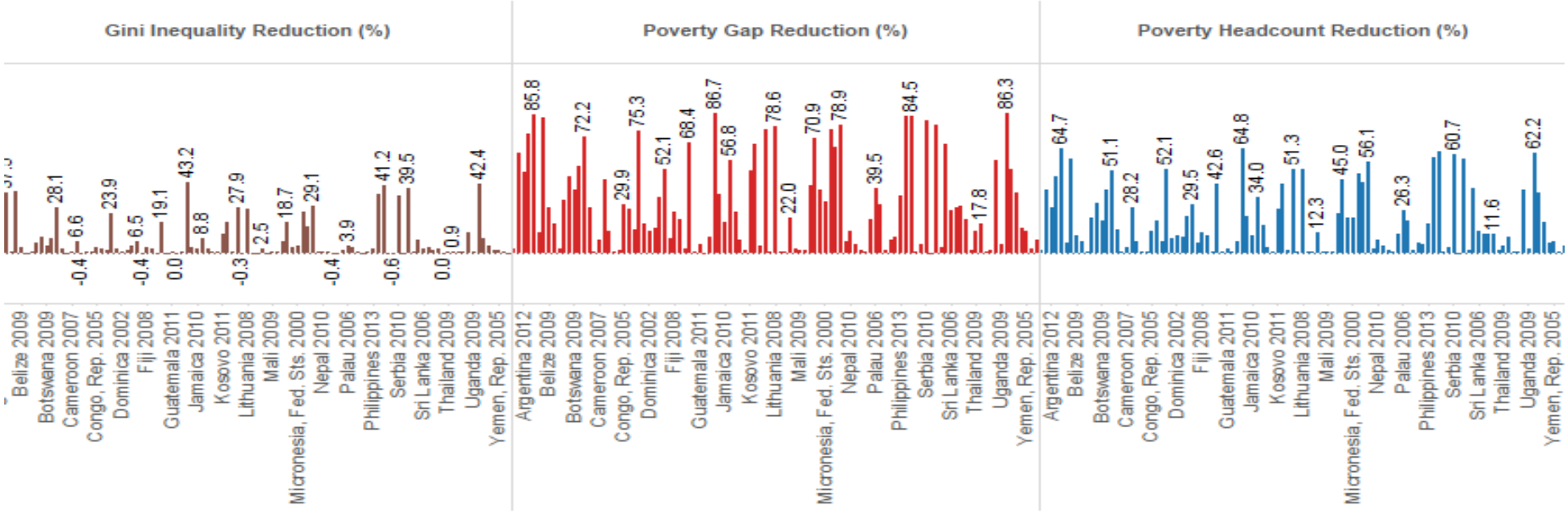
Simulated change (%) on poverty HC/Gap/Gini due to SPL programs

- Poverty headcount reduction
- Poverty gap reduction
- Inequality reduction (Gini)

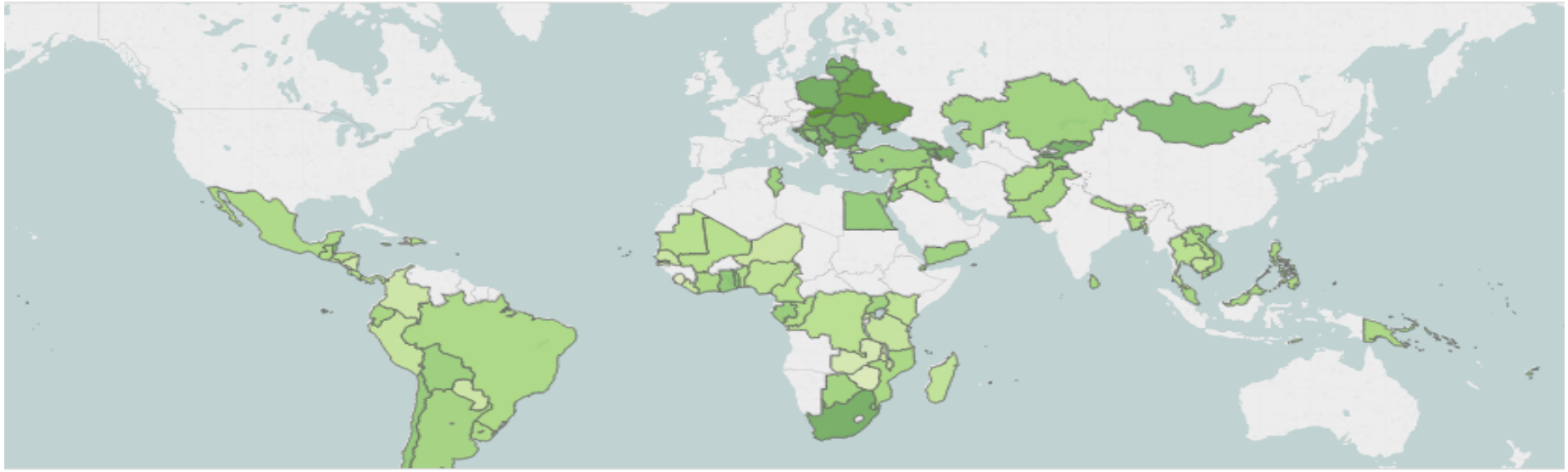
$$\text{HC reduction} = \frac{\text{Poverty headcount pre transfer} - \text{poverty headcount post transfer)}}{\text{Poverty headcount pre transfer}}$$

Countries All

Impact on Poverty and Inequality Reduction of SPL Programs



Benefit-Cost Ratio of SPL Programs ($PPP 2005)



Poverty is defined as the bottom 20% of the per capita welfare distribution (total household income or consumption)

Source: ASPIRE

Thank you!!