



Growth and redistribution

Arthur Silve

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Stylized facts

Inequalities
History of ideas

Growth
determinants

Determinants of
sustainability

Determinants of
inclusiveness

Poverty
Inequalities

Conclusion

Growth and redistribution

Macroeconomics / political economy

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2013



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Outline of the sequence

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- 3 Growth determinants
- 4 Determinants of sustainability
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Objective of this sequence

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Growth and inequalities : two concepts strongly linked

- Growth
- Growth volatility
- Inequalities
- Poverty



Distribution of inequalities

as from Li, Squire and Zou, EJ98

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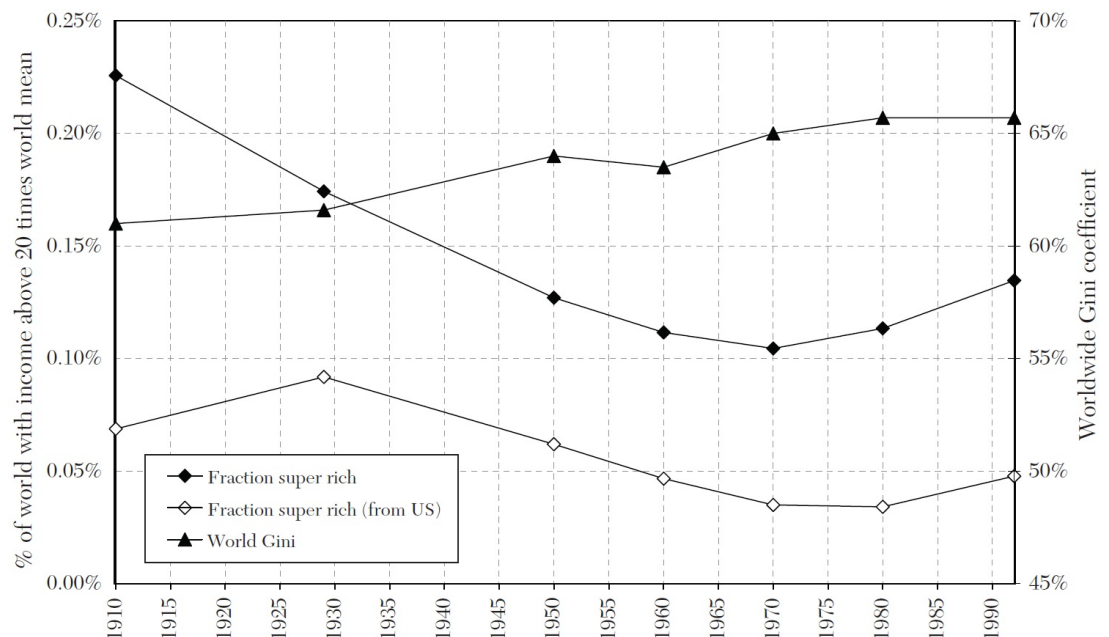
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The variance of Gini indexes is explained

- for 90% by cross-country differences
- for less than 1% by the intertemporal variation within countries

and these findings are robust to many specifications



Source: Atkinson, Picketty and Saez 2011.

- aggregated statistics reveal complex realities
- really strong differences between countries
- really slow evolution within countries

lead to consider the fight against inequalities as a *structural* issue involving

- economic
- politic
- sociological
- and demographic

changes

Other dimensions of inequalities

Infant mortality

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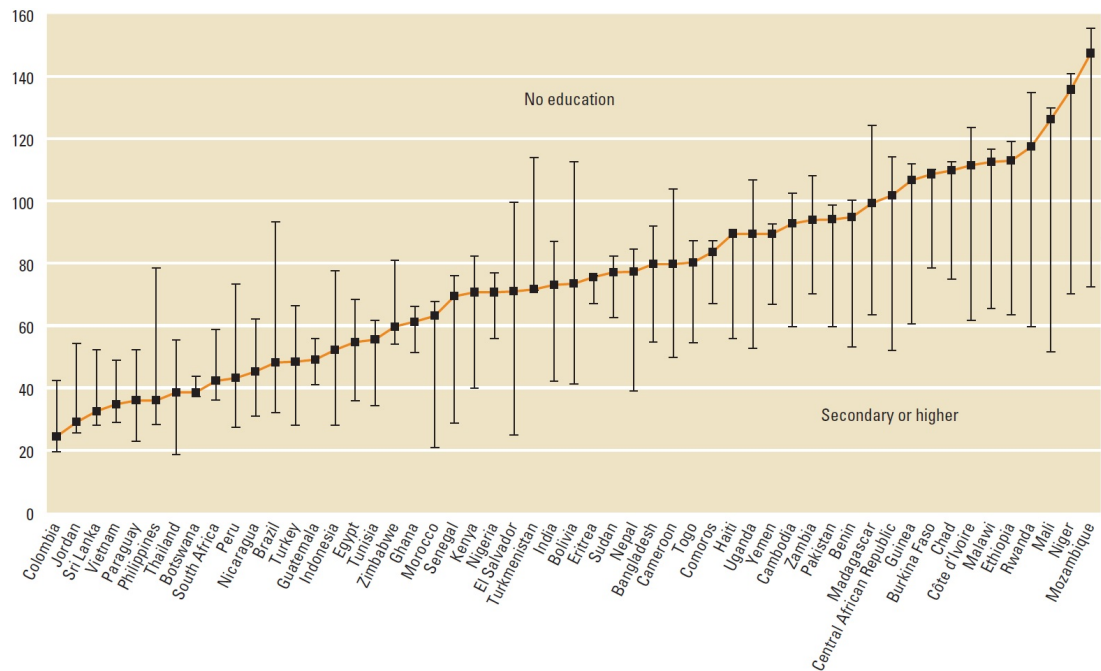
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Source: World Bank, World Development Report 2006

Other dimensions of inequalities

childhood immunization

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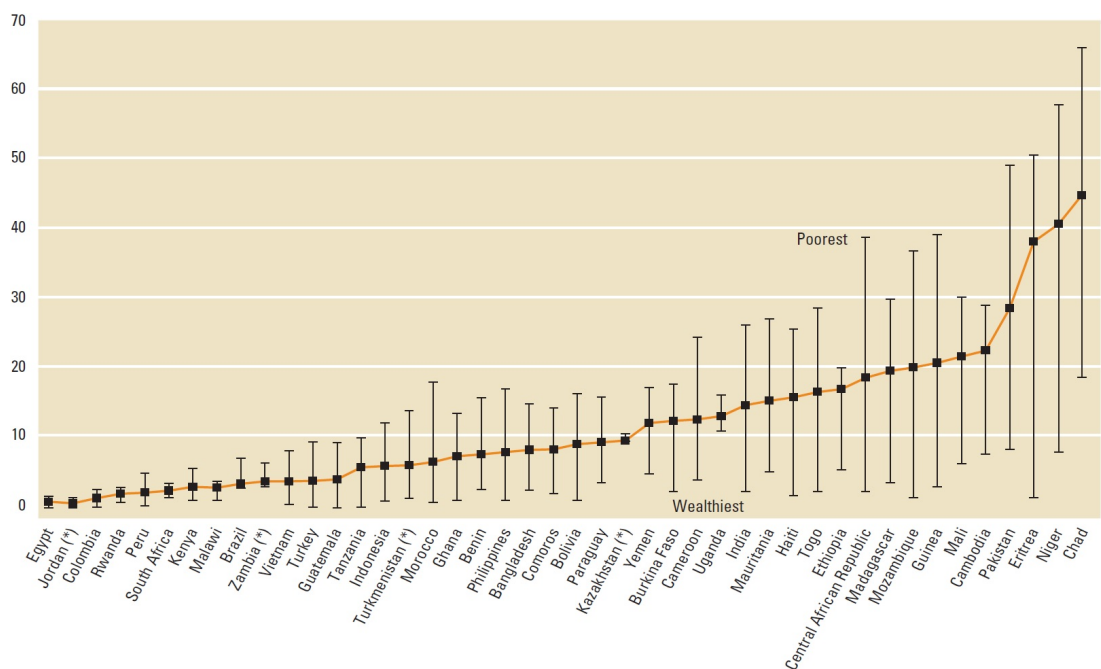
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Source: World Bank, World Development Report 2006

Other dimensions of inequalities

Household head illiteracy

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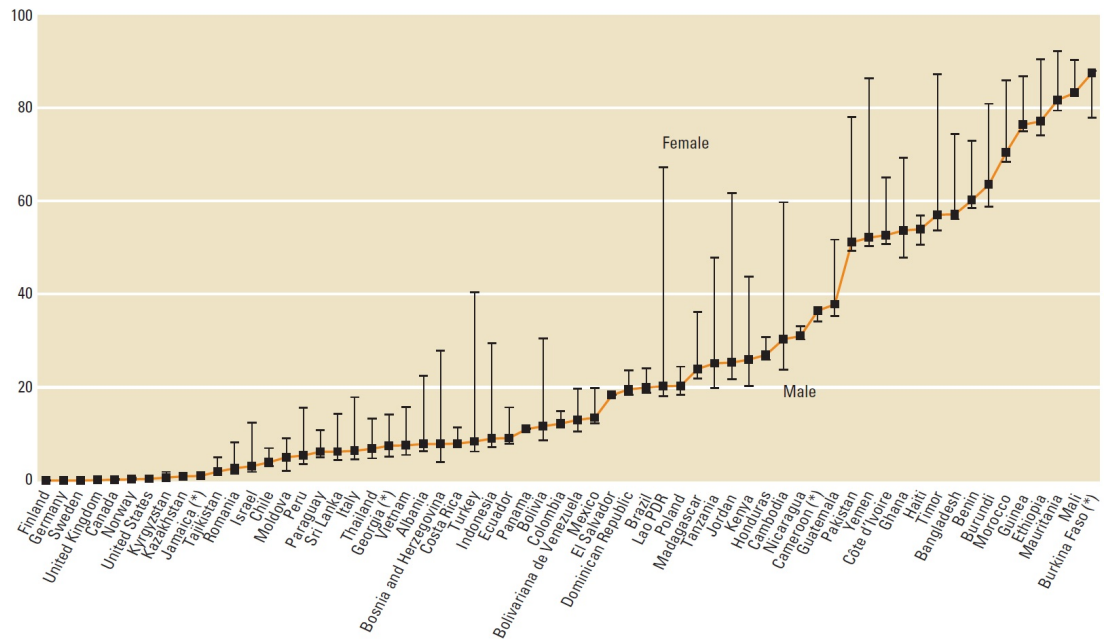
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Source: World Bank, World Development Report 2006

Other dimensions of inequalities

Male-female inequalities

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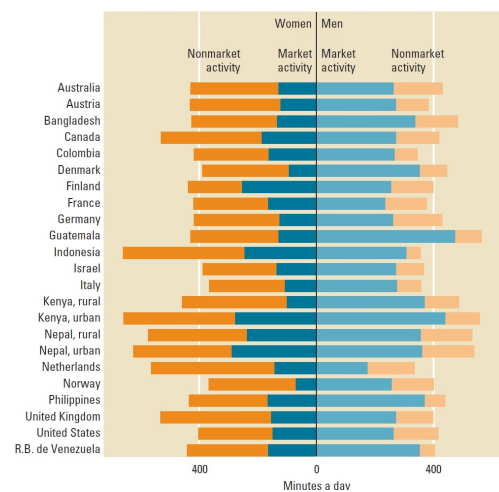
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- negotiated decisions within the couple
- influence on the structure of household expenditures
- access to information



Source: World Bank, World Development Report 2006

1990s view

Complementarity between growth and reduction of inequalities

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Country	HDI 1987	Under-five mortality rate (per 1,000 live births)			Life expectancy (years)			Adult literacy (%)				Calorie supply as % of requirements	
		1960	1975	1988	1960	1975	1987	Female		Male		1965	1985
								1970	1985	1970	1985		
<i>Sustained human development</i>													
Korea, Rep.	0.903	120	55	33	54	64	70	81	91	94	96	96	122
Malaysia	0.800	106	54	32	54	64	70	48	66	71	81	101	121
Botswana	0.646	174	126	92	46	52	59	44	69	37	73	88	96
Sri Lanka	0.789	113	73	43	62	66	71	69	83	85	91	100	110
Costa Rica	0.916	121	50	22	62	69	75	87	93	88	94	104	124
<i>Disrupted human development</i>													
China	0.716	202	71	43	47	65	70	..	56	..	82	86	111
Chile	0.931	142	66	26	57	65	72	88	97	90	97	108	106
Jamaica	0.824	88	40	22	63	68	74	97	..	96	..	100	116
Colombia	0.801	148	93	68	55	61	65	76	88	79	82	94	110
Kenya	0.481	208	152	113	45	52	59	19	49	44	70	98	92
Zimbabwe	0.576	182	144	113	45	53	59	47	67	63	81	87	89
<i>Missed opportunities</i>													
Brazil	0.784	160	116	85	55	61	65	63	76	69	79	100	111
Nigeria	0.322	318	230	174	40	46	51	14	31	35	54	95	90
Pakistan	0.423	277	213	166	43	50	58	11	19	30	40	76	97

Source: UNDP Human Development Report 1990

Rediscovery of trade-offs

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- China 1985-93 poverty reduction : -12%
- China 1994-95 poverty reduction : -24%



No systematic relation

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Efficient and fair policies

- transfers targeted towards the poors
- access to education and basic health
- fight against informal work

Efficient but unequal policies

- focusing on consumption or property taxes vs. taxes on labor or profits

Fair but inefficient policies

- minimum wage too high



The empirical link growth - inequalities

Inconclusive – mechanisms to know

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Conclusion

- no consensus in the literature regarding an assumed relation between inequalities and growth
- some elements at the microeconomic level
- diverse national trajectories

Important to know the mechanisms



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Inequalities written in the market mechanisms

Private appropriation of the benefits of one's

- effort – for instance when one is the principal recipient of last resort of one's labor returns
- education – when the labor market allows to make the most of it
- innovation
- investment – when one does not fear to be expropriated

... provides the needed incentives to a higher growth, but also contributes to the increase of the level of inequalities.



Finance and growth

An inconclusive causal relation

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- According to Nobel Prize winner Lucas, financial tools are created to address firms' needs
- According to Nobel prize winner Miller, finance widens companies' options
 - because it provides information
 - because it exerts corporate governance
 - because it diversifies risks
 - because it mobilizes savings
 - because it facilitates transactions

A causal link difficult to establish.



Do inequalities impede growth ?

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Key mechanism :

- inequalities raise the redistributive conflict intensity
- the intensity of this conflict hinders the private appropriation of the returns to one's own efforts
- less accumulation translates into less growth

Redistribution in democracy

- growth is function of capital accumulation
- capital is unequally allocated in the society
- the median voter taxes capital



Impact of conflicts on growth

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Rhetoric of fighters : a civil war is a catalyst necessary for social progress

- opportunity cost of resources used in conflicts (as well as military expenditures during non conflict times)
- cost of infrastructure destruction during the conflict
- capital flight during the conflict
- erosion of social capital
- displacement of population groups, refugees



Inequalities and public choice

The conflict does not need to be armed

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The inequalities inform decisions of each and every agent, including the policy maker

- who belongs to one social group
- who has economic assets he wants to promote
- who can appropriate the proceeds of taxation for himself

Inequalities and growth stability

As from a IMF WP: Berg and Ostry 2011

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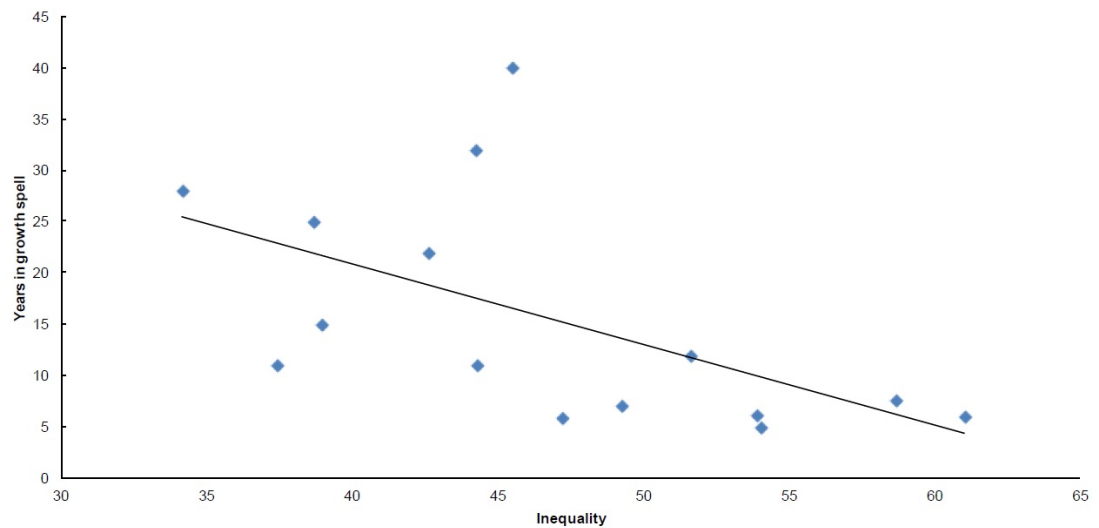
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Source: Berg and Ostry 2011

Determinants of stability

Very preliminary results

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- the balance of power and accountability of the executive branch of government
- basic education
- financial development
- financial and trade opening
- macroeconomic stability, external competitiveness, etc.

Examples of the end of growth spells

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Country	Spell dates	Growth in real per capita GDP		Hazard ratio	Main contributing factors (Share of total hazard)				
		During spell	Next decade		Inequality	Low FDI Inflow	Increased external debt	More autocracy	Over-valuation
Cameroon	1978–85	6.6	-5.6	109	0.49	0.33	-0.05	0.33	0.09
Colombia	1967–78	3.4	1.2	66	0.73	0.46	-0.06	-0.23	-0.03
Guatemala	1958–79	2.4	-1.3	56	0.39	0.38	-0.07	0.13	-0.02
Ecuador	1971–78	7.2	-1.0	47	1.05	0.34	-0.05	0.17	-0.13
Panama	1959–80	4.7	0.0	42	0.44	-0.61	0.62	0.28	0.06
Nigeria	1968–76	5.9	-4.0	29	0.27	0.41	-0.08	0.39	0.47

Source: Berg and Ostry 2011

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- Growth is on average not accompanied by any evolution of inequalities or of the polarization
- Negative growth is usually highly detrimental to redistribution
- Poor people (robustly) benefit everywhere of an increase in standards of life.
- 600 million Chinese



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Deux classical mechanisms :

- above all, poor people should benefit from finance
- NON LINEAR ?

The financial development allows to reduce poverty

- empirical confirmation with longitudinal data
- confirmation also on Indian national data
- contribution to a reduction in inequalities



Perpetuation of inequalities

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In non-democratic countries, those holding political power

- can use credit and foreign currency allocation for their own benefit
- can protect their own firms from domestic and international competition
- can allocate in priority public spending to higher education and health (except basic health)



Development and inequalities

The (unverified) inverted U hypothesis

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In 1955, Kuznets offers an assumption according to which

- inequalities increase when
 - a new technology offers higher returns to a fraction of workers
 - and at the beginning of an urbanization phase
- then they diminish when more and more workers are concerned

The hypothesis is not verified empirically.



Market imperfections and inequalities

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Credit market imperfections

- credit constraints mainly affect the poor
- impossibility to make productive investments

Initial distribution of land

- Availability of a good or asset used as a collateral
- Facilitated by land reforms / fair initial distribution of land



Demography and inequalities

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- revenues increase then decrease over the life cycle;
- as do income inequalities;
- the thickest cohorts have a relatively less important income.

Three intuitions regarding the cohort effect on inequalities :

- ✓ a slowdown of demographic growth increase inequalities
 - ✓ by raising the proportion of high income
 - ✓ by increasing the weight of a more heterogeneous population
- ✗ and this despite a lower profitability of experience.



Trade openness and inequalities?

A mechanism empirically unsubstantiated

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Predictions of Heckscher-Ohlin model

- countries specialize in the production of the good intensive in the most abundant factor (HO theorem)
- over remuneration of the abundant factor (Stolper Samuelson theorem)

Developing countries are usually rich in labor, and even in unqualified labor

- prediction of a reduction in inequalities (except if demographic dividend, or effect *à la* Kuznets)



Operational conclusion 1/3

Many mechanisms to remember

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Simultaneous determinants of growth and inequalities

- market mechanisms : growth + inequalities +
- financial development : growth + inequalities –
- trade opening : growth + inequalities ?
- demography : growth + inequalities –

Inequalities / redistribution \implies growth

- economies of scale
- conflicts \implies instability and destruction
- extraction / cost of doing business \implies growth –

Growth \implies inequalities

- best predictor of poverty reduction
- urbanization / growth with higher value added



Operational conclusion 2/3

Trade-off in the ST, complementarity in the LT ?

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The effect of many policies on inequalities is different in the ST and the LT

- unequal market mechanisms, but favourable to growth, and thus reducing poverty
- labor market flexibility vs. minimum wage
- Phillips curve : inflation and unemployment

Conclusion: LT growth benefits from taking into account inequalities and poverty. In the ST, the trade-off is unclear.



Operational conclusion 3/3

The impact of policies essentially redistributive

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- subsidies
 - food subsidies
 - energy subsidies
- social safety nets
 - pro-poor countercyclical expenditures
 - access to basic medical services
 - unemployment / retirement benefits
- cash transfers
- mechanisms to secure jobs