Paris School of Economics Lectures March 2009

Lecture 3:
Bailing out the World's Poorest

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The challenge of extreme poverty in the world: some aggregate numbers

- In 2005, about 1.4bn people—one person in four in the developing world—lived below the average poverty line of the world's poorest countries, $1.25 a day in 2005 PPP.

- Their total "poverty gap"—the total sum of money that would bring everyone up to that poverty line per year if nothing else changed—is just under $200bn (less than one quarter of the $800bn fiscal stimulus just passed by the US government).

- However, the cost of eliminating extreme poverty by direct transfers is going to be far higher than $200bn, given incentive effects, information problems and political economy.

=> the challenge of anti-poverty policy

Progress for the world's poorest 1981-2005

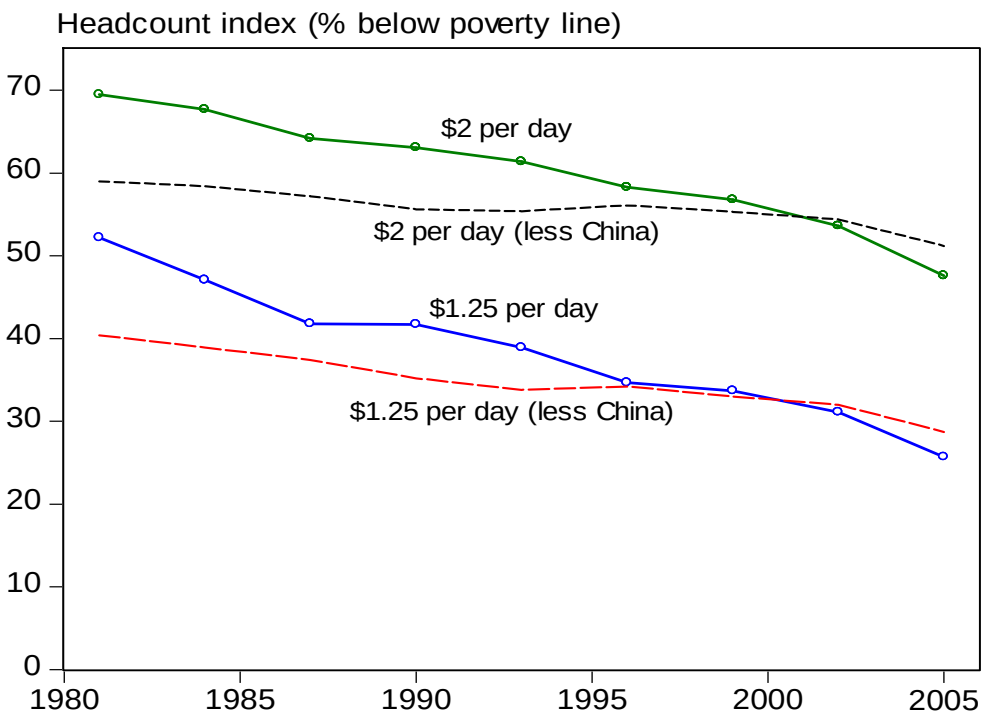
The % below $1.25 a day was halved over 25 years:

1981: 52%

1990: 42%

2005: 25%

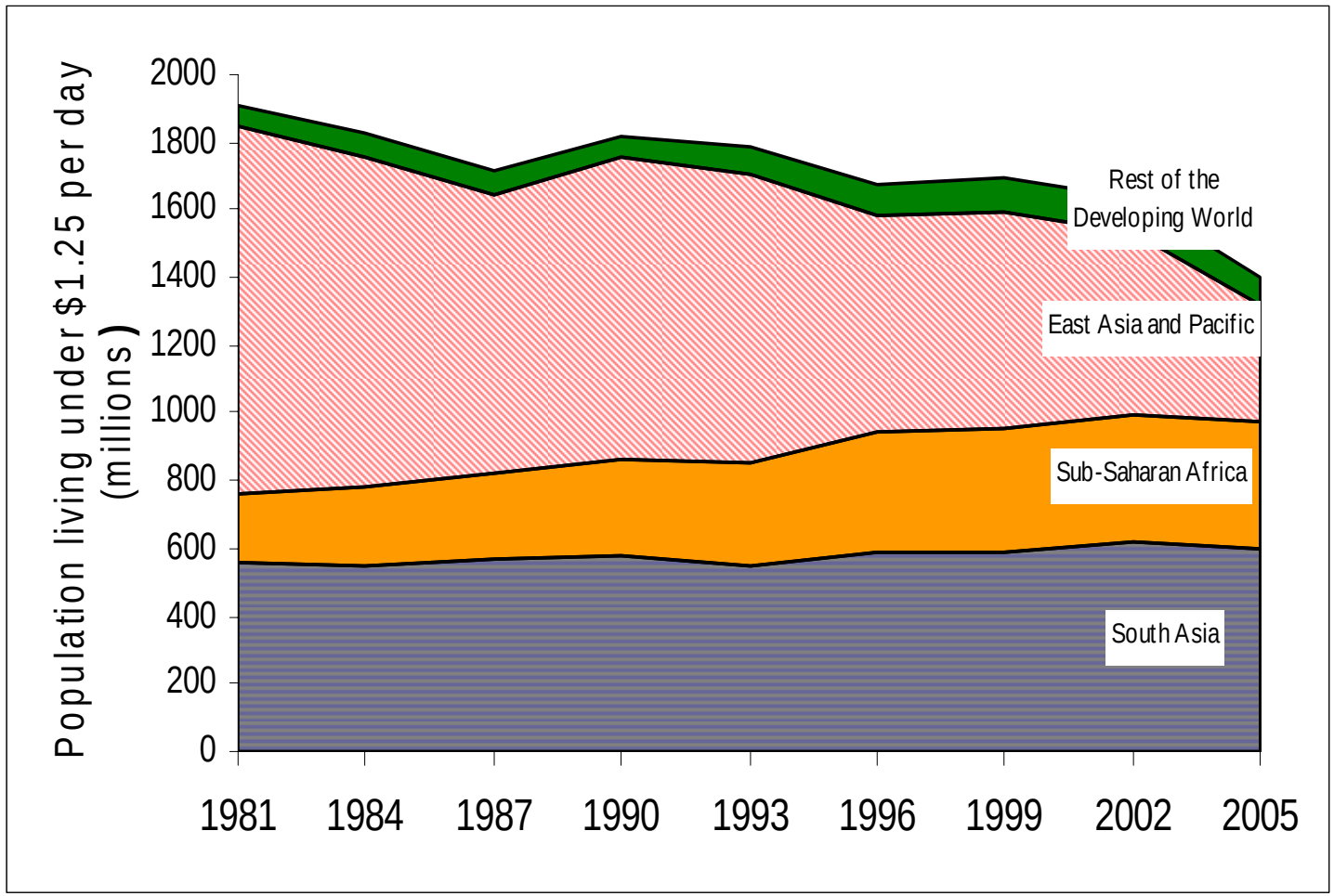
Trend decline of one % point per year



- Number of poor fell by 500 million, from 1.9 billion to 1.4 billion
- Poverty rate fell in all years
- Robust to choice of poverty line up to about $10 per day

But uneven progress across regions

Number of poor by region



Questions for today

- *How vulnerable are the world's poorest to the crisis?*
- *What tradeoffs are faced in policy responses?*
- *What are the objectives for social policy in a crisis?*
- *What are the options for social policy reform?*
- *What would the ideal safety net look like?*

How vulnerable are the world's poorest to the crisis?

Much less progress against poverty by Western standards

Who is poor by US standards?

($13 a day for a family of 4 in 2005)

	1990	2005
Number living below $13 a day (millions)	**4193**	**5208**
Percentage of population	**96.1**	**95.5**

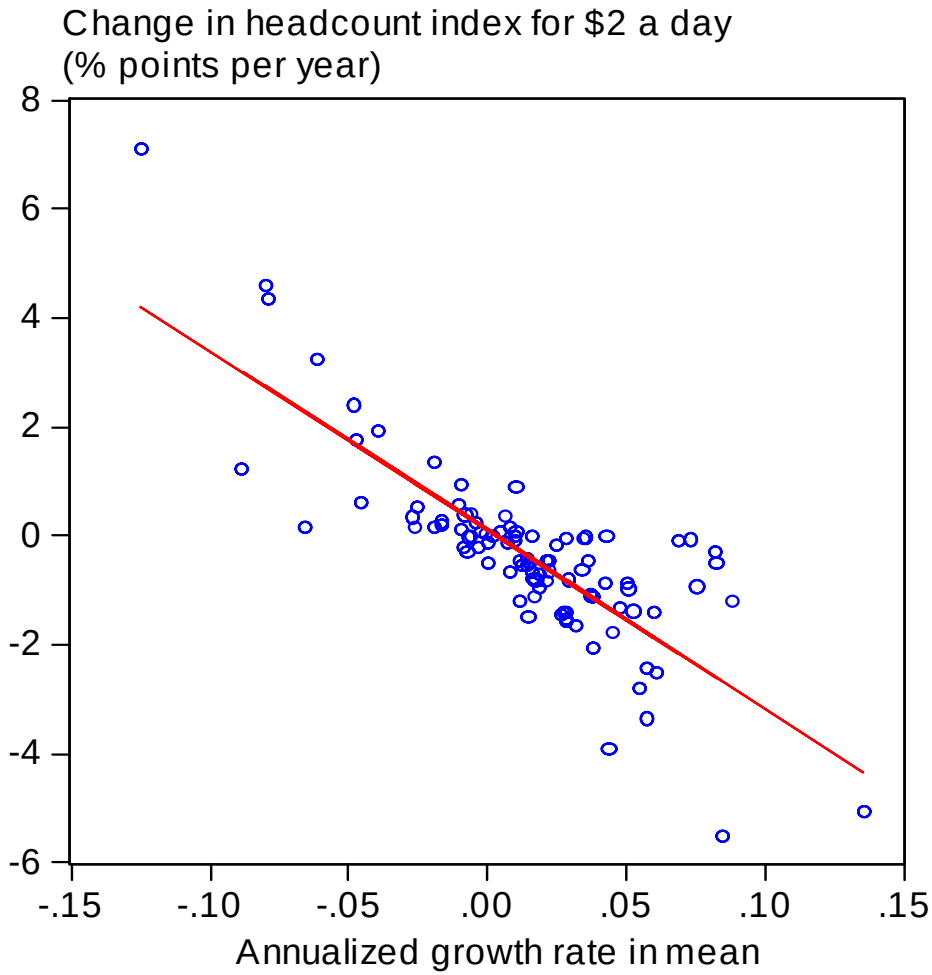
The developing world's bulging, but vulnerable, "middle class"

People living between $2 a day and $13 a day

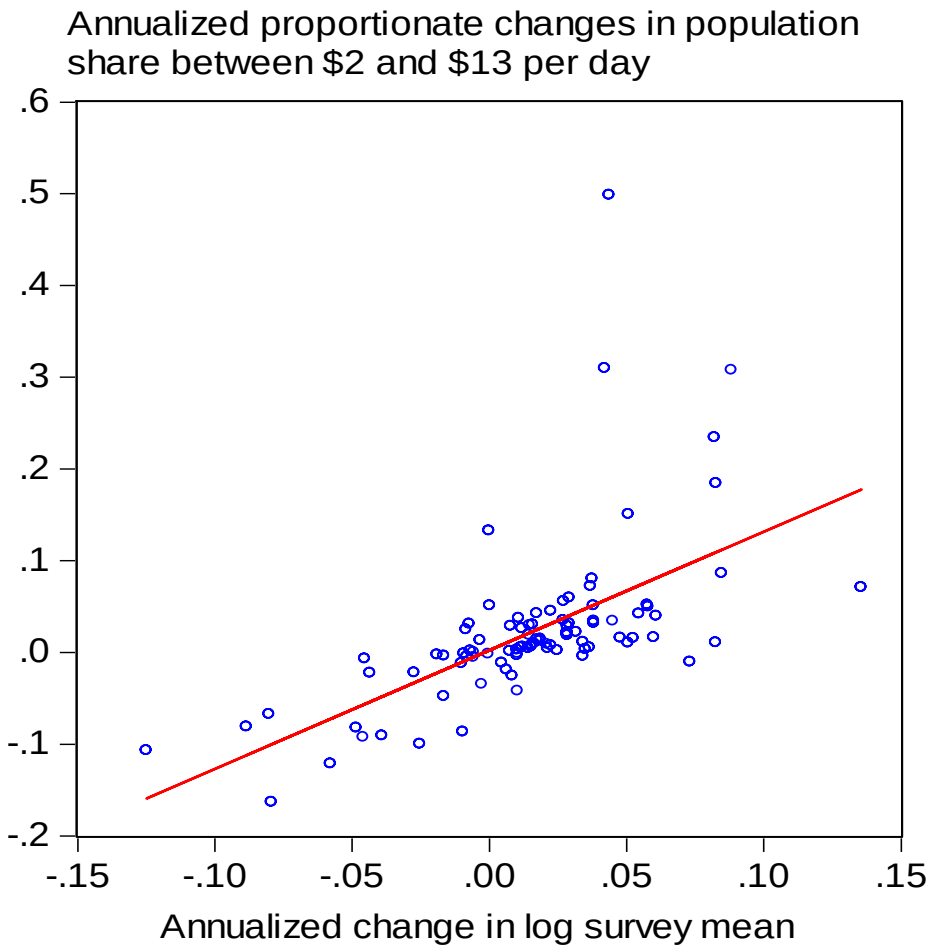
	1990	2005
Number living between $2 and $13 per day (millions)	**1428**	**2644**
Percentage of population	**32.7**	**48.5**

One in six people now live between $2 and $3 per day

Growth has reduced extreme poverty

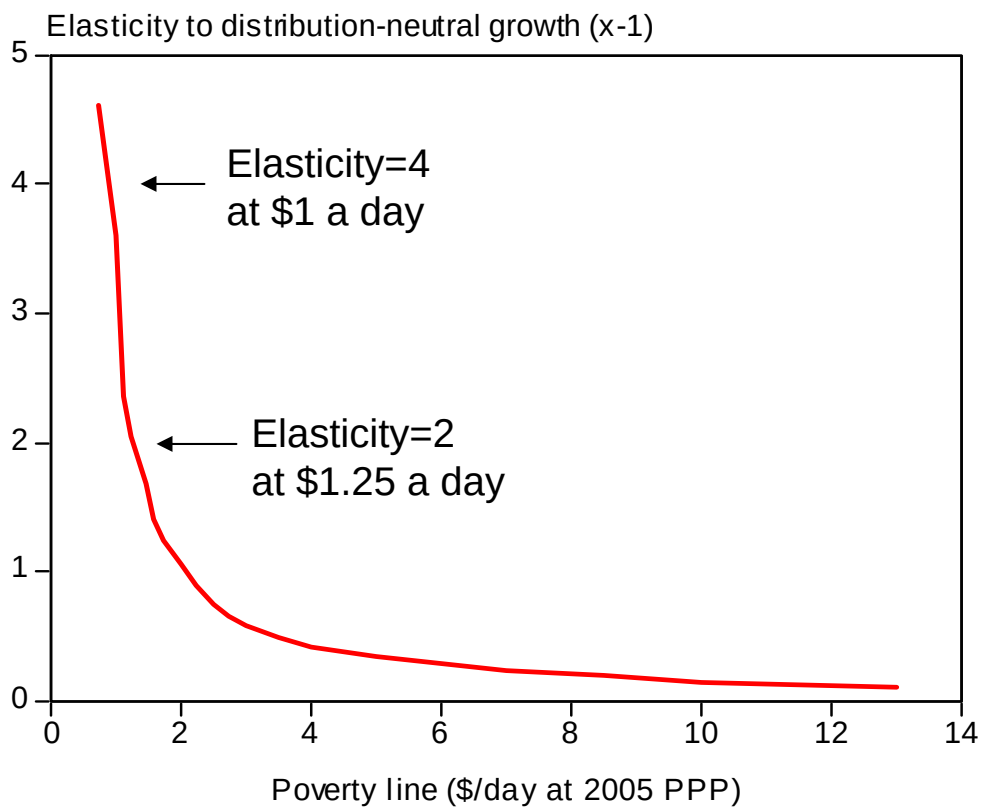


But growth has left a large and vulnerable middle class in many countries



Bulging middle class => Extreme poverty can rise rapidly with global recession

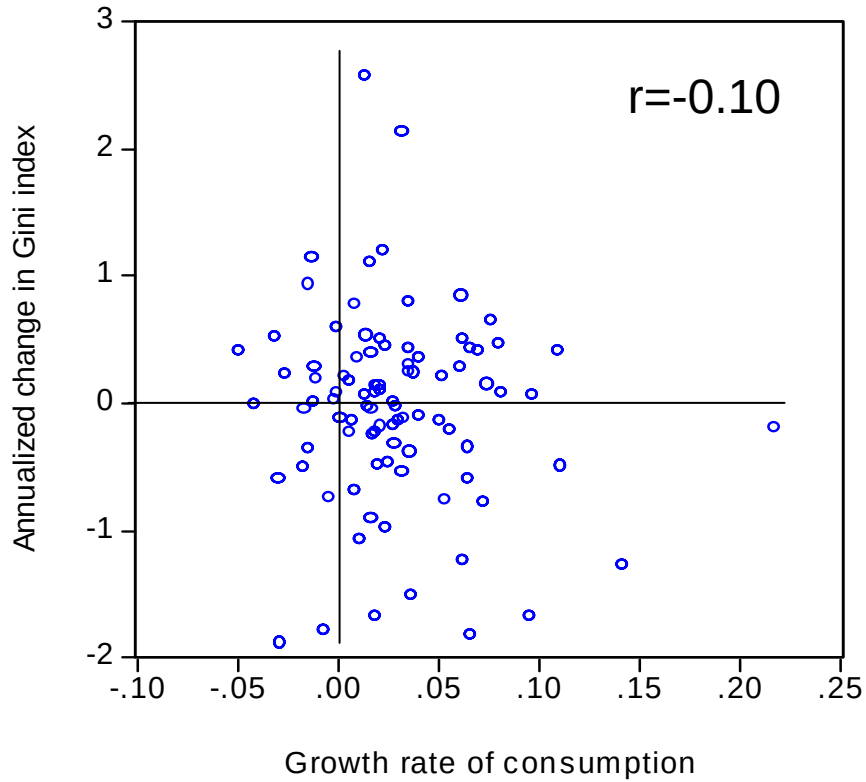
Distribution-neutral growth/contraction: same proportionate change at all levels, leaving relative inequality unchanged



Stylized fact: Economic growth tends to be distribution-neutral on average

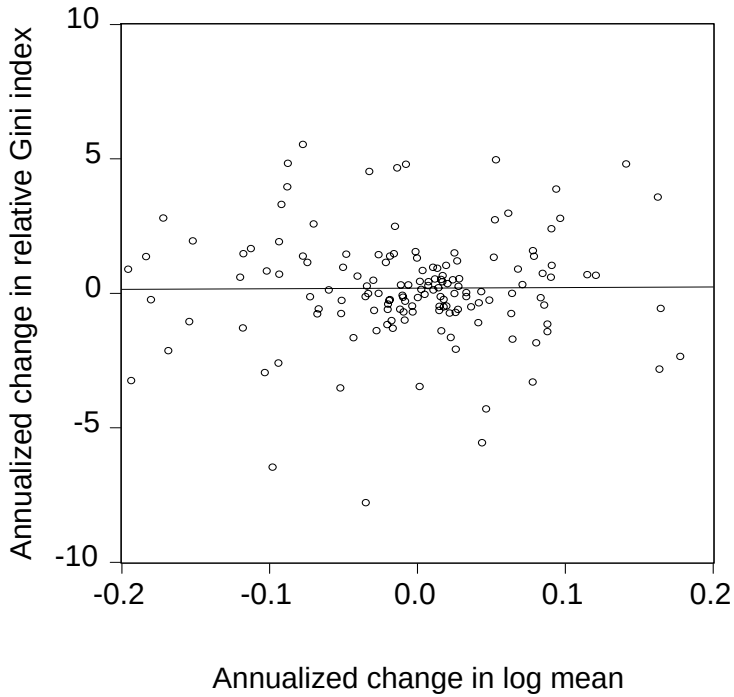
Distribution-neutral growth/contraction: same proportionate change at all levels, leaving relative inequality unchanged

Longest spells between surveys

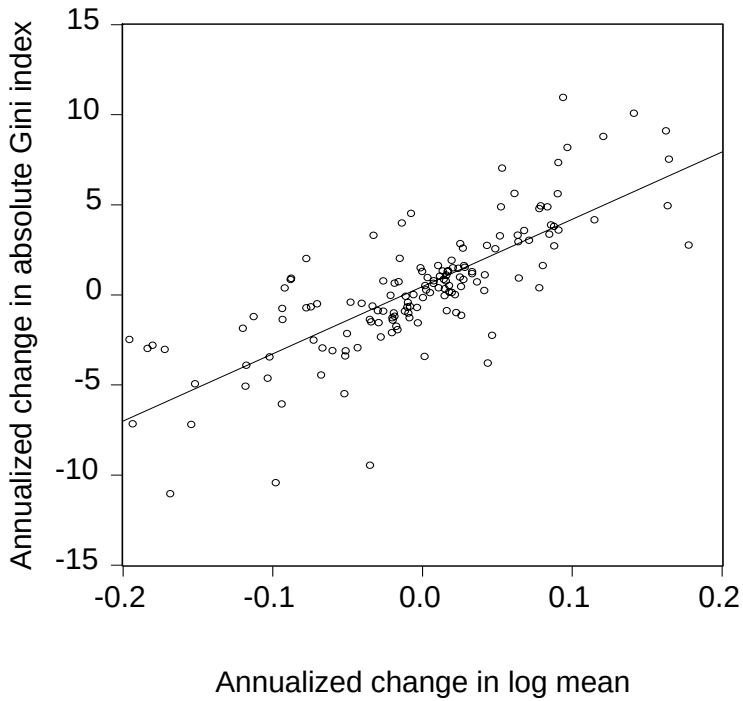


Same data, but very different pictures

Relative Gini



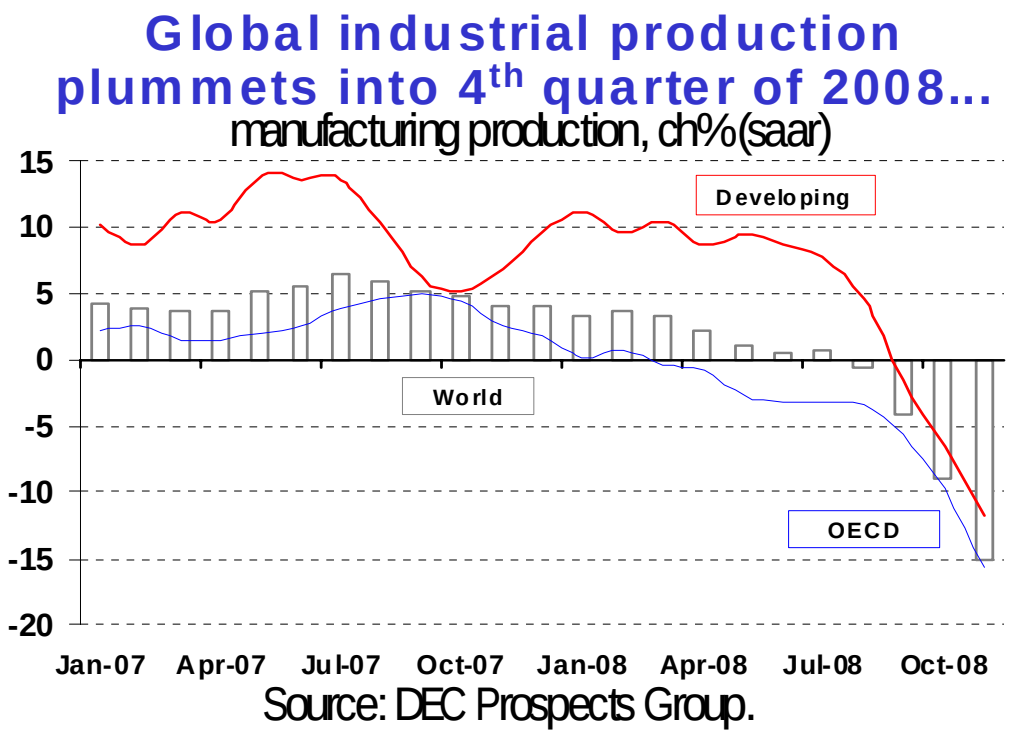
Absolute Gini



- Past aggregate contractions have more often reduced the absolute gaps between “rich” and “poor”.
- But no such pattern for proportionate gaps.

Crisis: How much impact on growth?

- Growth projections for the developing world are being revised downwards as we speak.
- Weak last quarter of 2008



Crisis: How much impact on poverty?

- Applying the current country-specific growth projections to our survey-based data and aggregating, we expect that the crisis will add:
  - 53 million people to the 2009 count of the number of people living below $1.25 a day and
  - 65 million to the count of the number of people living under $2 a day.

- These impact estimates are relative to the pre-crisis trajectories.
  - Given current growth projections, poverty rates are still expected to fall in the developing world as a whole, albeit at a slower pace.
  - The (post-crisis) growth projections imply that the aggregate $1.25 a day poverty rate will fall from 21% (1194 million) in the “pre-crisis” year of 2008 to 18% (1040 million) in 2009.
  - The pre-crisis growth rate for 2009 would have instead brought the poverty rate down to 17% (987 million).

At the cusp of rising poverty?

- Sub-Saharan Africa and South Asia (except India): the growth slowdown essentially eliminates all progress in reducing the number of poor,
  - which remains unchanged between 2008 and 2009 for both the $1.25 and $2.00 lines under the attenuated growth expectations,
  - unlike the pre-crisis expectation that the poverty count would continue to decline in both regions.
- Within these regions, rising poverty counts will be seen in some of the more fragile and low-growth economies.

A small revision downwards to current growth rate expectations for the developing world will see rising aggregate poverty.

Heterogeneous impacts

- Even an economy-wide shock has heterogeneous impacts <u>within</u> any given country, depending on (*inter alia*) household wealth, demographics, education attainments and location.
- Impacts will not necessarily be largest for the poorest.
  - The same things that have created poverty—geographic isolation and poor connectivity with national and global markets—will help protect som of the poorest.
- Initial impacts will tend to be in the <u>urban economy</u>, but will spillover to poorer rural areas, notably though reduced <u>remittances</u> and <u>return migration</u>.
  - It is estimated 10 million or more of the rural-registered workers in urban China have already returned to their home villages, representing about 10% of the estimated number of rural migrants working in urban areas.

What tradeoffs are faced in policy responses?

Three trade offs

- Tradeoffs loom large during a crisis.
- Safety net policies are only one element of the set of policy responses to a crisis.
  - Other policies to restore macroeconomic stability and economic growth, <u>and</u>
  - assure that the financial system is sound, will be crucial.
- Three generic tradeoffs have been prominent in past policy discussions:
  - the equity-efficiency tradeoff,
  - the insurance-efficiency tradeoff and
  - the dynamic (inter-temporal) tradeoff.

Equity-efficiency trade off?

- One view:

  "Safety nets for the poor are economically inefficient and so harmful, or at best neutral, to economic growth, which is the only thing that really matters to sustainably reducing poverty."
- This is unlikely to be right.
  - In the short-run, when a public fiscal stimulus in a crisis is concentrated on the poorest it appears more likely that it will bring a larger short-term gain to aggregate effective demand, and hence output.
  - In the long-term: The idea of an inevitable long-run tradeoff between economic growth and greater equity can also be questioned.
    - Multiple equilibria, poverty traps
    - Credit market failures + diminishing marginal products
    - Political economy

Insurance-efficiency trade off?

- Using public money to help those who took high risks, and lost out, can encourage excessively risky behavior in the future.
- However, it was not the risky behavior of the world's poor that precipitated the crisis.
- Uninsured risk spills over into production and investment decisions of poor people in ways that can severely impede longer-term prospects of escaping poverty.

Lack of insurance for the poor is arguably a more important reason for persistent poverty than too much insurance.

Dynamic trade offs

- Dynamic tradeoffs in most aspects of the policy responses to a crisis: macroeconomic policies, financial sector policies + social protection.
- There is a risk that the political response will come with a neglect of longer-term implications.

The terms of this tradeoff often depend crucially on program design features

By adding conditions on:

- who receives a transfer payment (such as women or men) and
- under what conditions (by adding work requirements or other conditions such as that children remain in school)

one can help reduce the potentially adverse effects of current transfers on future poverty.

What are the objectives for social policy in a crisis?

The special role of the safety net..

…is insurance for those who are relatively uninsured or face high costs of self insurance.

- Even poor people typically find some means of insurance. But that is no excuse for inaction.
  - Covariate economy-wide shock => less scope for co-insurance (relative to idiosyncratic shocks) and mutual insurance arrangements may well break down.
- One view: *"public safety nets should avoid displacing indigenous arrangements for self-insurance and risk-sharing."*
  - However, if the existing arrangements are more costly than a publicly-provided alternative then displacement is a good thing.

The aim of safety net policy is to reduce the costs of insurance: gains to those currently insured + broader coverage.

The need for flexibility

- The safety net must respond flexibly to the needs of the poor, and not rely heavily on administrative discretion.
- When we look at the “safety nets” found in practice, few provide effective insurance since they do not adapt readily to changing circumstances.
  - Relief transfers, workfare and credit are often rationed amongst those in need, and hence provide unreliable insurance.
  - Nor is the rationing necessarily targeted to those in need.

Unless the public safety net is genuinely state-contingent it cannot help much in reducing the costs of insurance facing the poor.

Don’t get obsessed with “targeting”

- The attraction of targeting lies in the fact that the aggregate “poverty gap” is often rather small.
  - The poverty gap for the developing world using the $1.25 a day poverty line is less than 1% of the GDP of the developing world.
- However, it is far from clear what is so “perfect” about “perfect targeting.”
  - Adverse incentives (100% marginal tax rate)
  - Information problems
  - Political economy

Assessing targeting performance

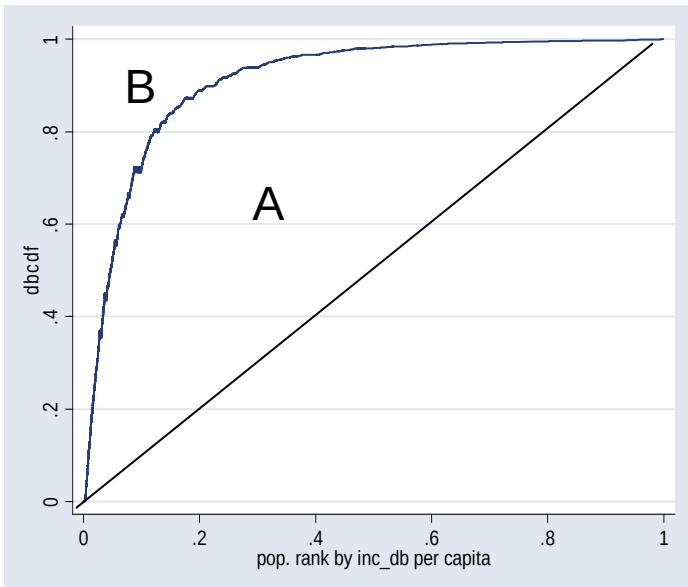
Measures how well benefits are directed at the poor.

Weights **errors of targeting**:

- <u>undercoverage</u>: incorrectly classifying a person as not poor
- <u>leakage</u>: incorrectly classifying a person as poor

Measures of targeting:

- Share = $C(H)$; H=headcount index
- $C(p)$ = share of benefits going to the poorest p% of the population.
- CI = area A/(A+B)
- Normalized share = $C(H)/H$



Problems with focusing on targeting performance alone

Targeting has costs:
- administrative
- behavioral responses/incentive effects
- political economy

Once all the costs are considered, the most targeted policy may not be the one with the most impact on poverty.

Indeed, targeting performance says nothing about impacts on poverty.

Further reading: van de Walle, Dominique, 1998. “Targeting Revisited”, *World Bank Research Observer*, 13(2): 231-48.

Example: China's Di Bao Program

Aims to bring everyone up to the Di Bao poverty line

Leakage and coverage in *Di Bao* program

	Eligible $y - db < z_{db}$	Ineligible	Total
Receiving DB	2.22	1.69	3.91
Not receiving DB	5.48	90.60	96.09
Total	7.71	92.29	100.00

Note: *y*=actual ("gross") income; *db*=income from DB; *y*-*db*=net income; z_{db} = DB line.

Leakage:
Errors of inclusion

Incomplete coverage:
Errors of exclusion

Further reading: Martin Ravallion, 2009. "How Relevant is Targeting to the Success of the Antipoverty Program?" *World Bank Research Observer*, forthcoming.

How well targeted is Di bao ?

- Targeting performance is excellent by conventional measures: $C(H)$ = 64%; CI = 0.78; $C(H)/H$ = 8.3

- For example, it is better than Argentina's *Trabajar* Program, which had the best targeting performance of any social safety net program for which we have data.

- Coverage is the problem for Di Bao, not targeting. The program is not reaching about two-thirds of the eligible households.

How much impact on poverty? Amongst participants? In population?

Impacts on aggregate poverty in urban China

	Dibao poverty rate (%)	
	Before *Dibao*	After *Dibao*
Population		
H (%)	7.71	7.26
Gap (%)	2.28	2.06
SPG (x100)	1.02	0.88
Participants		
H (%)	56.85	45.49
Gap (%)	19.92	14.23
SPG (x100)	10.21	6.44
	calculated by subtracting DB transfers	**observed in data**

What are the options for social policy responses?

Unfortunately, the problem is a lot harder than simply filling all those “poverty gaps” to bring everyone up to the poverty line

To help protect the poorest start by doing less damage during the crisis

- Fiscal (and monetary) policies in developing countries tend to be procyclical.
  - Timing is a common problem; help comes too late.
- Composition of spending should change to favor the poor
  - Macroeconomic + ethical case
  - Macro case: short-term impact of the stimulus on aggregate demand will be greater given that the poor tend to be more credit constrained.
- However, evidence that pro-poor spending is also procyclical.

  Spending on the nonpoor gets protected or boosted.

Information constraints

- Crisis preparedness requires investments in better data on which programs matter most to the poor.
- Incidence can be difficult to assess rigorously.
- Although priors “on the ground” can contain useful clues.
- Harder for economy-wide programs than assigned programs.
- Huge improvement in survey data design and availability, though continuing concerns about data quality.

Crises have led to some of the worst "social protection" and some of the best

- Governments drawn into generalized food and fuel subsidies
  - huge cost,
  - not easily reversed,
  - modest impact on poverty.
- Yet some governments have been able to turn a crisis into an opportunity for dismantling inefficient subsidies in favor of more effective programs.
  - Tequila financial crisis of 1994: Mexico's *PROGRESA* program.

“Conditional Cash Transfers”

- CCT requires the children of the recipient family to demonstrate adequate school attendance (and health care in some versions).
  - Early influential examples were the *Food-for-Education Program* in Bangladesh, Mexico’s *PROGRESA* (*Oportunidades*) and *Bolsa Escola* in Brazil.
- Aiming to strike a balance between reducing current poverty and reducing future poverty.
  - Distribution within households: the program’s conditions entail that relatively more of the gains accrue to children.
  - Transfers to women improve the dynamic trade off in a crisis.
  - Political economy: taxpayers and donors are more supportive when they know that recipients are compelled to do something to help themselves escape poverty in the future.

Further reading: Ariel Fiszbein and Norbert Schady et al., *Conditional Cash Transfers for Attacking Present and Future Poverty,* World Bank Policy Research Report, 2009.

Evidence that CCTs work

- Benefits to poor households
  - both current incomes and future incomes, through higher investments in child schooling and health case.
- Expanding the coverage and increasing the benefits has been one response to crises, particularly in Latin America.
  - For example, Mexico was able to help redress the adverse welfare impacts of the recent rise in food prices by implementing a one-time top up payment to *Oportunidades* participants.
- *Jaring Pengamanan Sosial* in Indonesia: reduced school drop out rates amongst beneficiaries during the 1998 crisis
  - the program had greatest impact at the lower secondary school level where children are most susceptible to dropping out.
- However, concerns about how responsive these programs are to changes in need.
  - A previously ineligible household hit by (say) unemployment of the main breadwinner may not find it easy to get help from such schemes.
  - Efforts should be made to re-assess eligibility in the wake of a crisis.

Self-targeted programs

- One way to provide effective insurance—a genuine "safety net"—is to build in design features that:
  - only encourage those in need of help to seek out the program and
  - encourage them to drop out of it when help is no longer needed given better options in the rest of the economy.

- Subsidies on the consumption of inferior goods (for which demand falls as incomes rise) are self-targeted to the poor.
  - The problem is that not many goods are inferior, although there have been cases in which this was feasible.
  - Tunisia was able to make its food subsidies more cost-effective in reducing poverty by switching to inferior food items, combined with quality differentiation through packaging.

Workfare programs

- Widely used in crises and by countries at all stages of development.
  - Famously, workfare programs were a key element of the New Deal introduced by US President Franklin D. Roosevelt in 1933 in response to the Great Depression.
  - They were also a key element of the Famine Codes introduced in British India around 1880 and have continued to play an important role to this day in the sub-continent.
  - Relief work programs have helped in responding to, and preventing, famines in Sub-Saharan Africa.
  - During the East Asian financial crisis of the late 1990s, both Indonesia and Korea introduced large workfare programs,
  - as did Mexico in the 1995 “Peso crisis,” Peru during its recession of 1998-2001 and Argentina in the 2002 financial crisis.

Employment Guarantee Schemes

- *Employment Guarantee Scheme* (EGS) in Maharashtra, India, which started in the early 1970s.
  - Aims to assure income support in rural areas by providing unskilled manual labor at low wages to anyone who wants it.
  - Financed domestically, largely from taxes on the relatively well-off segments of Maharashtra's urban populations.
- Employment guarantee helps support the insurance function, and also helps empower poor people.
- India has introduced an ambitious national version of this scheme under the *National Rural Employment Guarantee Act* (NREGA).
  - This promises up to 100 days of unskilled manual labor per family per year, at the statutory minimum wage rate for agricultural labor, to anyone who wants it in rural India.

Evidence on workfare programs

- Sizeable income gains to participants, net of foregone incomes from any work they give up to join the program.
  - Maharashtra's EGS: foregone income = 25% of the wage rate; by re-allocating work within the household, poor rural families were able to come close to maximizing the net income gain.
  - Argentina's *Trabajar* program: Foregone income= 50% of earnings.
  - Another study: income losses to those who left the program = 75% of gross wage within first six months, falling to 50% over 12 months.

- *Plan Jefes y Jefas:* Argentina's main social policy response to the severe economic crisis facing the country in 2002-3.
  - Aimed to provide direct income support, with work requirements, for families with dependents + head unemployed due to the crisis.
  - Reduced aggregate unemployment, though attracted as many people into the workforce from inactivity as it did unemployed.
  - Substantial leakage to formally ineligible families, and incomplete coverage of those eligible
  - But the program did partially compensate many losers from the crisis and reduced extreme poverty.

The dynamic tradeoff in workfare

- Less evidence on the benefits to the poor from the assets created,
  - and this matters to whether workfare dominates cash transfer schemes in terms of their impact on poverty for given budget.
  - *Ex ante* assessment of India's NREGA: unless the assets created are of sufficient value to the poor the scheme would not dominate even a poll transfer in terms of its poverty impact.
- Dynamic tradeoff between the twin goals of achieving short-term flexibility in response to current needs versus longer-term goals in the fight against poverty.
  - Absorbing large amounts of labor in relief work may mean that the technologies use too little capital to create durable assets.
  - It is very likely that the optimal labor intensity of relief work will be higher than normal during a crisis.

Some of the schemes found in practice have given too little weight to asset creation.

The ideal workfare program…

…guarantees low wage work on community-initiated projects.

- Low wage rate assures that the scheme is <u>self-targeted</u> in that the non-poor will rarely want to participate.
- Stylized scheme:
  - Government announces that it is willing to finance up to (say) 15 days a month of work on community projects for any adult at a wage rate no higher than the market wage rate for unskilled manual labor in a normal year.
  - The work is available to any adult at any time, crisis or not.
  - Relaxes the eligibility restrictions often found on relief work.
  - Relies little on administrative discretion in access to program.
  - As long as the guarantee is credible it will also help reduce the longer-term costs of risk facing the poor.

Thus it can help in fighting chronic poverty as well as transient poverty in a crisis + empowerment benefits

The ideal workfare program…

- …should only be on technically feasible projects proposed by bona fide community groups in poor areas.
  - The local community group would propose specific projects, documenting what exactly would be done, at what cost, and how many workers will be employed under each project.
  - The workers need not come from the same community (to allow flexibility, and help respond to idiosyncratic risk).
  - The proposals should be assessed if they qualify with public disclosure.
  - Can include training in literacy and numeracy for adults, together with appropriate specialized knowledge, such as drought-avoidance lessons for farmers.
  - The wage rate for training should be set somewhat lower than other work.
- Financing: Center should only contribute to the non-wage costs in poor areas; non-poor areas finance own non-wage costs.

A permanent automatic safety net

- The budgetary cost of a permanent safety net need not be very high and it could well bring longer-term efficiency gains to the economy.
- The budgetary outlay could well be highly variable over time in risk-prone settings, entailing some fiscal stress.
- There will no doubt be relatively low frequency events, such as the current global financial crisis, for which extra external aid will be needed, and certainly justified on moral grounds when it was the rich countries of the world that were largely responsible for the crisis.
- However, the domestic resources should be sufficient to cover a normal sequence of shocks as well as modest demand in normal years.

Conclusion 1

- It may not be feasible to fill all the poverty gaps exactly, but it is possible to protect a share of the poor in a crisis, without damaging longer-term prospects of escaping poverty.

- This will probably require a combination of relief work + transfers (in cash or food) targeted to specific groups who either:
  - cannot work (due to physical incapacity, including poor nutritional status) or
  - should not be taken out of other activities (notably school).

Conclusion 2

What would it cost to nullify the expected impact of the crisis on poverty in 2009?

Illustrative calculation:

- Assume that a CCT program modeled on PROGRESA could be scaled up to all developing countries with the same design parameters.
- The cost of eliminating the expected impact of the crisis on the $2 a day poverty rate would be $25 billion, representing 0.2% of the GDP of the developing world.