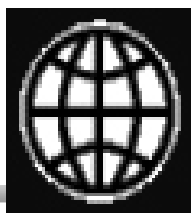


# The Growth-Inequality-Poverty Triangle: Implications for the Development Strategy in Developing Countries

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Egyptian Center for Economic Studies  
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## Outline of this Presentation

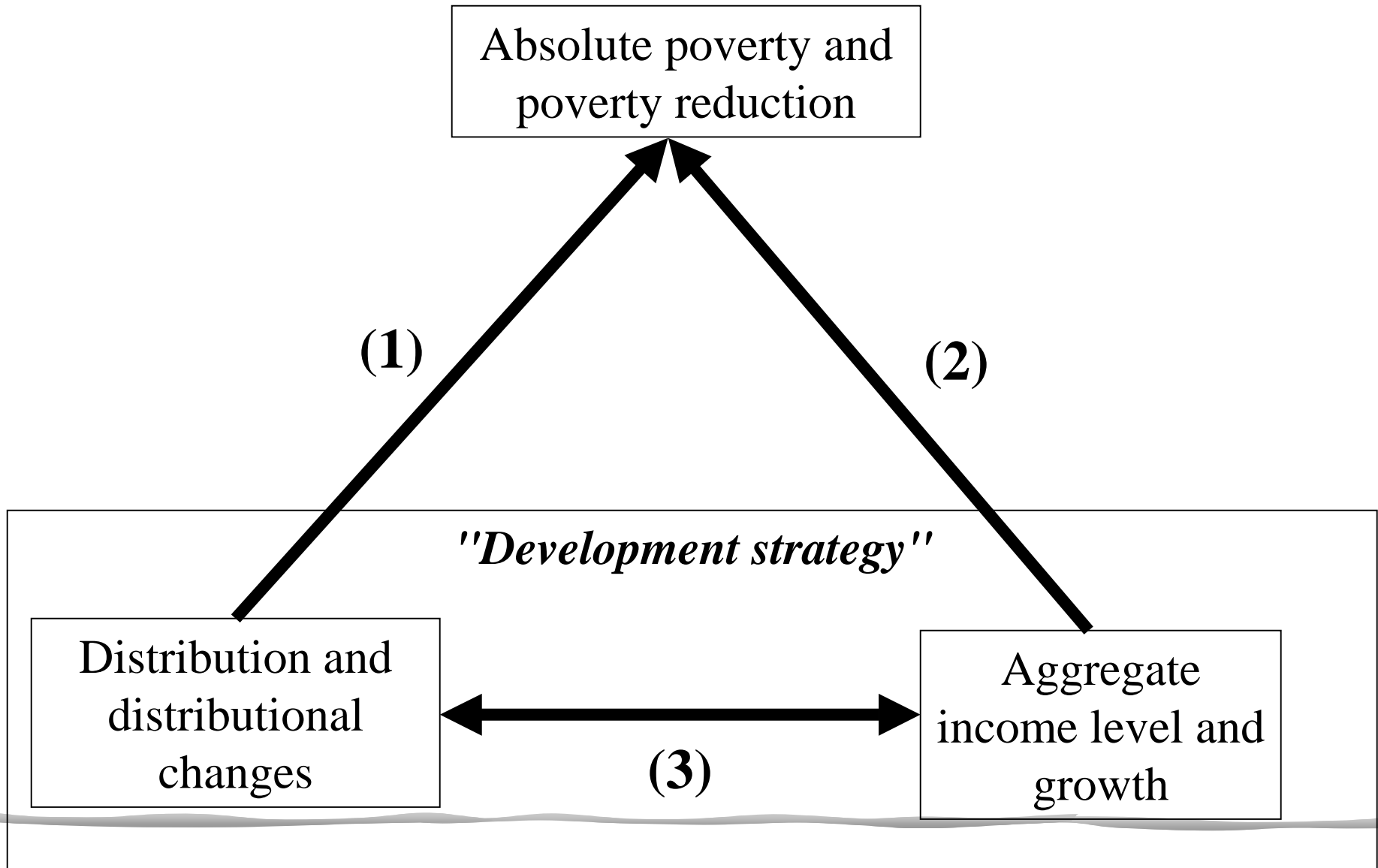
- ❖ Strategies for development and poverty reduction
- ❖ The simple arithmetics of poverty, inequality and growth.
- ❖ The lessons from economic theory and empirical analysis about the interactions between growth and equity.
- ❖ Scope and role of social and redistribution policies.
- ❖ Illustrations and implications in the case of Egypt.

# Strategies for Development and Poverty Reduction

## Three aspects of poverty reduction strategy

- ❖ Poverty reduction results from the combination of strong economic growth and a non-worsening distribution of income.
- ❖ This raises the question of the bi-directional relationship between economic growth and the distribution of productive endowments in the population.
- ❖ Role of redistribution. How much possibly distorting redistribution of income and how much possibly growth-enhancing redistribution of assets?

# The Poverty-Growth-Inequality Triangle



# Simple Arithmetics of Poverty, Inequality and Growth

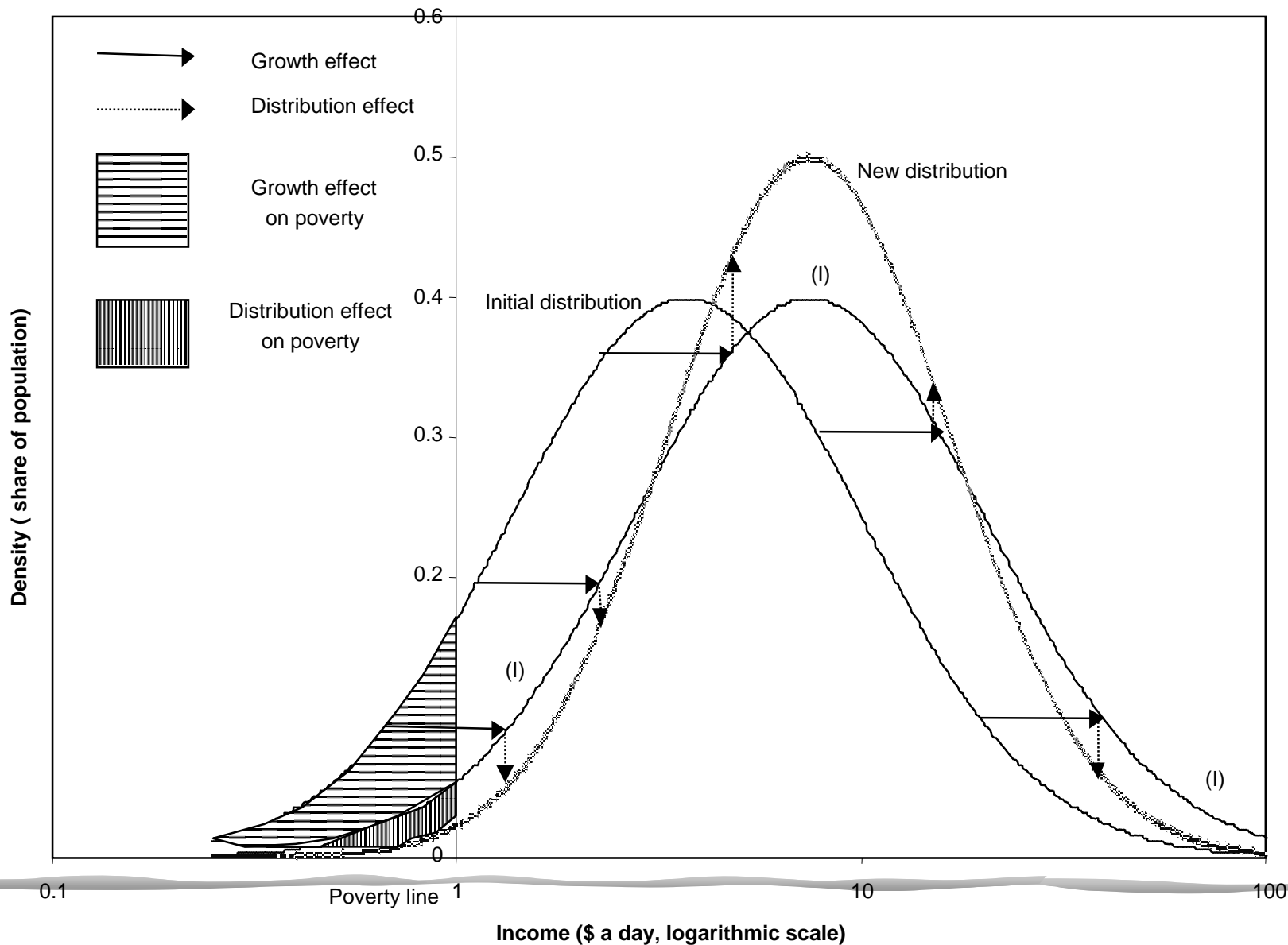
(1) + (2)

**Change in Poverty**

**=**

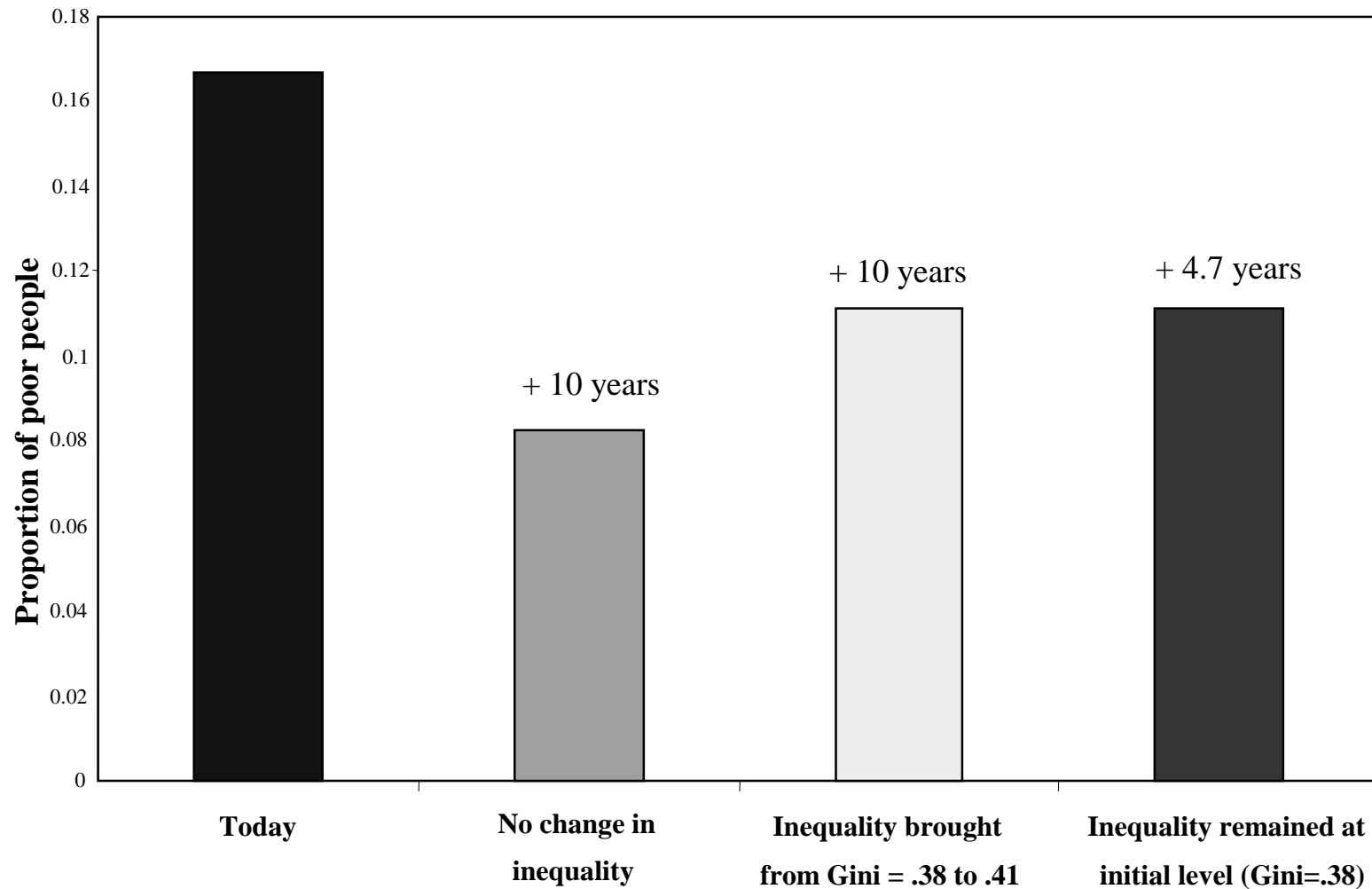
**F ( average income, distribution, growth,  
change in distribution)**

# Decomposition of Change in Distribution and Poverty into Growth and Distributional Effects



# “Absolute” Poverty in a Middle-Income Country with Middle Inequality and 3% Growth in Real Expenditure per Capita

Prospective Absolute Poverty Reduction in Egypt with 3% Annual Growth in Real Expenditure per Capita



# Growth, Distribution and Changing Poverty Levels

	Positive Income Growth	Negative Income Growth	Total
Increasing Gini	+13 - 21	+18 - 1	+31 - 22
Decreasing Gini	+2 - 31	+18 - 10	+20 - 41
Total	+15 - 52	+36 - 11	+51 - 63

« + » indicates increase in poverty; « - » indicates decline.

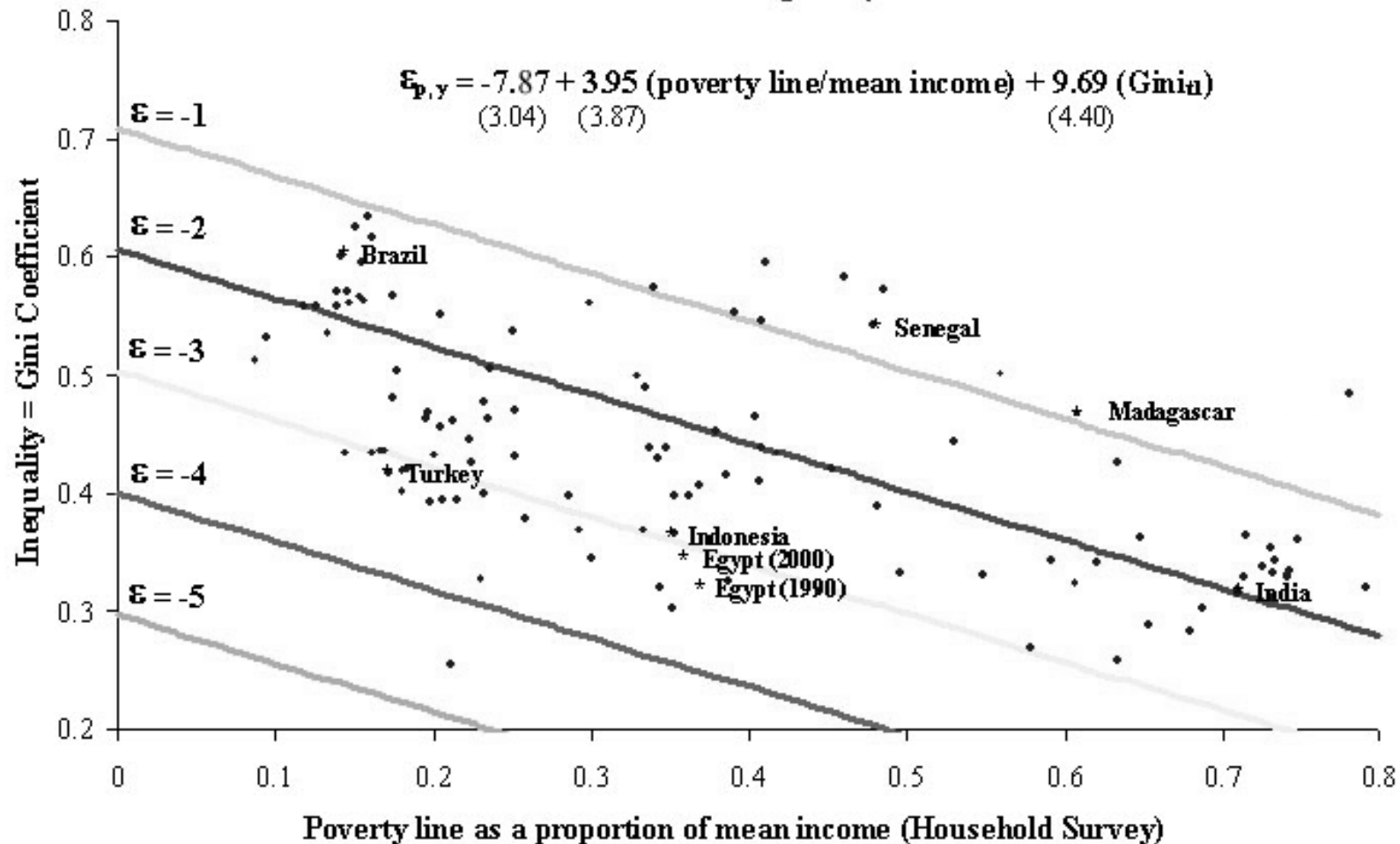
Numbers indicate the count of growth spells in each cell.

Cells shaded in « blue » indicate declining poverty.



# Growth Elasticity of Poverty

Poverty headcount/growth elasticity as a function of mean income and income inequality

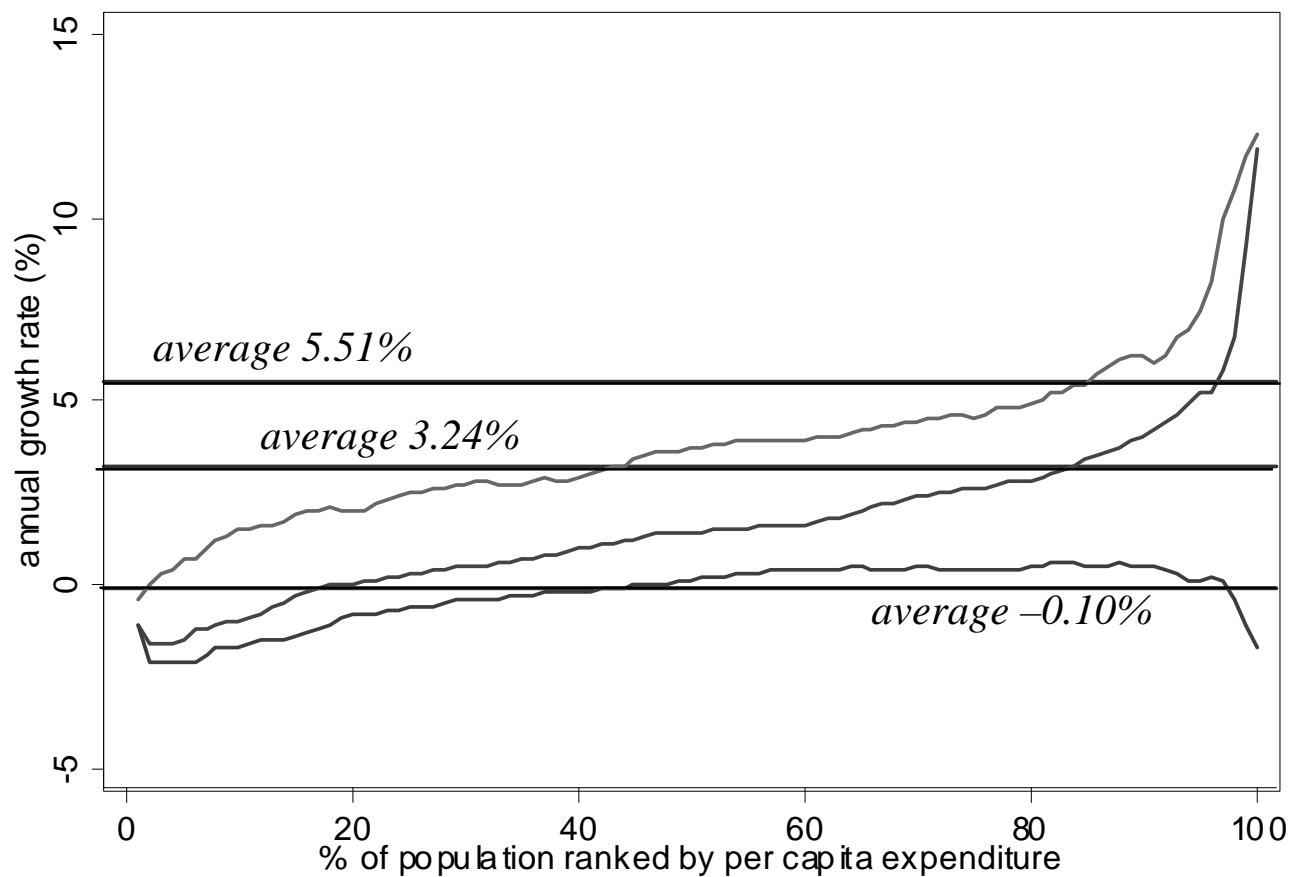


Note: See Bourguignon (2004).  $\epsilon$  = the elasticity of poverty with respect to income. T-statistics are included in parentheses in the regression equation.

## Growth is rarely distribution neutral

- ❖ The process of economic growth modifies income distribution depending on the forces behind growth.
- ❖ But these effects may be attenuated or compounded by growth and distribution policies.
- ❖ Because of this, it would be illusory to rely on preceding poverty-growth elasticities.

# Case of Egypt: Growth Incidence (1995/96-1999/2000)

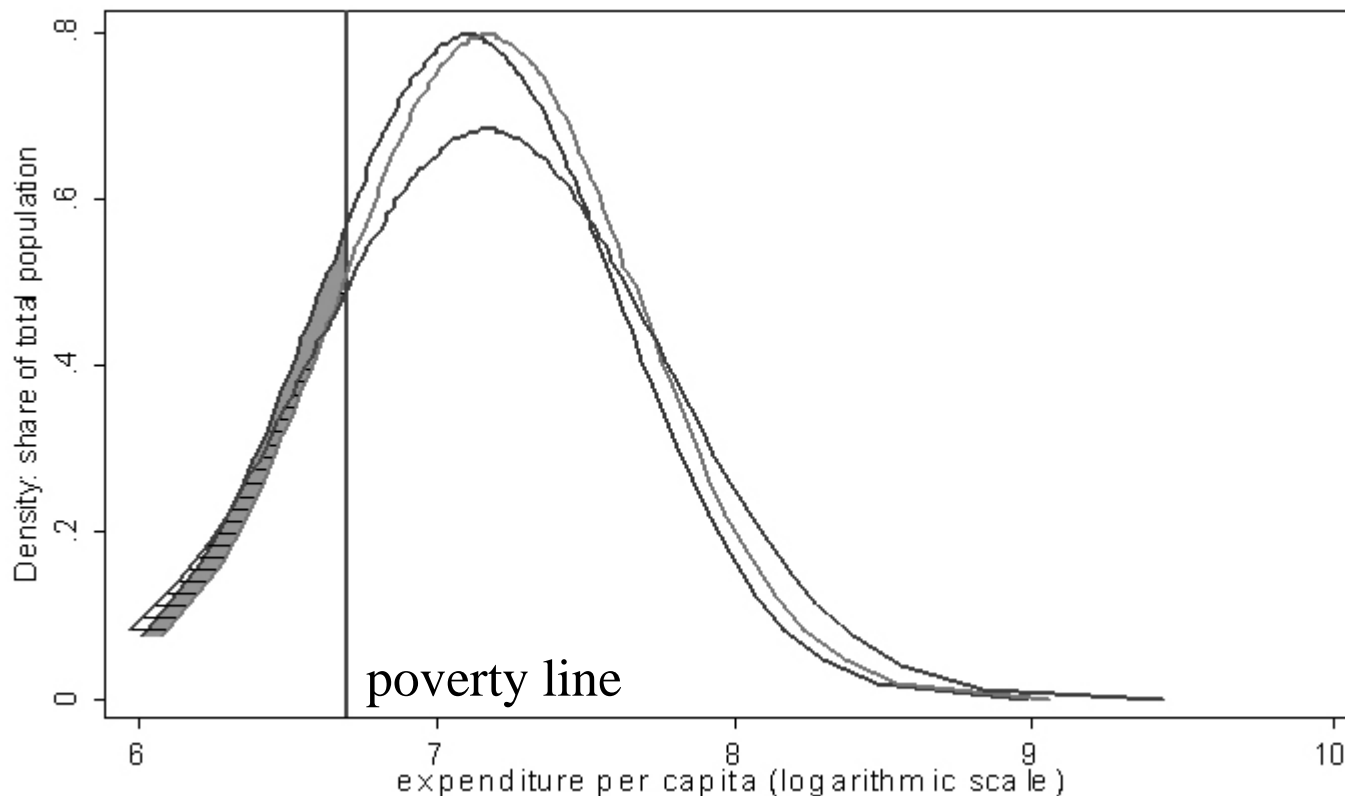


— total Egypt    — urban Egypt    — rural Egypt

Source: HIECS 1995/96, 1999/2000

# Case of Egypt: Growth and Distributional Effects Decomposition

## Distribution of expenditure per capita in total Egypt (lognormal assumption)

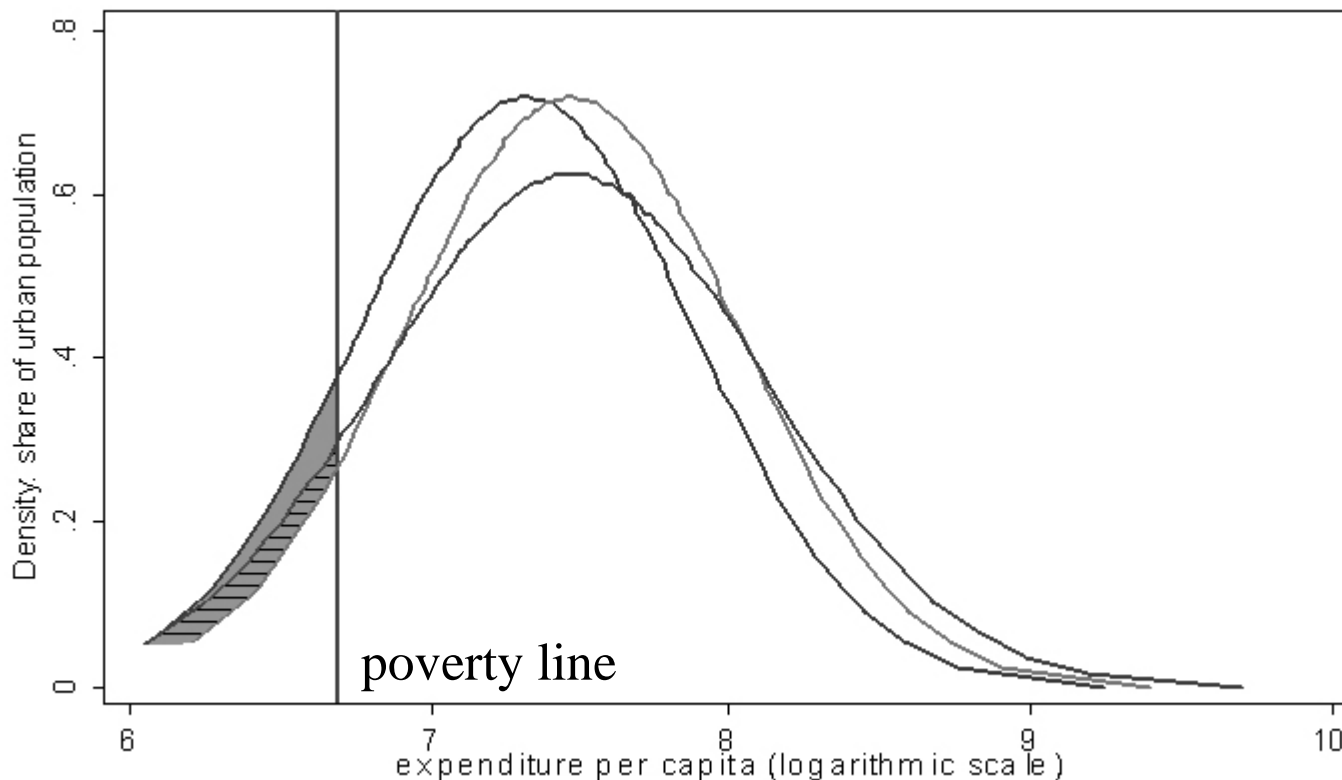


- Initial distribution
- New distribution
- - - Horizontal translation of the initial density curve

Source: HIECS 1995/96, 1999/2000

# Case of Egypt: Growth and Distributional Effects Decomposition

## Distribution of expenditure per capita in urban Egypt (lognormal assumption)

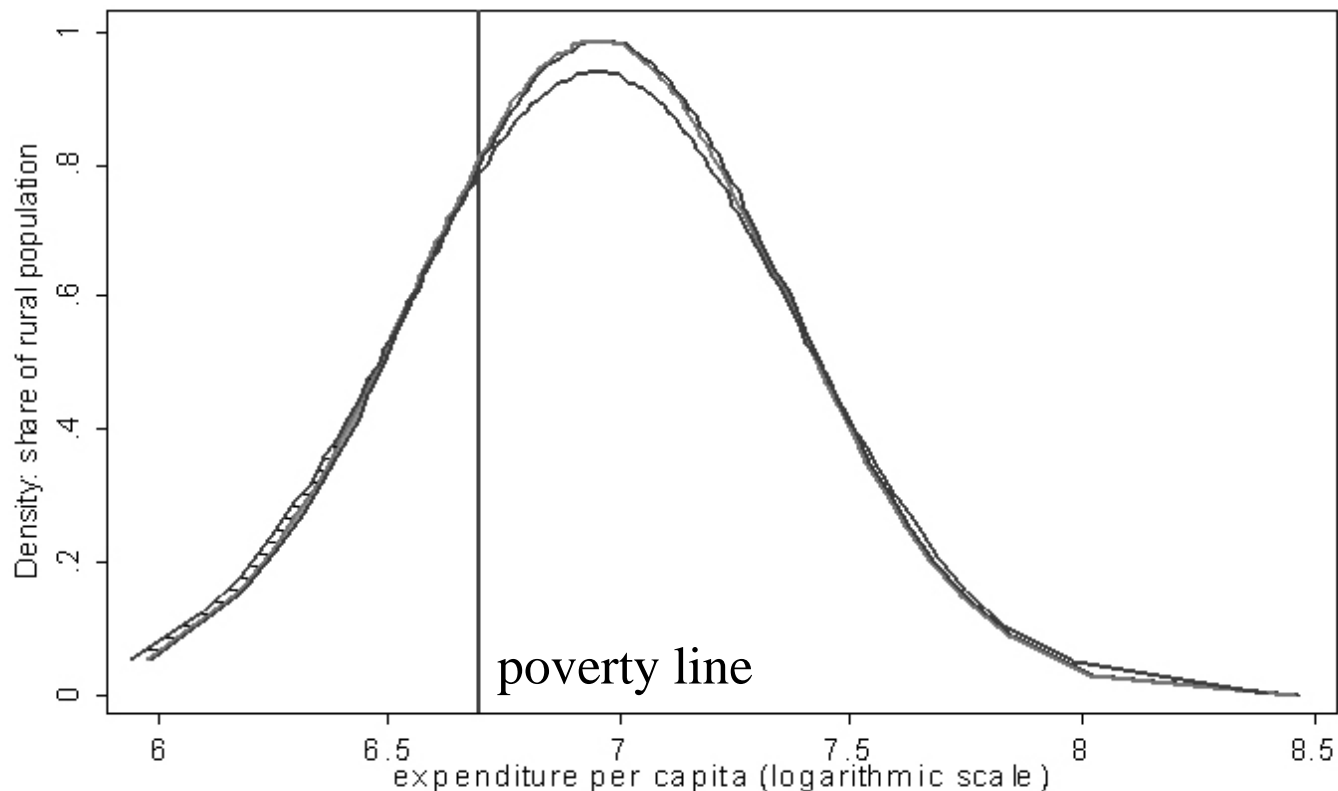


- Initial distribution
- New distribution
- Horizontal translation of the initial density curve

Source: HIECS 1995/96, 1999/2000

# Case of Egypt: Growth and Distributional Effects Decomposition

## Distribution of expenditure per capita in rural Egypt (lognormal assumption)



—— Initial distribution

—— New distribution

—— Horizontal translation of the initial density curve

Source: HIECS 1995/96, 1999/2000

# Growth, Inequality Change and Poverty Reduction

## Regional Comparison (1995/96-1999/2000)

	Gini change	Annual per capita expenditure growth rate	Change in poverty incidence
Metropolitan	0.022	7.96	-8.04
Lower Egypt Urban	-0.028	1.04	-2.17
Lower Egypt Rural	-0.032	2.87	-9.7
Upper Egypt Urban	0.023	-1.32	8.45
Upper Egypt Rural	0.005	-0.33	4.83
Border Urban	0.054	9.73	-1.93
Border Rural	-0.082	-4.09	4.48
All Egypt	0.033	3.24	-2.68

*Poverty reduction mainly occurs in the regions where there is positive economic growth; in general, the effect of growth on poverty reduction is greater when the region has a pro-poor distribution change.*

Negative Gini change = reduction in inequality; negative change in poverty incidence = reduction in poverty.

Source: El-Laithy, Lokshin and Banerji (2003), "Poverty and Economic Growth in Egypt, 1995-2000", Policy Research

# Mechanisms linking growth and distribution (I)

## Growth $\Rightarrow$ Distribution

- ❖ Growth is not necessarily distribution neutral. Several arguments about endogenous development mechanisms support the Kuznets curve hypothesis ... but other arguments contradict it.
- ❖ Fully general model suggests many exogenous factors may simultaneously affect growth and distribution : technology, international prices, trade protection, ...
- ❖ Endogeneity of redistribution policies and social institutions determining them – e.g. democracy.
- ❖ Conclusion : no ‘law’ and therefore room for policy



## Mechanisms linking growth and distribution (II)

### **Distribution $\Rightarrow$ Growth**

Several arguments suggest that a progressive redistribution of wealth may be efficiency- and growth-enhancing.

- ❖ Credit market imperfection (exploits the fact that return on assets larger among credit-constrained small asset holders)
- ❖ Political economy argument (too much asset inequality leads to more redistribution, politically or possibly through violent means)
- ❖ Economies of scale (too much inequality and imperfect foreign markets prevent producing at the efficient scale); ...

*But other reasons suggest the opposite relationship ... (Kaldor's saving propensity argument)*

# Empirical evidence (I)

## Growth $\Rightarrow$ Distribution

- ❖ Empirical literature dominated by cross-country studies :
  - Growth as a function of initial income inequality in the growth regression literature of the 90's
  - Income inequality as a function of development level : Kuznets curve in the 1970's, «Growth is good for the poor» (Dollar-Kraay) in the 00's
  - Both streams of literature equally inconclusive - not unsurprisingly so.
- ❖ Case studies on the distributional effects of growth ('pro-poor growth') showing very much country specificity
- ❖ Micro-economic evidence

## Empirical evidence (II)

### Distribution $\Rightarrow$ Growth

- ❖ Empirical verification through 'growth regressions' with distribution variables on the RHS yields ambiguous (or even contradictory) results.
- ❖ This is not unexpected: (a) theory suggests some *redistribution of assets* may generate more efficiency and growth; (b) Did such a redistribution ever occur exogenously?
- ❖ Hypothesis testing is better approached through microeconomic evidence. Best empirical verification is to check whether micro-economic mechanisms behind preceding hypotheses are verified or not, and then proceed with 'calibrating' the likely effect of various types of redistribution.

# Role of (and Scope for) Redistribution in Development

- ❖ Redistribution as **Compensation** : redistribution of income may be necessary to compensate for the regressive distributional effect of growth.
- ❖ Redistribution to **Accumulate Assets in the Hands of the Poor** : redistribution of assets may be beneficial to growth directly and indirectly .
- ❖ **But paradox**: (non-lump-sum) redistribution of current income may be harmful to growth (through disincentives to accumulate) → redistribution *aimed at accumulating assets among the poor* relies on taxation of current income → There is an optimal scale of “income for asset” redistribution (strong argument in favor of '*smart transfers*' conditional on asset buildup)

# An Illustration: Case of Egypt

## Experience of Egypt

- ❖ Robust growth in late 1990s – averaging over 5% per annum over 1995-1999 – poverty rate dropped from 19.4% to 16.7%. However, between 1999 and 2004, the growth rate slowed down to around 3.5%.
- ❖ Measured unemployment remained high (at 9.9% on average in 2003/04 and very likely higher among the poor)
- ❖ Inequality level comparable to other middle-income countries but Gini rose from 34.5 to 37.8 over 1995-1999.
- ❖ Considerable progress in asset accumulation among the poor but still considerable scope for further progress.

# An Illustration: Case of Egypt

## Challenges of Egypt

- ❖ Growth supported through domestic fiscal and monetary expansion policies (plus positive external shocks) – sustainable?
- ❖ Inequality increased at national level; regional disparities moved beyond the traditional rural-urban divide.
- ❖ Growing unemployment pressure (particularly among the youths).
  - *Limited ability to provide jobs*
  - *Rapid labor force growth. Inequalizing role of unemployment due to difficult integration of young people in the labor market.*

# An Illustration: Case of Egypt

## Three sets of factors critical for the poor\*:

### ❖ **Income earning-opportunities**

*Increasing current earnings through growth and employments*

### ❖ **Education**

*The strongest correlate to poverty in Egypt*

*Increasing future earnings through education*

### ❖ **Social safety-nets**

*Protecting the vulnerable through social assistance*

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\*Source: The World Bank (2004), Arab Republic of Egypt, A Poverty Reduction Strategy for Egypt.

# An Illustration: Case of Egypt

## Key Pillars for a Poverty Reduction Strategy (I)

### Increasing current earnings through growth & employment

- ❖ Conduct macroeconomic and structural policies so as to increase private sector investment.
- ❖ Raise poverty-oriented investments for Upper Egypt.
- ❖ Ensure availability of critical inputs for micro and small business.
- ❖ Reduce regulatory obstacles to starting, operating and dissolving small businesses.
- ❖ Support agricultural development.



# An Illustration: Case of Egypt

## Key Pillars for a Poverty Reduction Strategy (II)

### *Increasing future earnings through education*

- ❖ Combat adult illiteracy by using civil society groups more actively and adding a parental education focus to literacy programs.
- ❖ Enhance access and reduce costs of education for the poor by offering conditional stipends for attendance, etc.
- ❖ Improve quality of basic and secondary education for the poor, through improving teacher skills, instituting evaluation processes and improving technical skills of both teachers and students.

# An Illustration: Case of Egypt

## Key Pillars for a Poverty Reduction Strategy (III)

### *Protecting the vulnerable through social assistance*

- ❖ Improve geographical coverage to align safety net resource allocation with poverty status of districts and governorates.
- ❖ Increase budget outlays for cash transfer programs and improve poverty targeting.
- ❖ Improve poverty-orientation of the Social Fund for Development so as to better harness the considerable resources and outreach of this agency for the purposes of poverty reduction.

# An Illustration: Case of Egypt

## Key Pillars for a Poverty Reduction Strategy (IV)

### Poverty monitoring and program evaluation

- ❖ Improve data quality and frequency in a cost effective manner.
- ❖ Make data easily available to facilitate robust analysis.
- ❖ Institutionalize program evaluation systems so as to allow for better comparison of alternative uses of public funds.