

*The legacy of Martin Ravallion*

Reflections on some his key contributions  
to the economics of poverty

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# A giant

- A major figure of development economics over the last 30 years
- All the more remarkable a career that:
  - More than any other in academia, it systematically combined research endeavor and excellence with pragmatic and policy concerns, and with a true entrepreneurial talent
- A formidable contribution to economic development as well as development economics
- But only some of the major aspects of it to be brought up here

# Outline

1. The One-Dollar-A-Day Saga
2. Inequality is bad for the poor
3. Pro-poor growth and the Growth Incidence Curve
4. Other Contributions
5. Conclusion

## A few basic and /or extensively cited papers

- Martin Ravallion, Gaurav Datt, Dominique van de Walle (1991), **Quantifying absolute poverty in the developing world**, Review of Income and Wealth
- Martin Ravallion and Shaohua Chen (2011) **Weakly Relative Poverty**, The Review of Economics and Statistics
- Martin Ravallion (2001) “**Growth, Inequality and Poverty: Looking Beyond Averages.**” World Development
- Martin Ravallion and Shaohua Chen (2003), **Measuring pro-poor growth**, Economics Letters
- Martin Ravallion (2004), **Propoor Growth: a Primer**, World Bank Policy Research Working Paper N°3242

# 1) The One-Dollar-A-Day... and saga

- Recently arrived in the World Bank, MR is hired as a team member of the 1990 World Bank Report on Poverty (headed by Lyn Squire) .
- One of the challenges of the report is to define and measure global poverty, and thus national poverty in a way that is comparable across countries and over time.
- With Gaurav Datt and Dominique van de Walle, they had a simple idea which influenced poverty measurement, and therefore the debate on the definition of poverty and policy until today, and most certainly many years from now.
- With this basic idea, MR was then able, almost singlehandedly initially, to put together a formidable machine for the global and national monitoring of poverty (and inequality): the POVCALNET database and algorithm, which has today morphed into the Poverty and Inequality Platform (PIP).

# The one-dollar-a-day poverty line

- Plotting National Official Poverty Lines (at 1985 PPP) against Mean Consumption for a sample of developing countries
- *Consistent absolute global poverty line = mean official poverty line of poorest countries*

31\$/mn or 1\$/day

Countries around the red line:  
Indonesia, Bangladesh, Nepal, Kenya,  
Tanzania, Morocco, Philippines,  
Pakistan, ..

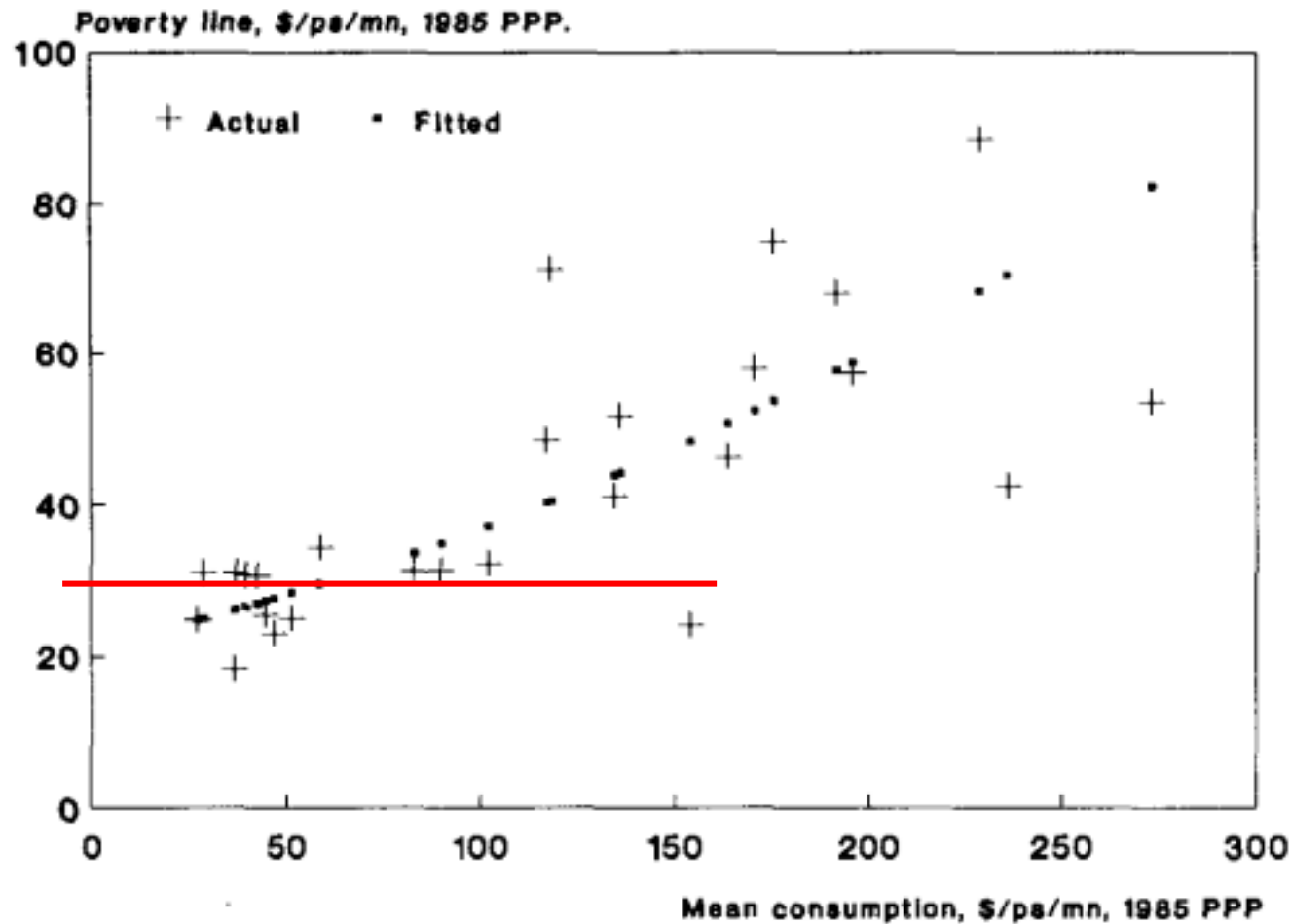


Figure 2

# The one-dollar-a-day poverty line

- First set of estimates of absolute poverty around the world

TABLE 2  
ESTIMATES OF POVERTY MEASURES FOR THE DEVELOPING COUNTRIES, 1985

Region	Poverty Line (\$/ps/mn)	Headcount Index		Poverty Gap Index	
		Point estimate	95% confidence interval*	Point estimate	95% confidence interval*
Aggregate estimates	31	33.0	(27.9, 39.2)	10.2	(8.4, 14.3)
	23	18.8	(14.9, 25.5)	5.1	(4.0, 8.9)
By region:					
South Asia	31	50.9	(49.8, 52.6)	15.9	(15.5, 16.9)
	23	29.4	(28.7, 31.1)	7.2	(7.0, 8.1)
of which India:	31	55.0		17.6	
	23	32.7		8.2	
East Asia	31	21.2	(21.1, 21.5)	6.0	(5.9, 6.0)
	23	9.7	(9.6, 9.9)	2.8	(2.8, 2.9)
of which China:	31	21.1		5.9	
	23	9.2		2.9	
Sub-Saharan Africa	31	46.9	(18.6, 75.7)	15.0	(5.4, 36.5)
	23	30.5	(8.9, 65.0)	7.7	(2.1, 27.5)
Middle-East and North Africa	31	31.0	(13.3, 50.9)	9.6	(3.3, 24.0)
	23	20.6	(6.4, 42.4)	5.5	(1.5, 19.3)
Eastern Europe	31	7.8	(7.3, 9.7)	2.6	(2.4, 3.3)
	23	4.3	(4.0, 5.7)	1.4	(1.3, 2.0)
Latin America	31	19.1	(14.0, 28.9)	6.9	(5.2, 11.5)
	23	12.5	(9.0, 21.0)	5.1	(4.0, 9.6)

\* Allowing solely for imprecision due to the need to predict the poverty measures for those countries for which suitable distributional data are unavailable; see text.

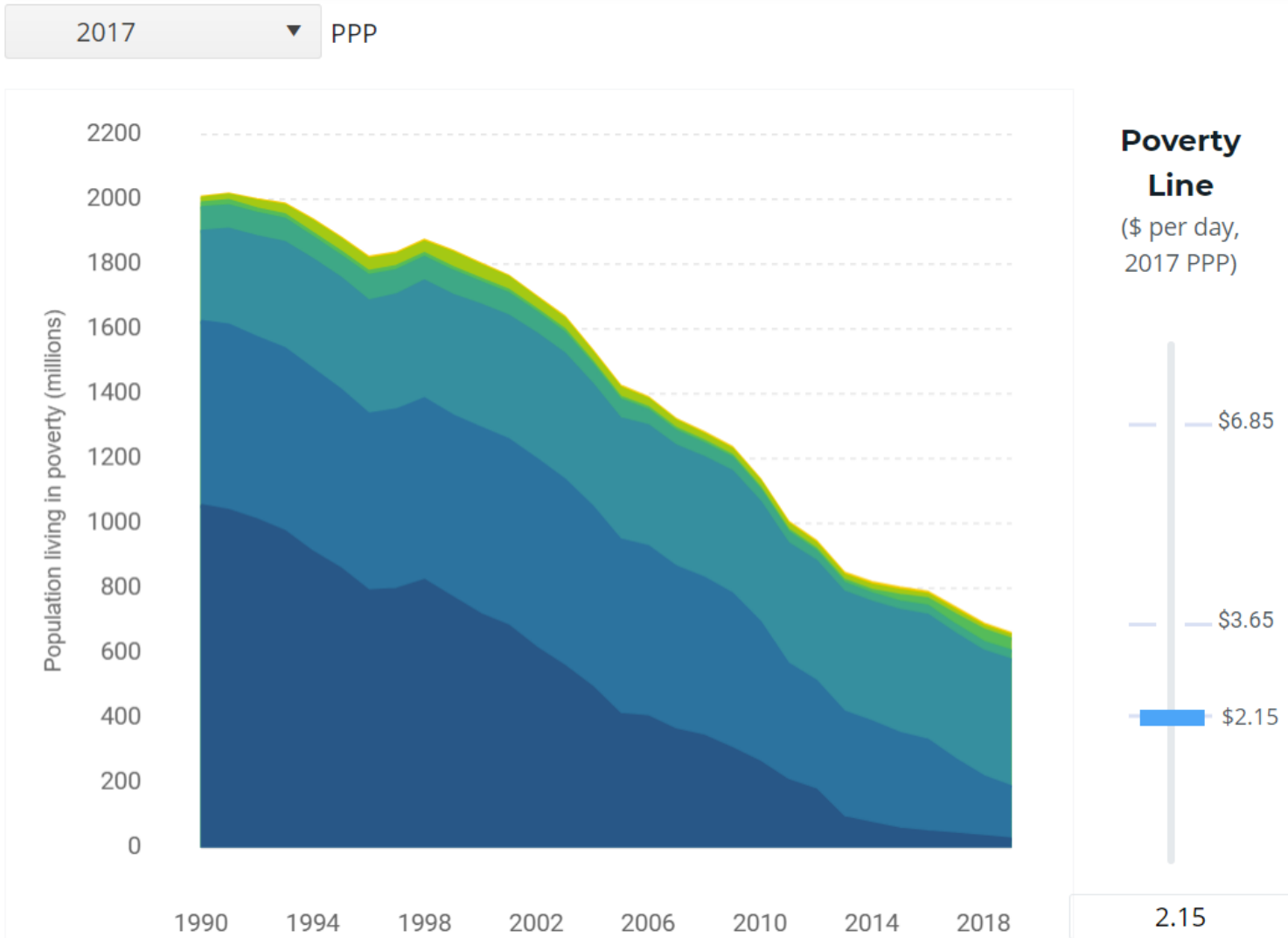
# The One-Dollar-A-Day... and saga

- The 1\$ a day – regularly updated - quickly became a norm and a reference in debates about global poverty
- This was the basis of Goal 1 of the Millenium Development Goals and is behind Goal 1 of the Sustainable Development Goals
- Hence the critical attention to all estimates produced by MR's team in the World Bank



# The one-dollar-a-day poverty line.. TODAY!

- World Bank's Poverty and Inequality Platform (PIP) -- *Povcalnet*'s descendant



# The everlasting debate around the x\$ a day absolute poverty line

- The PPP revision issue and changes in national poverty measurement
- Poverty indices
- Equivalence scales
- Surveys vs. National Accounts (for population means)
- Relative vs. absolute poverty (MR's weakly relative poverty)
- Dynamics of poverty: chronic vs. transient poverty; poverty vulnerability
- Non-monetary deprivations – UN Multidimensional Poverty Index (Alkire and Foster)
- Etc.
- MR has been in the forefront of all these debates during practically 25 years. They gave him the opportunity of key contributions to the economics and policy of poverty.
- In 2013, the Atkinson Commission (2013) defended the view of a multiple approach to poverty monitoring and made 13 recommendations, very much building on MR's 25 year work.

# The weakly relative poverty proposal

Strongly relative poverty line:

$$Z = \text{Max} (Z^*, k * \text{Mean})$$

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Weakly relative poverty line:

$$Z = \text{Max} (Z^*, a + k' * \text{Mean})$$

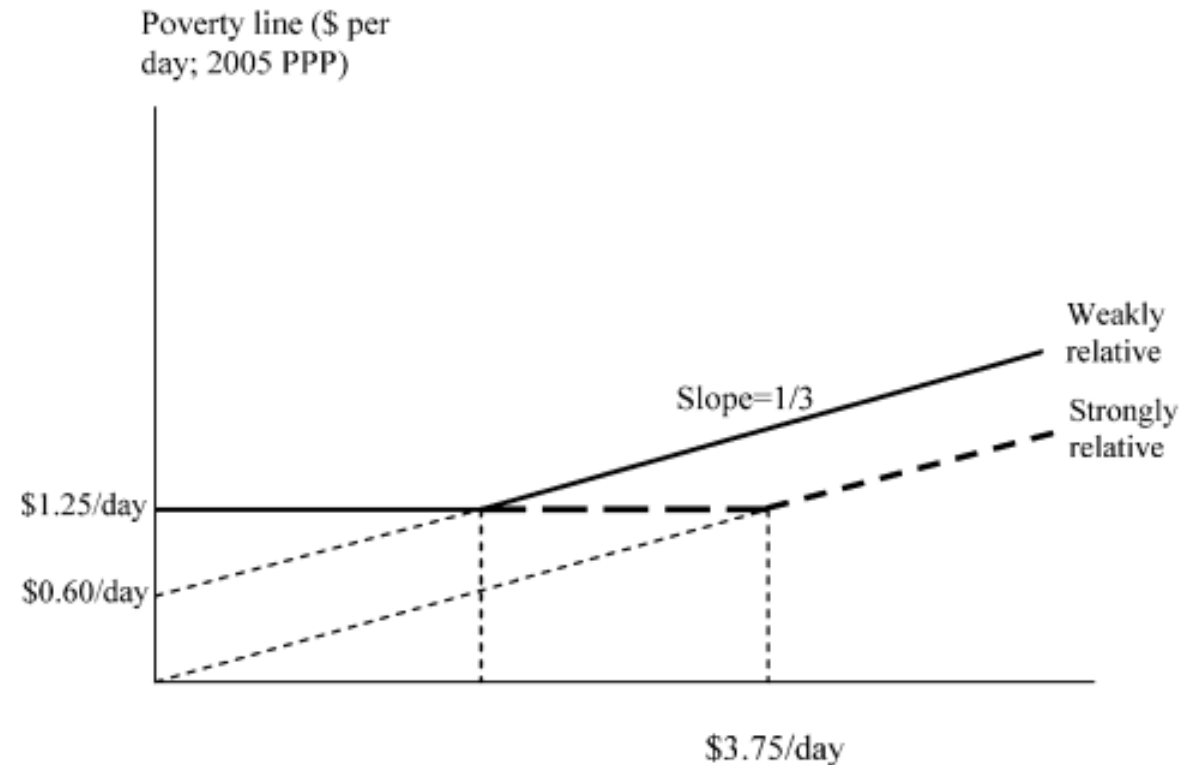
where  $Z^*$  = absolute international poverty line

Weakly Relative Poverty Axiom

*Inequality must fall when all incomes grow at the same rate, and vice-versa*

(see EU poverty definition)

FIGURE 2.—WEAKLY RELATIVE POVERTY LINES



## 2) "Inequality is bad for the poor"

- Response to "Growth is good for the poor" (Dollar and Kraay) in support of focusing poverty reduction policies essentially on aggregate growth - i.e. the 'development as GDP-growth' doctrine.
- MR showed that the poverty impact of growth spells depended not only on distributional changes but also on the extent of inequality
- Growth elasticity of poverty (sample of 47 developing countries)
  - Low inequality (G=.3):  $\varepsilon = -2.1$
  - High inequality (G=.6):  $\varepsilon = -1.2$
- Hence the importance of '*pro-poor growth*'.
- A key issue for poverty reduction then becomes that of the relationship between inequality and growth (the 'growth-inequality-poverty triangle')
- (Technical issue of measuring the inequality elasticity of poverty: debate with Kakwani - inequality index vs. shift in Lorenz curve).



### 3) Pro-poor growth and the Growth Incidence Curve

- Version 1: growth is pro-poor if the income of the poor increases – implying that poverty declines
  - Watts measure of poverty

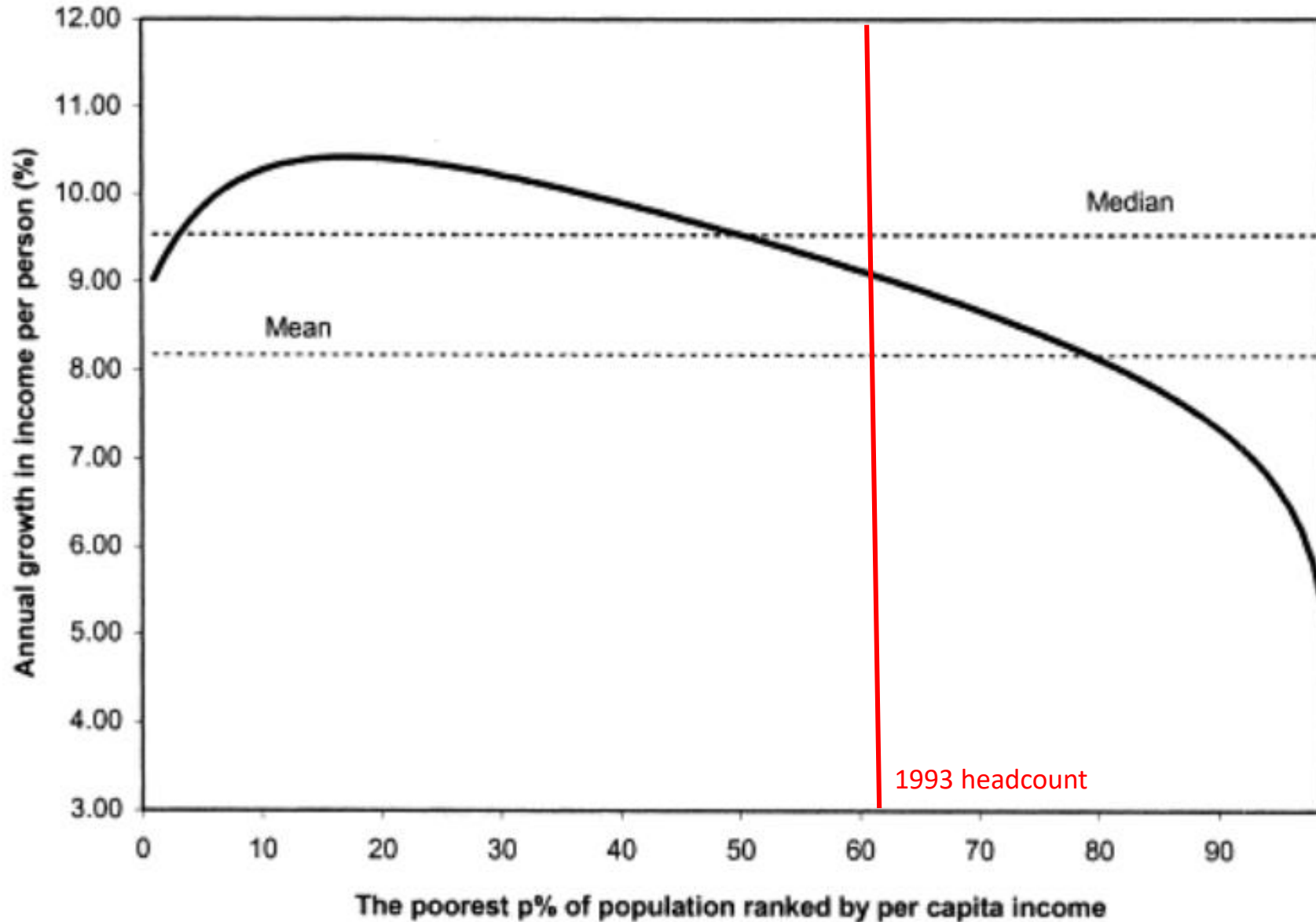
$$W = \frac{1}{N} \sum_{y_i \leq z} \ln\left(\frac{z}{y_i}\right)$$

- Change in Watts measure:

$$\Delta W = -\frac{1}{N} \sum_{y_i \leq z} \frac{\Delta y_i}{y_i} = \text{mean growth rate of the poor}$$

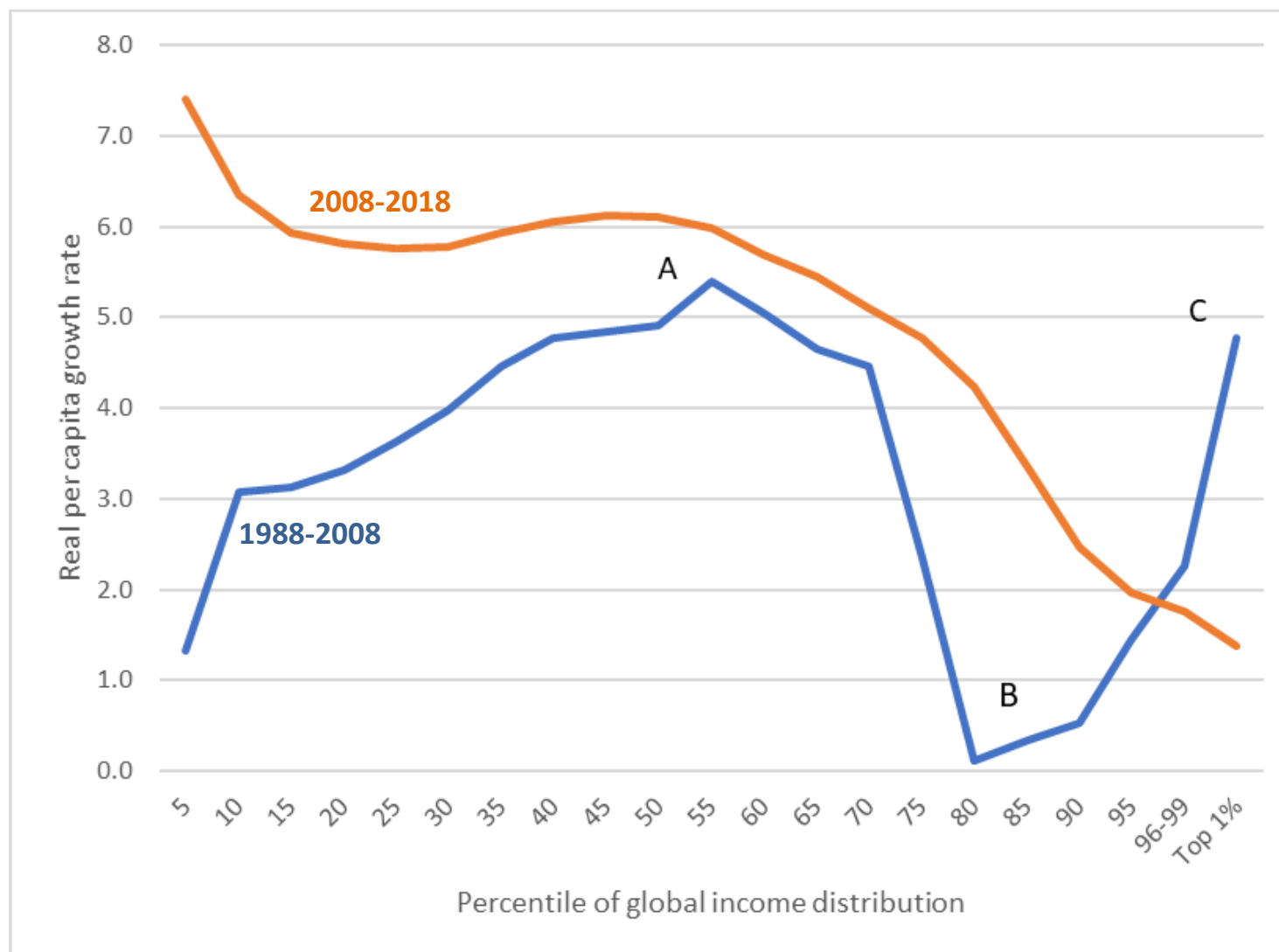
- Pro-poor growth measured by mean growth rate of poor's income,
- .... or the area below the Growth Incidence Curve (up to the headcount) 
- Version 2: growth is pro-poor if the income of the poor grows faster than the mean income 
- Version 3: growth is pro-poor if poverty declines more than if growth were distribution neutral

# China 1993-1996: Growth Incidence Curve and Pro-poor growth rate



# Growth incidence curves has become a key instrument in the analysis of the distributional impact of growth

BM 2022: Global incidence curves



## The many names of pro-poor growth

- The pro-poor growth concept greatly impacted the development community, even though going beyond poverty stricto sensu:
  - Inclusive growth (i.e. growth with no increase in inequality) as the ultimate goal of development policy
  - The 'Shared Prosperity' criterion (growth of bottom 40% poorest)
- Beyond names, what matters in the development community is today's focus on the dynamics of the whole income distribution rather than its mean.
  - World Bank's 'Poverty and Equity Global Practice': 230 staff
- MR has been pivotal in promoting and facilitating this evolution



## 4) Other contributions

- It would be unfair to restrict MR's contribution to his colossal work on poverty measurement and poverty monitoring
- Another crucial of his work concerned anti-poverty policy, especially the ex-post evaluation of policies through mainly structural econometric modeling.
- Almost countless publications in this area: rural employment program in India, social programs in Argentina, trade reform in Morocco, di Bao and other benefits in China, land-based targeting in Bangladesh, food pricing in Indonesia, ...

## Conclusion: a Ravallion community

There is more than 300 papers, two major books, countless presentations in conferences and seminars, and a brilliant career in a top International Organization ...

... there is a man, a colleague, a friend and a numerous community that built up around him throughout the years,

... a community that will survive his inspirator