

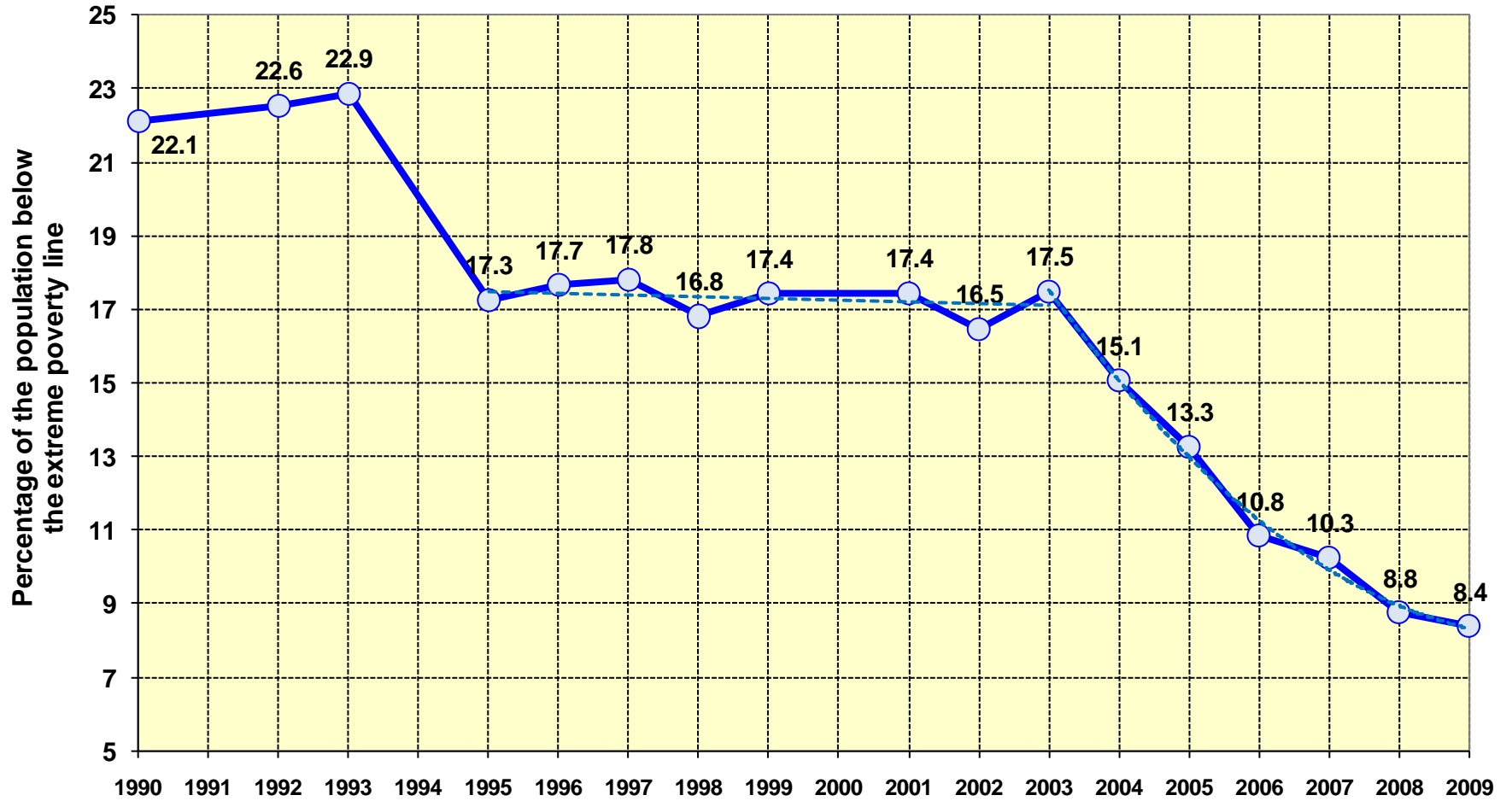
The determinants of the sharp improvement in income distribution in Brazil

Ricardo Paes de Barros (Ipea)

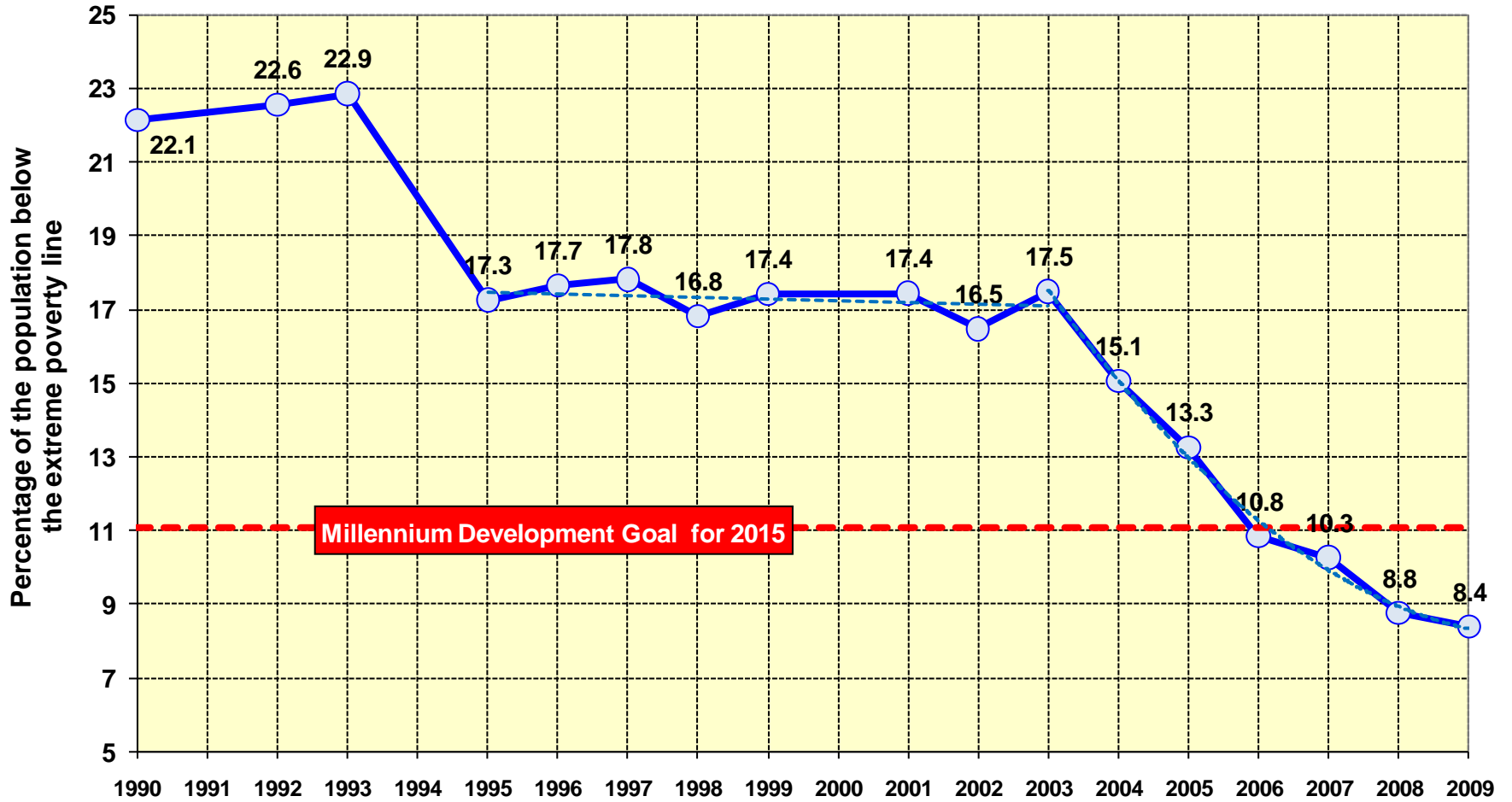
Rio de Janeiro, November 2010

***1. Evaluating the
magnitude of the
decline in poverty and
inequality***

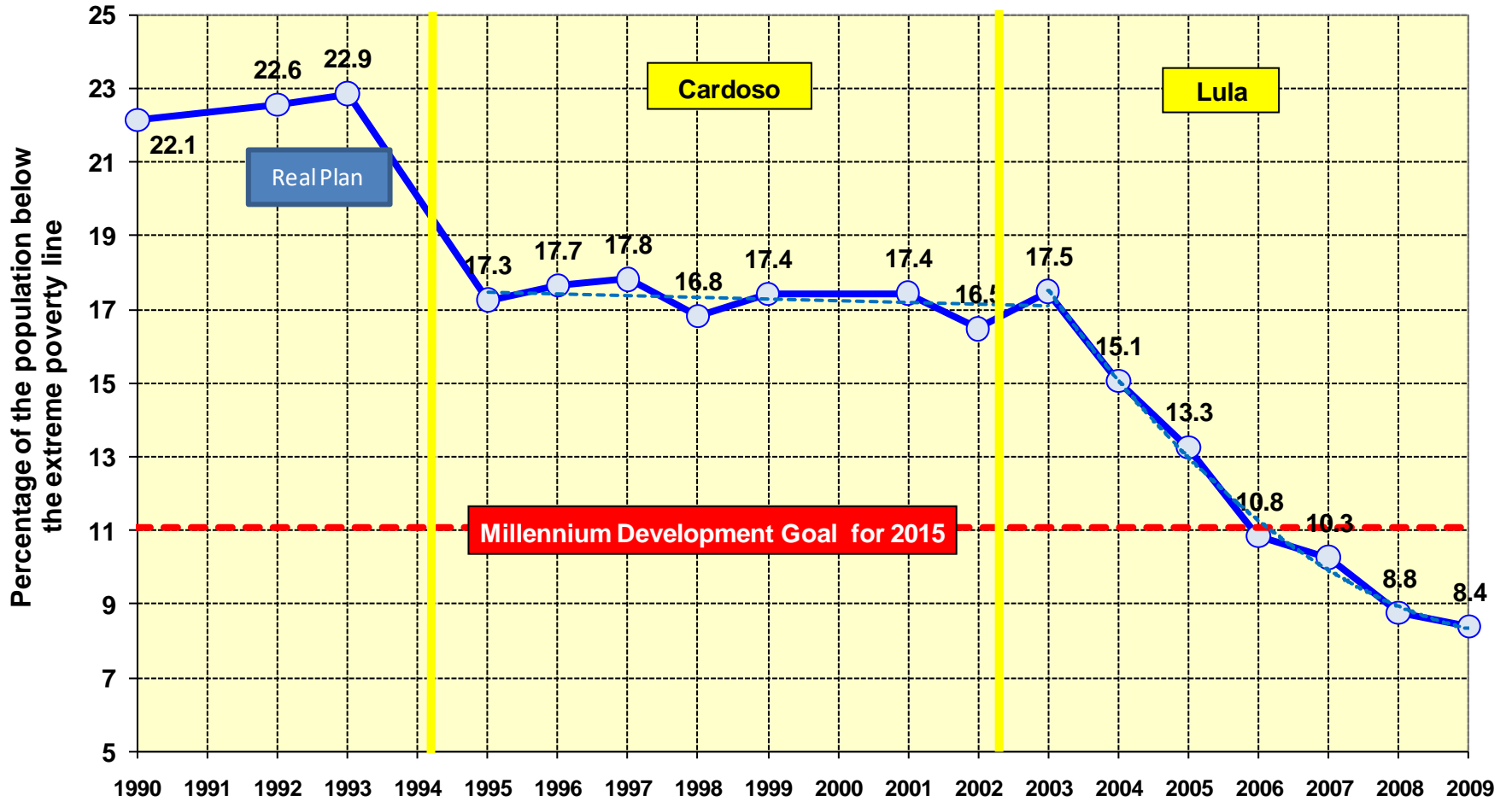
Evolution of extreme poverty rate in Brazil: 1990-2009



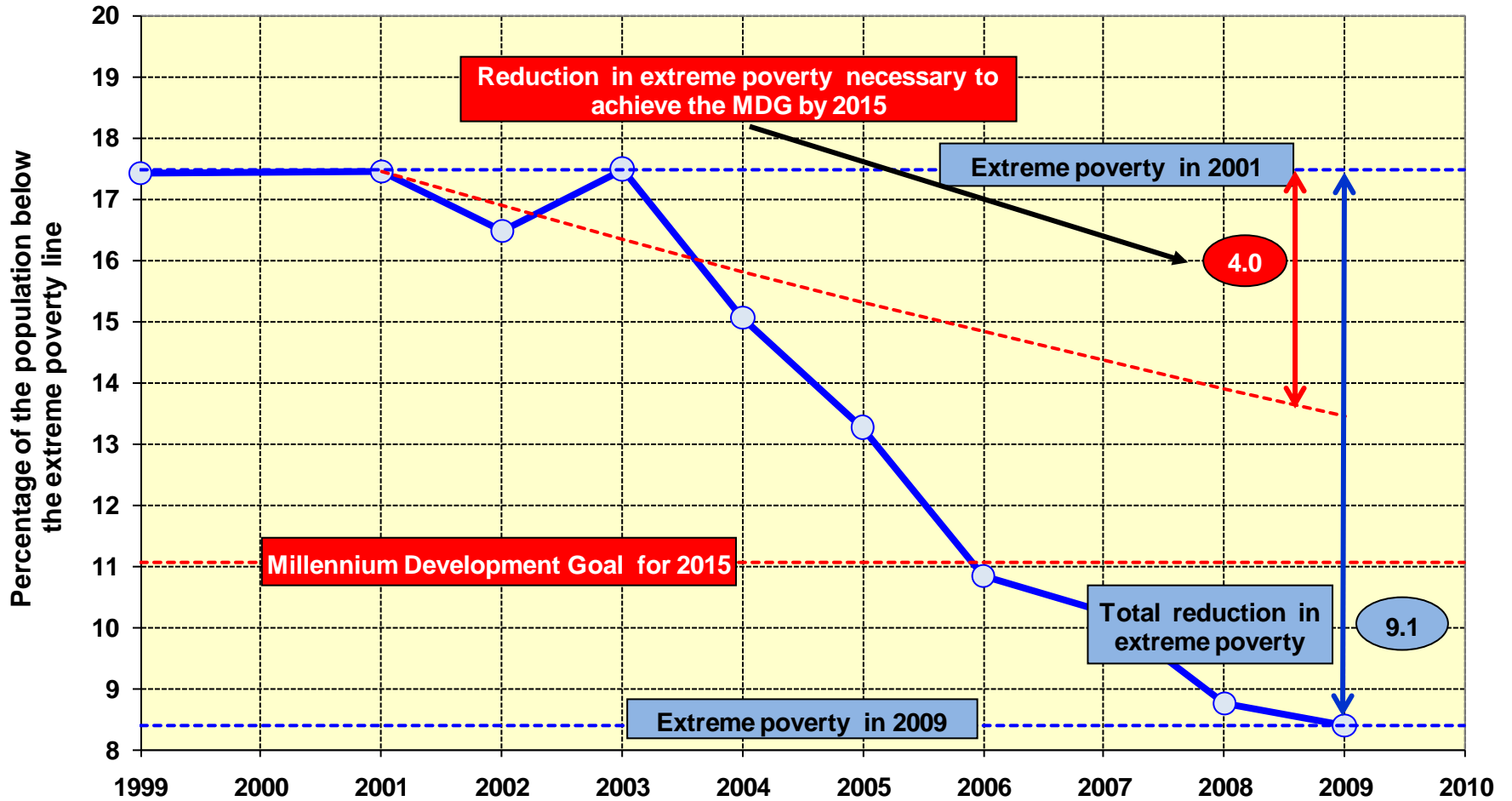
Evolution of extreme poverty rate in Brazil: 1990-2009



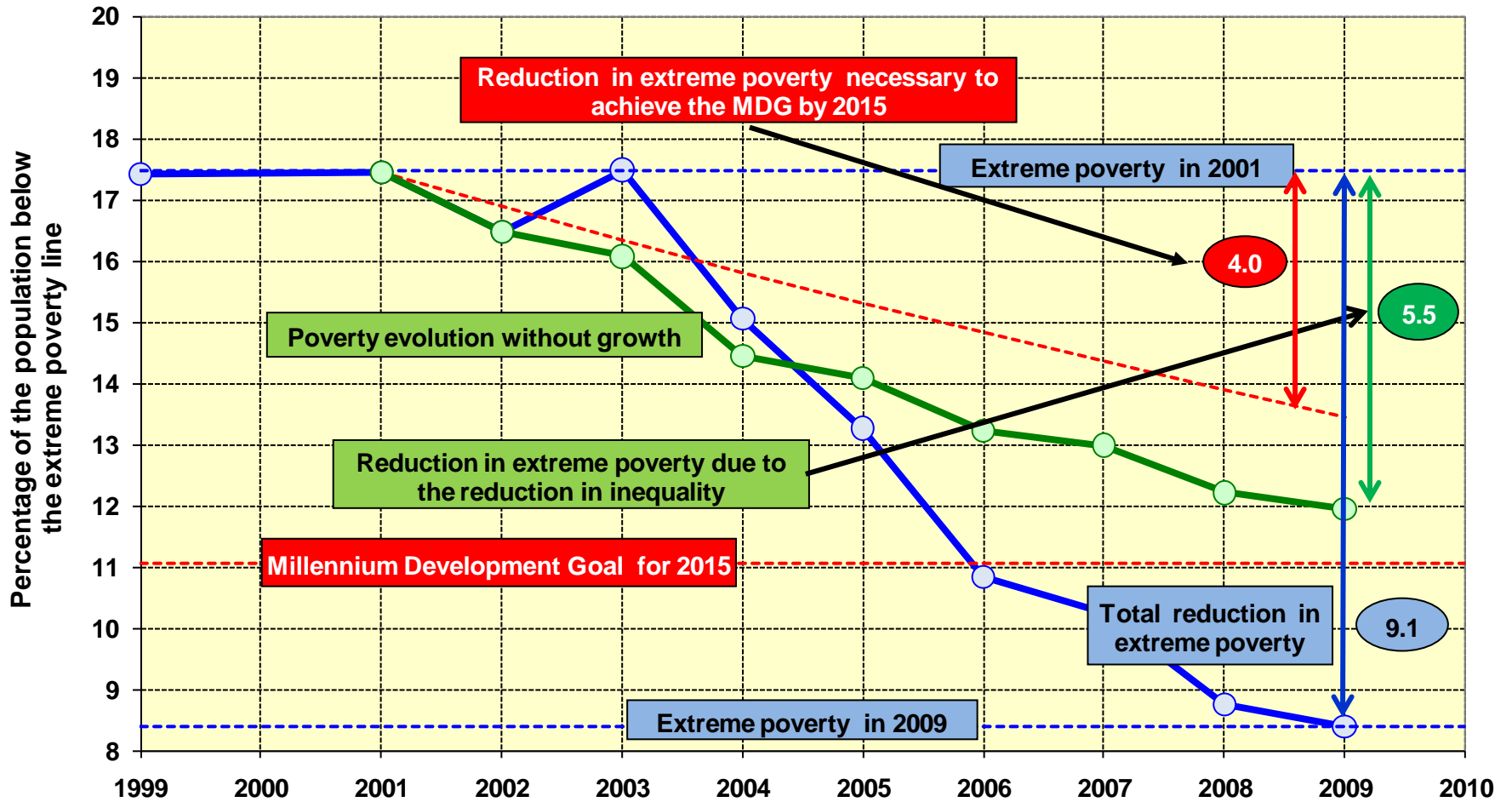
Evolution of extreme poverty rate in Brazil: 1990-2009



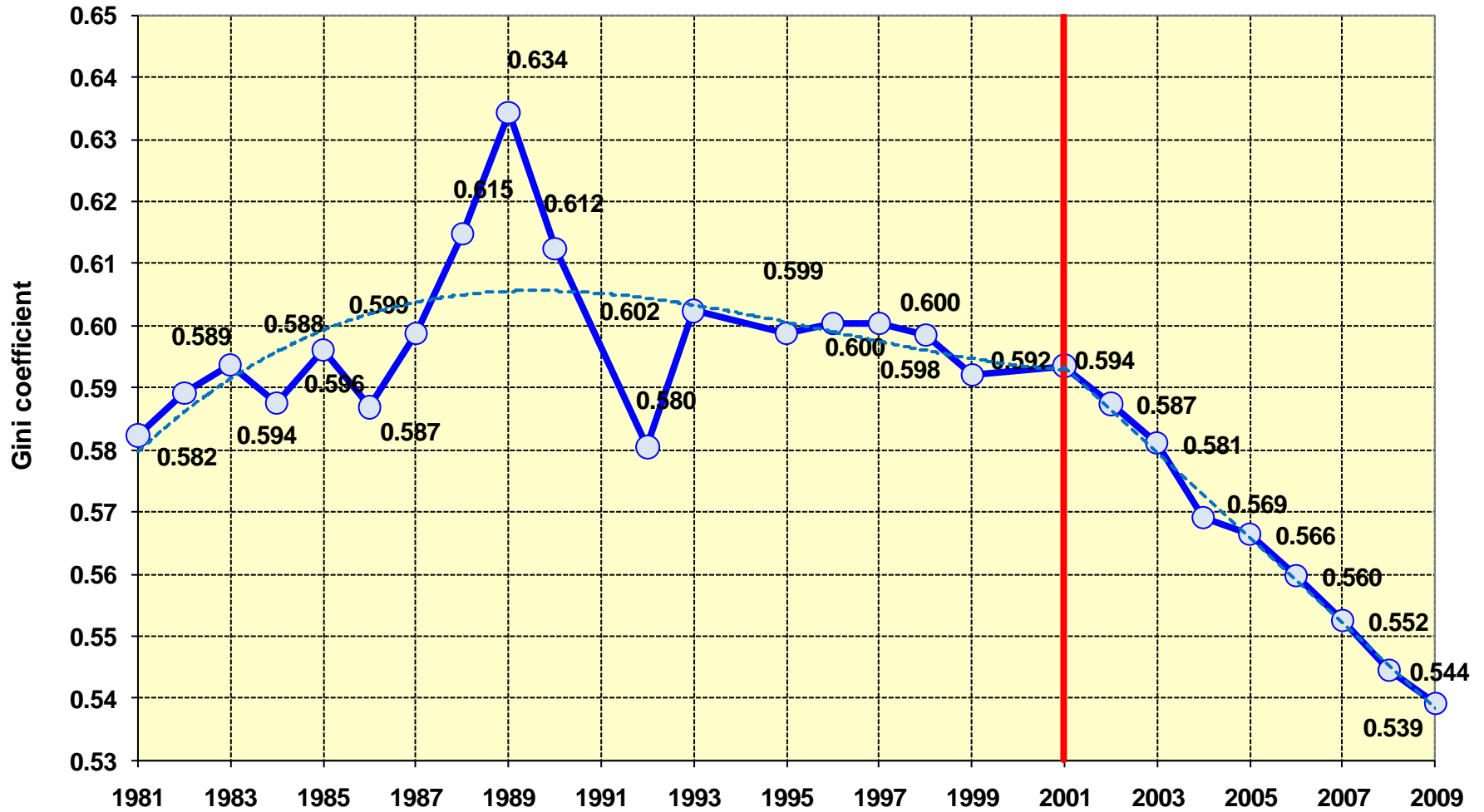
Evolution of extreme poverty in Brazil: 1999-2009



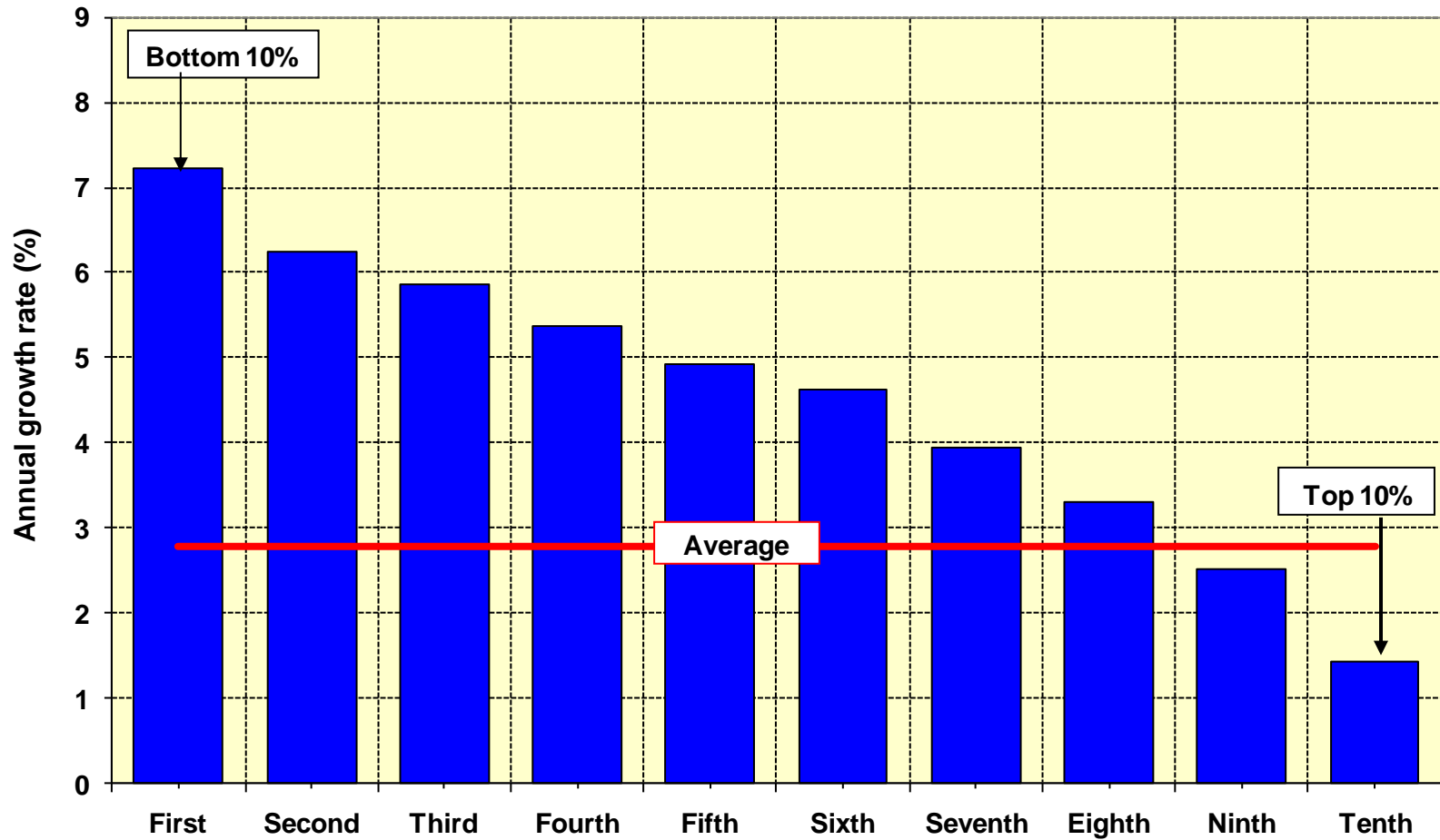
Evolution of extreme poverty in Brazil: 1999-2009



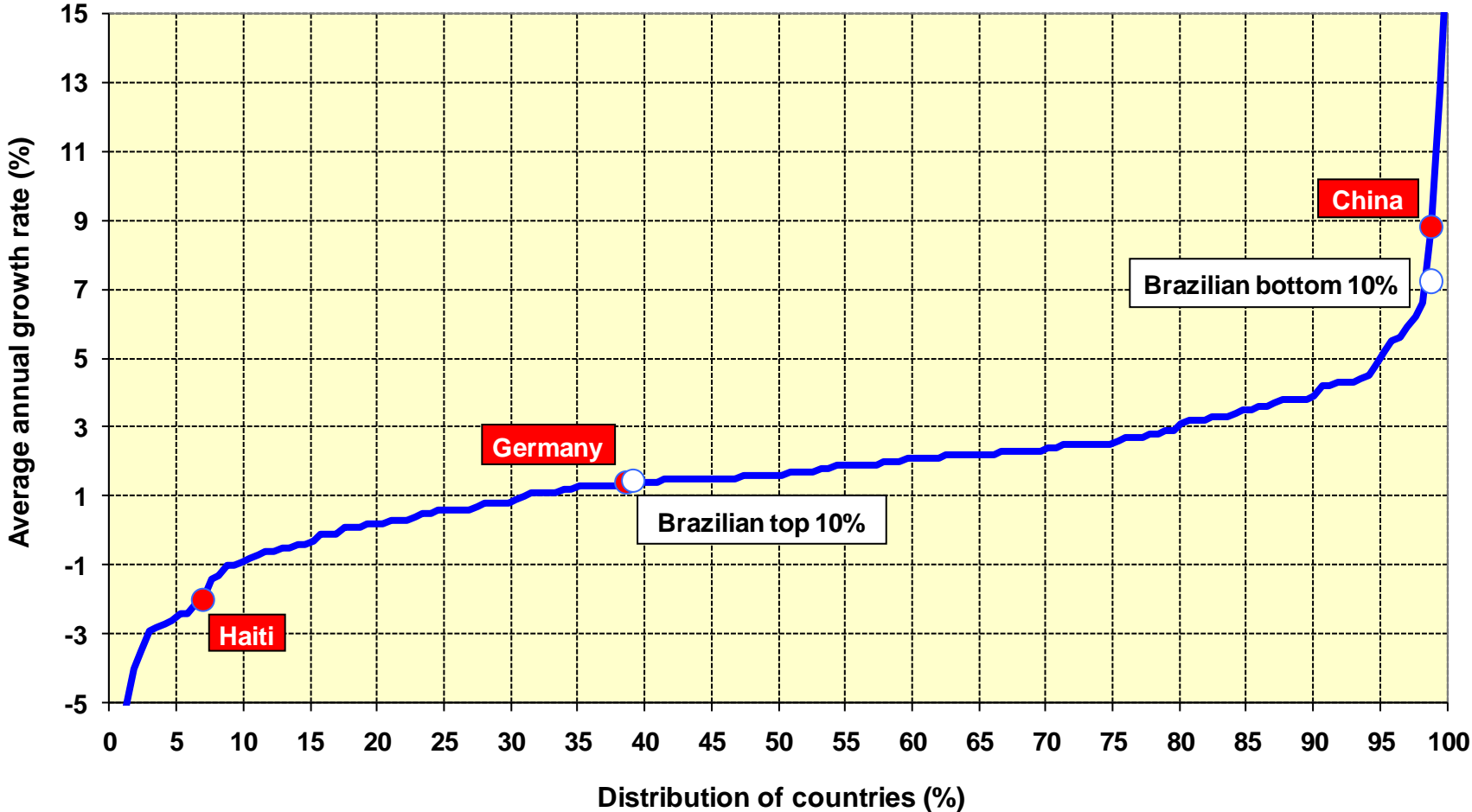
Evolution of the degree of inequality in per capita income: Brazil, 1995-2009



Average annual growth rate in per capita income by tenths of the distribution: Brazil, 2001-2009



Distribution of countries according to the average per capita GDP growth rate between 1990 and 2005



2. Immediate Determinants

Basic Identity

per capita income

Non labor income per adult

Labor income per adult working

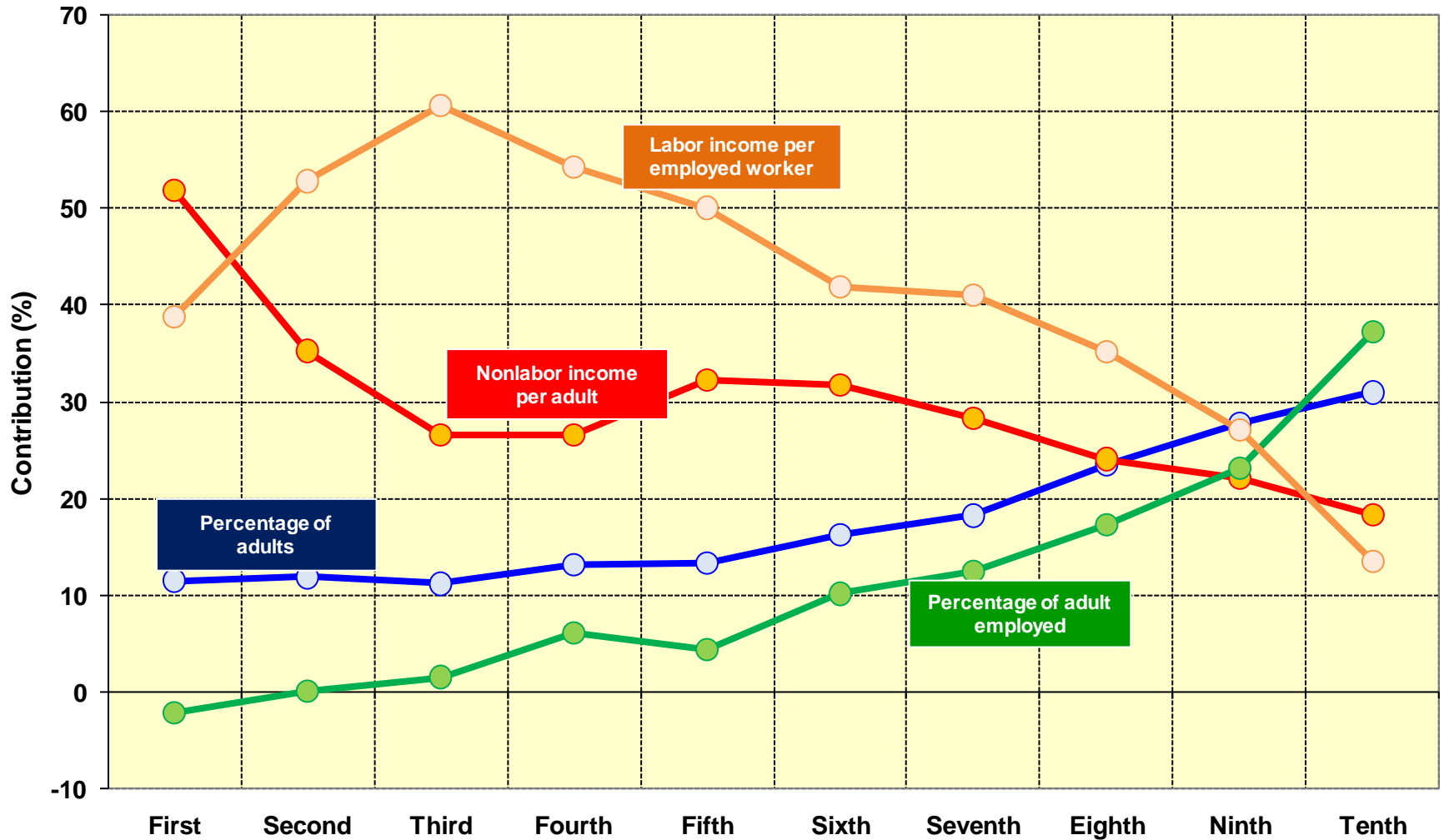
$$y = a.(o + u.w)$$

Percentage of adults

Percentage of adults working

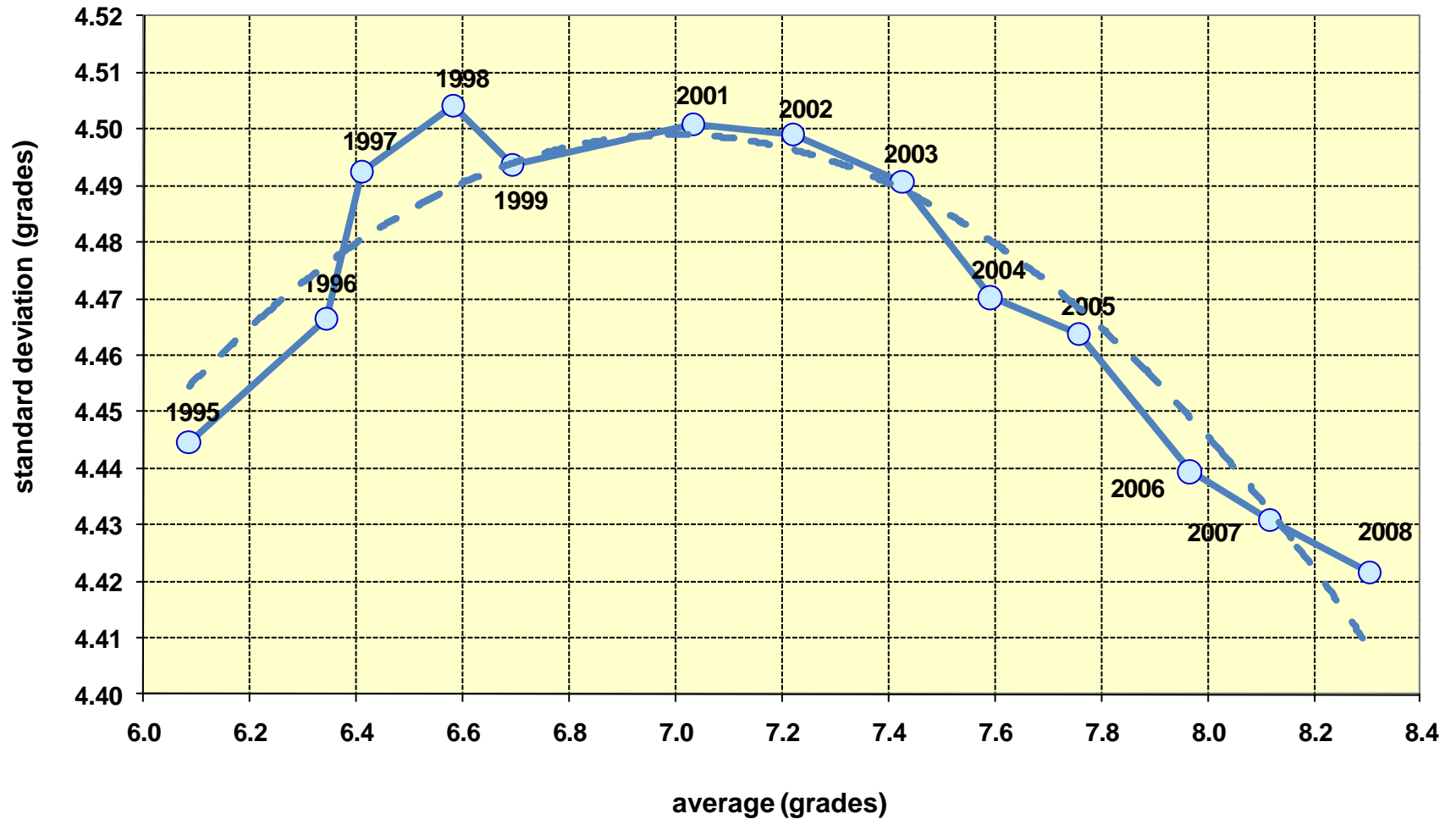
The diagram illustrates the 'Basic Identity' equation: $y = a.(o + u.w)$. The variable y is labeled 'per capita income' with a downward arrow. The variable a is labeled 'Percentage of adults' with an upward arrow. The variable o is labeled 'Non labor income per adult' with a downward arrow. The variable u is labeled 'Percentage of adults working' with an upward arrow. The variable w is labeled 'Labor income per adult working' with a downward arrow. The entire expression $(o + u.w)$ is enclosed in large parentheses.

Per capita income immediate determinants contributions for growth by tenths of the distribution: Brazil, 2001-2009

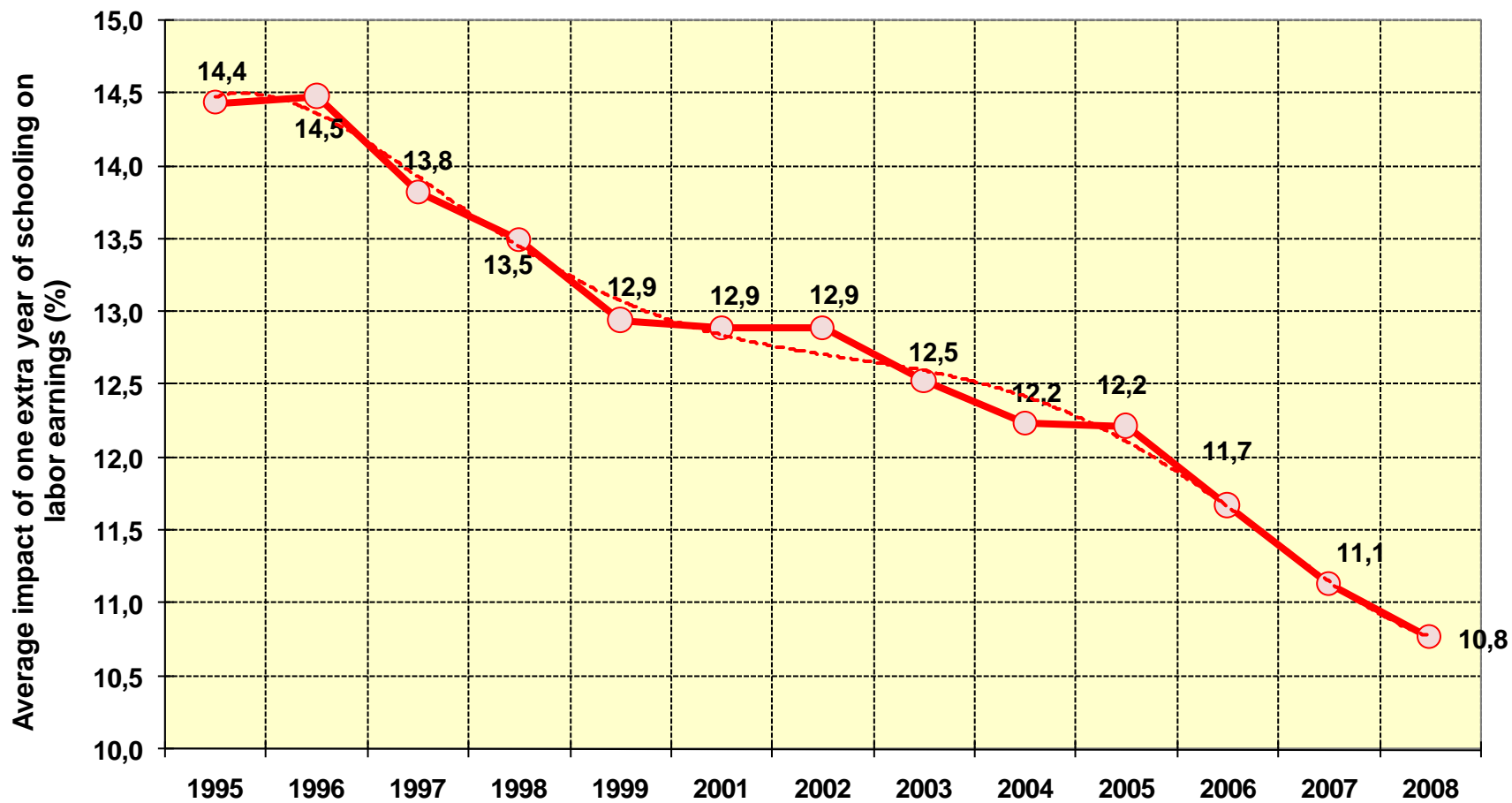


3. Labor Productivity

Evolution of labor force education level and degree of inequality in education: Brazil, 1995 a 2008



Average Impact of one extra year of schooling on labor earnings: Brazil, 1995 to 2008



Contribution of education to the reduction in inequality: Brazil, 2001-2008

Indicators	Situation in 2001	Situation in 2008 with 2001 prices and quantities	Contribution of changes in prices and quantity	Situation in 2008 with 2001 prices	Contribution of changes in prices	Situation in 2008
Labor income						
Gini coefficient	0.564	0.543	51	0.536	36	0.520
Ratio between the average income of the top 10% and the average income of the bottom 40%	18.2	15.6	42	15.1	30	13.7
Ratio between the average income of the top 20% and the average income of the bottom 20%	18.6	16.2	43	16.0	40	14.3
Per capita family income						
Gini coefficient	0.594	0.559	30	0.556	24	0.544
Ratio between the average income of the top 10% and the average income of the bottom 40%	22.9	18.3	25	18.1	21	16.8
Ratio between the average income of the top 20% and the average income of the bottom 20%	26.9	20.6	20	20.6	20	18.9

4. Labor Market Imperfections

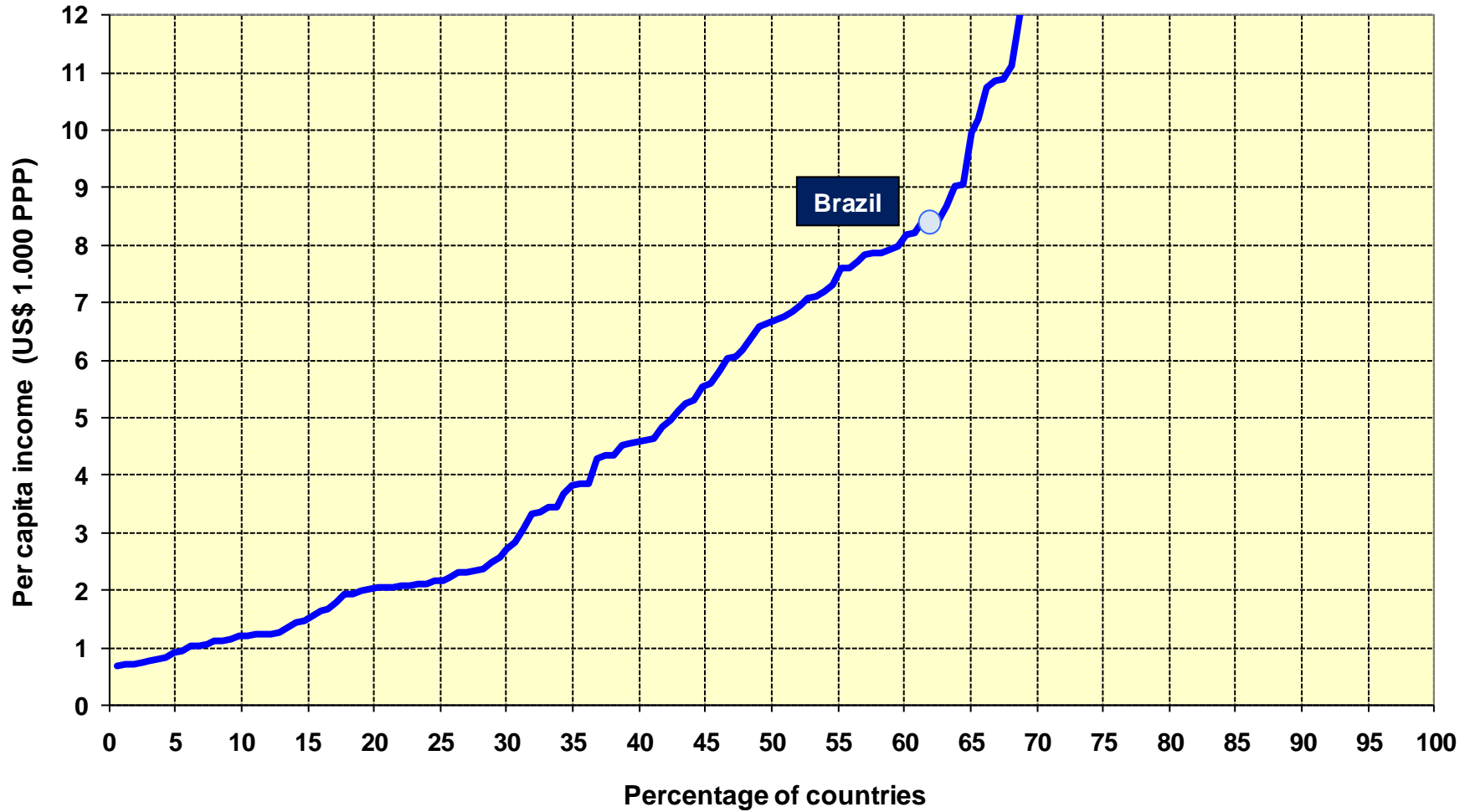
Contribution of reductions in labor market imperfections to the decline in income inequality: Brazil, 2001-2008

Simulation	Component	Gini coefficient	Absolute contribution	Relative contribution (%)
2008		0.552		
2008 with all measured labor market imperfections of 2001	All	0.556	0.004	10
2008 with discrimination levels of 2001	Discrimination	0.554	0.001	3
2008 with gender differentials of 2001	Gender differentials	0.552	0.000	0
2008 with race differentials of 2001	Race differentials	0.554	0.001	3
2008 with all measured segmentation levels of 2001	Segmentation	0.555	0.003	7
2008 with measured geographical segmentation of 2001	Geographical differentials	0.555	0.002	5
2008 with interstate differentials of 2001	Interstate differentials	0.553	0.000	1
2008 with urban-rural gaps of 2001	Urban-rural gaps	0.553	0.000	1
2008 with differentials between small and large municipalities of 2001	Small-large municipalities	0.554	0.001	4
2008 with all sectoral segmentation of 2001	Sectoral segmentation	0.553	0.001	1
2008 with the formal-informal differential of 2001	Formal-informal gaps	0.551	-0.002	-4
2008 with the same differentials by economic sector as 2001	Economic sectors differentials	0.555	0.002	6
2001		0.594	0.041	100

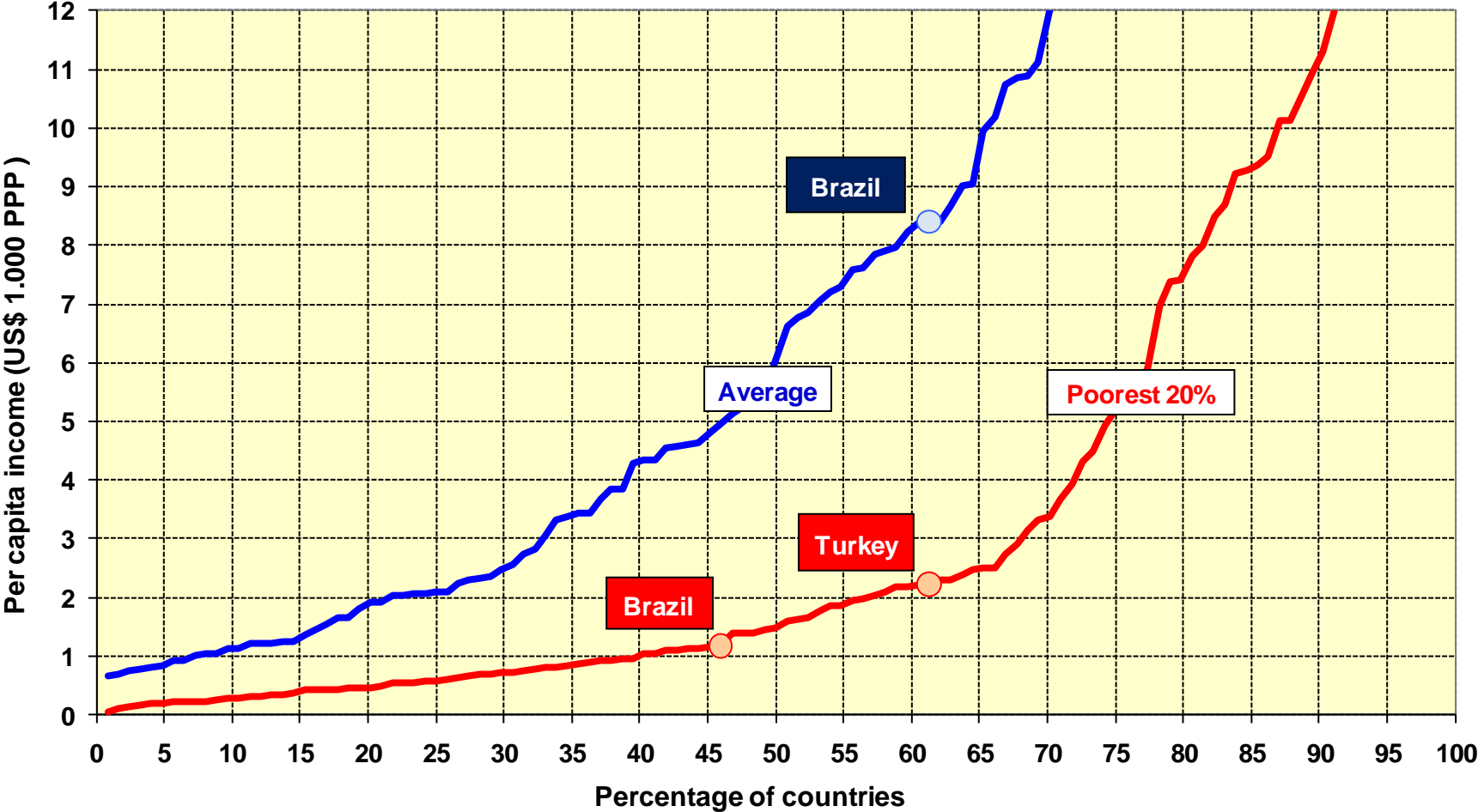
The background is a solid blue color. A white curved line starts from the top left and curves downwards towards the center. A white circular shape is partially visible in the bottom right corner, overlapping the blue background.

7. The need for continuity

Distribution of countries according to per capita income



Distribution of countries according to average per capita income and per capita of the poorest 20%



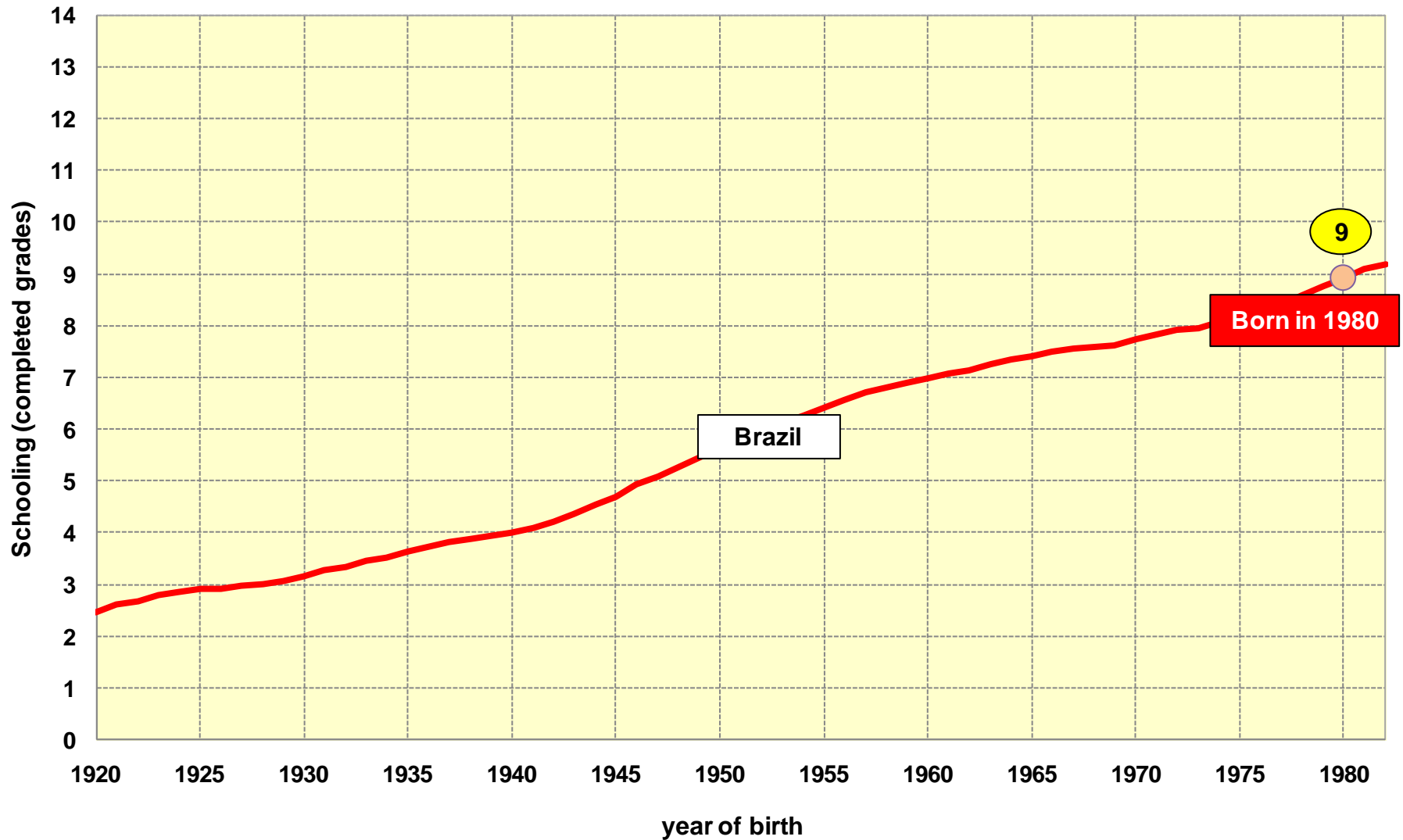
Time necessary for Brazil to align with other countries with similar levels of development in terms of income inequality

Brazilian growth rates (2001-08)	
Average (% per year)	2.8
Bottom 20% (% per year)	7.0
Differential (% per year)	4.0

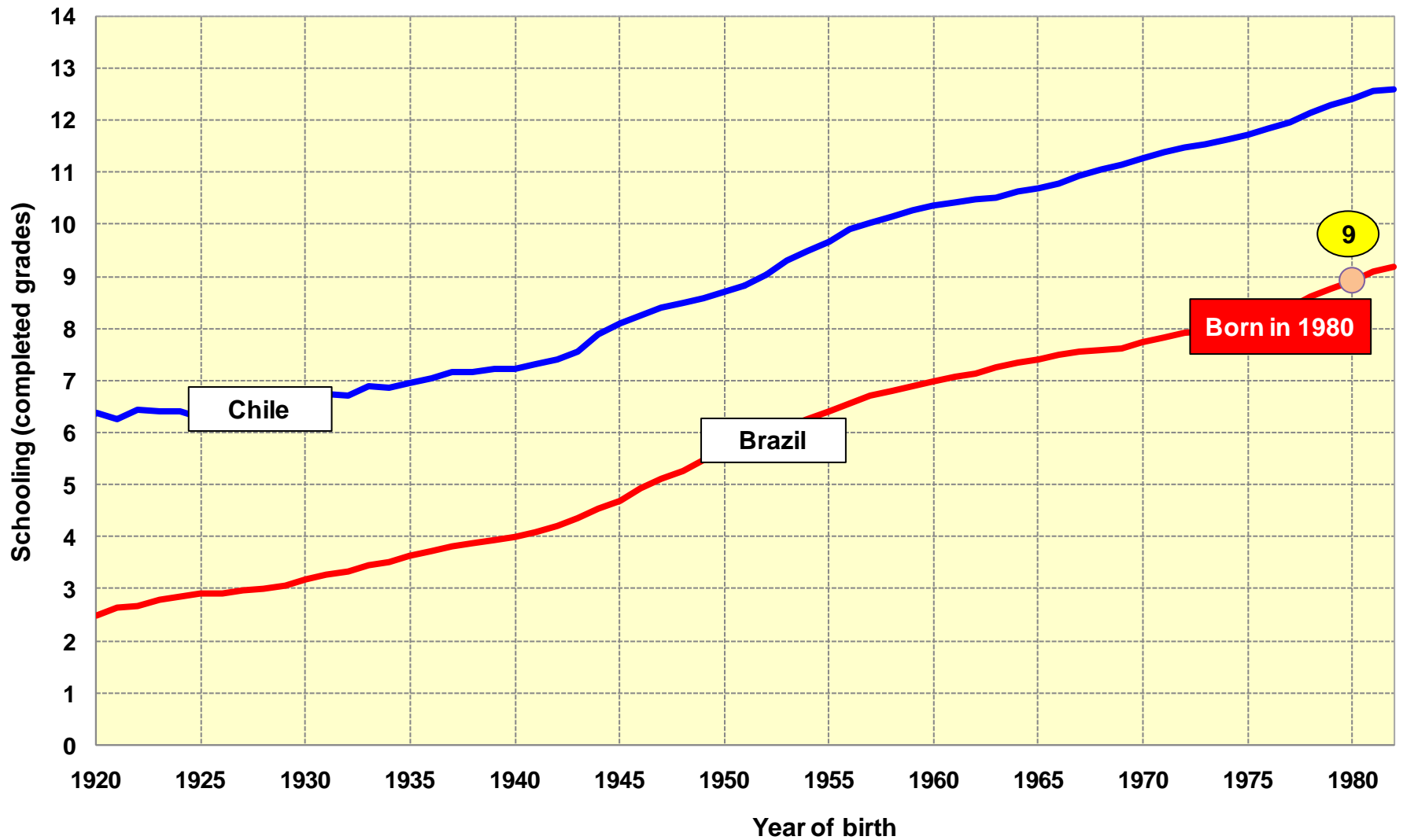
Per capita income of the bottom 20%	
Brazil (US\$ 1,000)	1.04
Turkey (US\$ 1,000)	1.89
Differential (%)	82

Time necessary for Brazil to eliminate the differential (years)	15

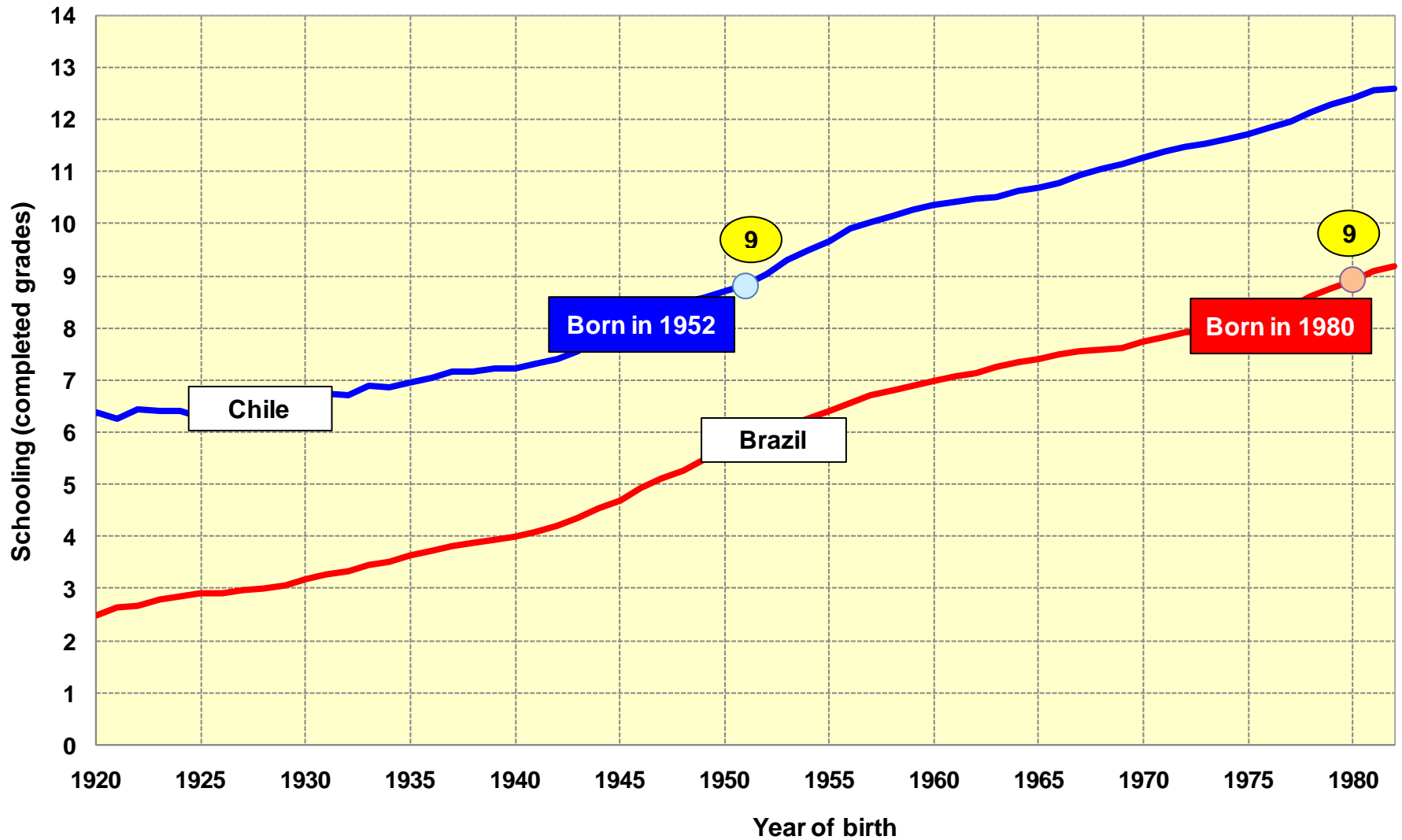
Evolution of average schooling by birth cohort: Brazil



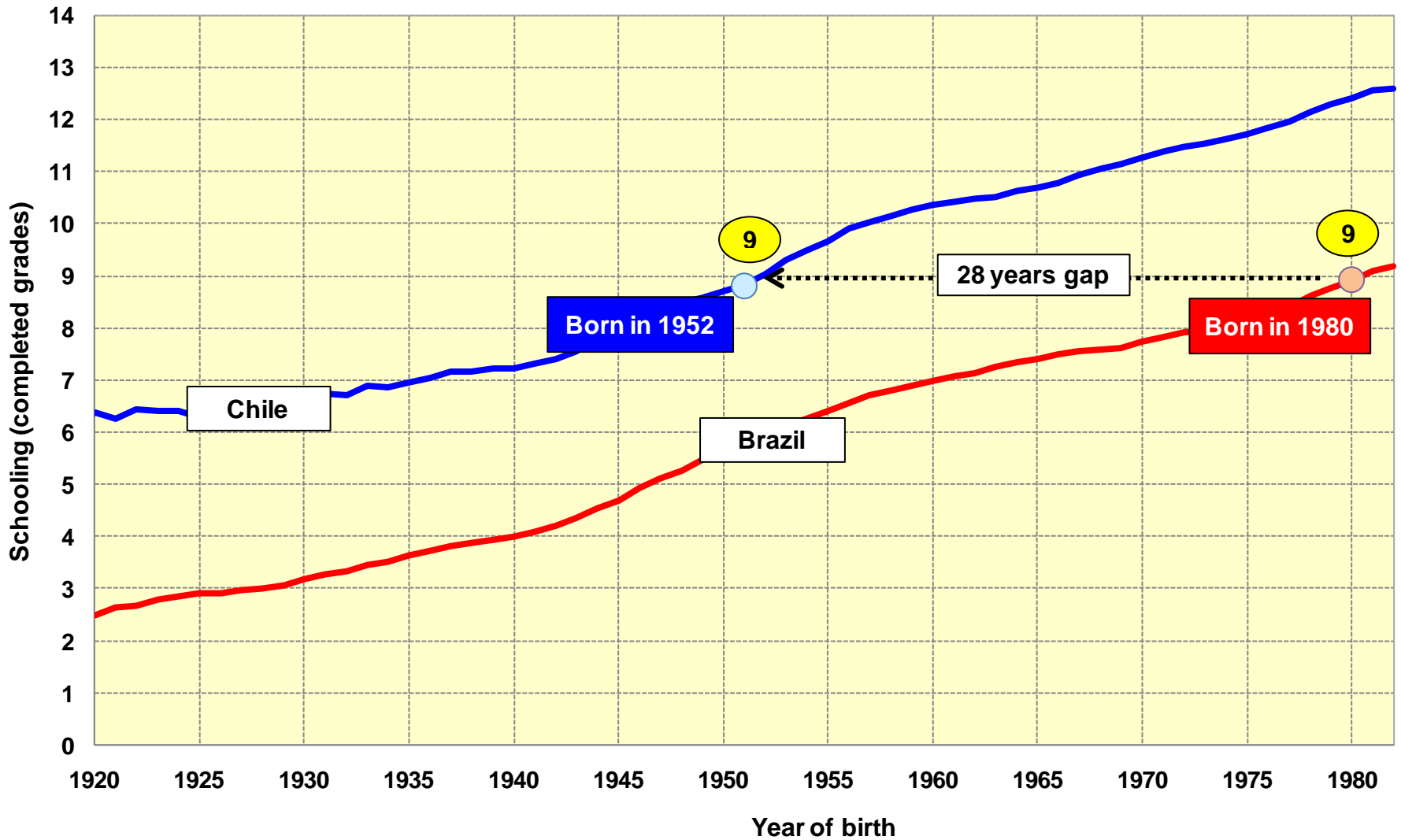
Evolution of average schooling by birth cohort: Brazil and Chile



Evolution of average schooling by birth cohort: Brazil and Chile

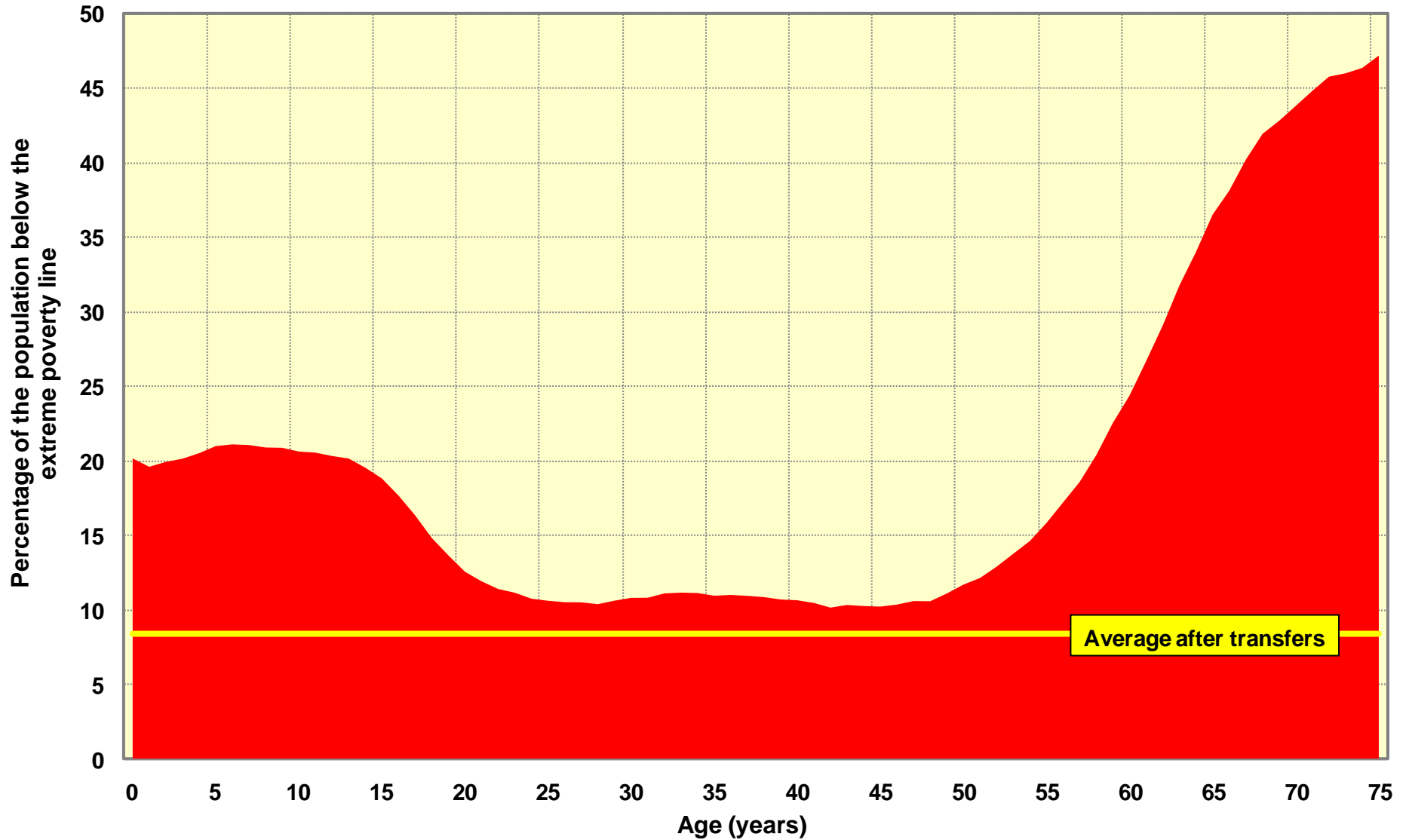


Evolution of average schooling by birth cohort: Brazil and Chile

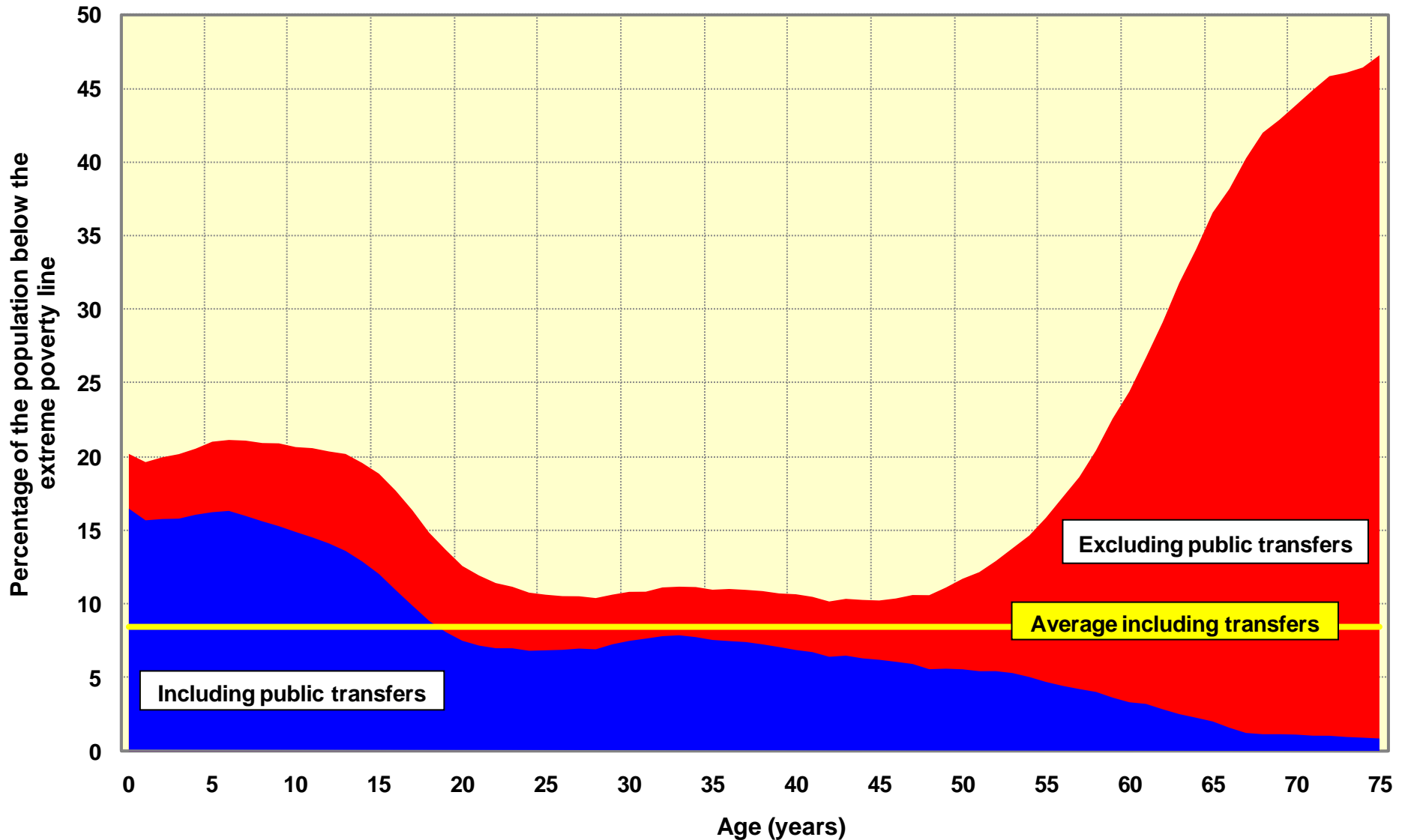


***8. Continuity of results
not necessarily continuity
of policies***

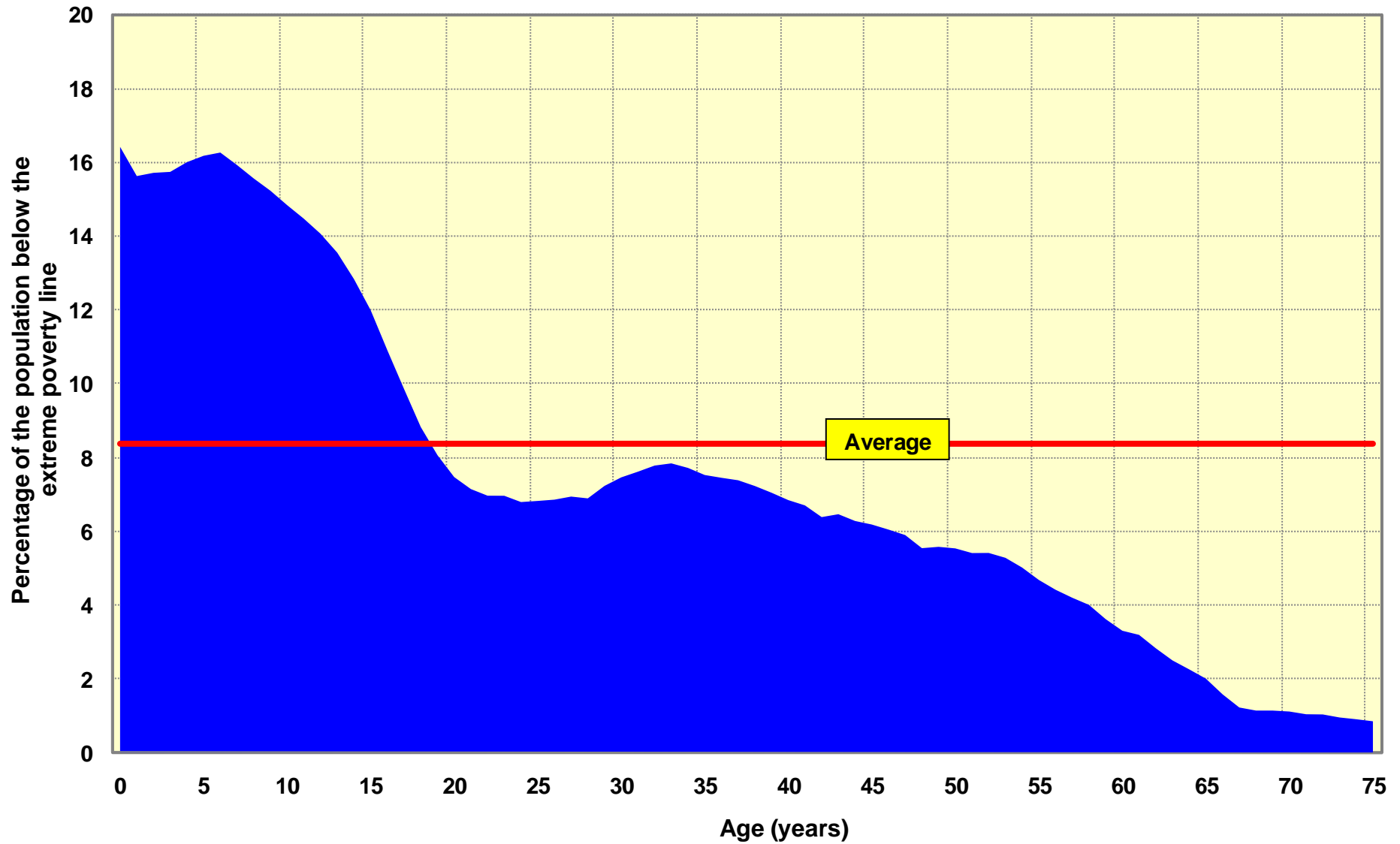
Extreme poverty by age before government transfers: Brazil, 2009



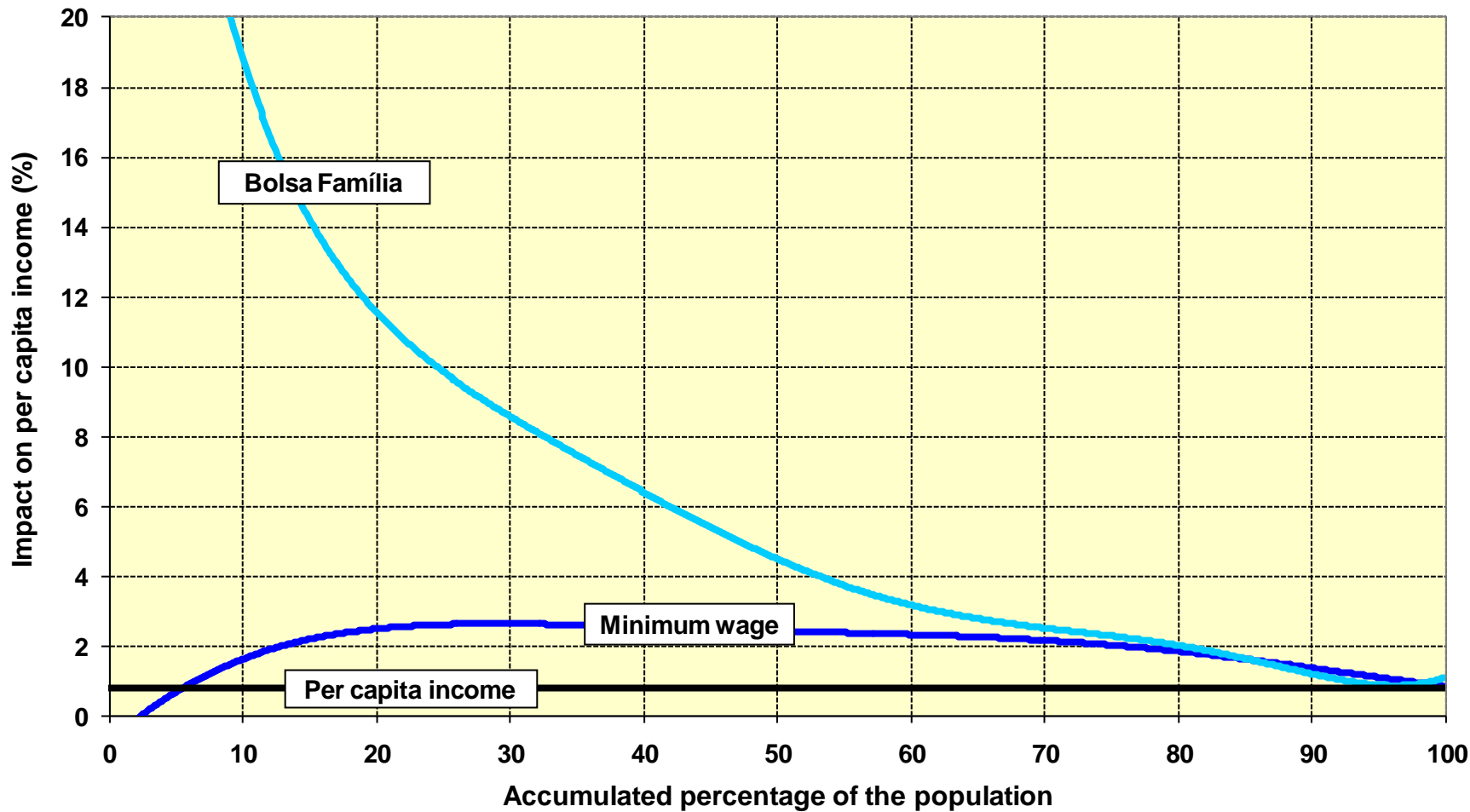
Extreme poverty by age: Brazil, 2009



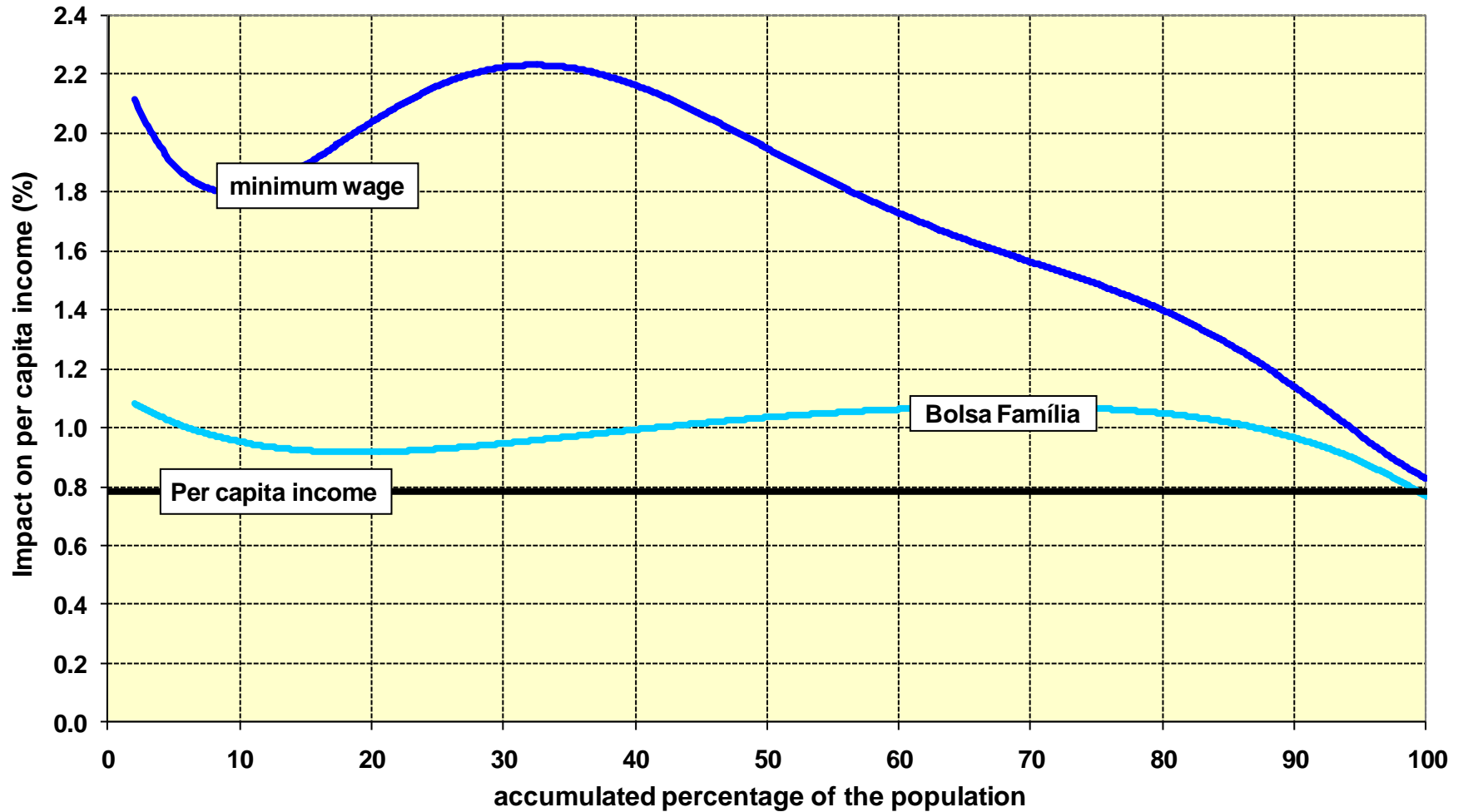
Extreme poverty by age after transfers: Brazil, 2009



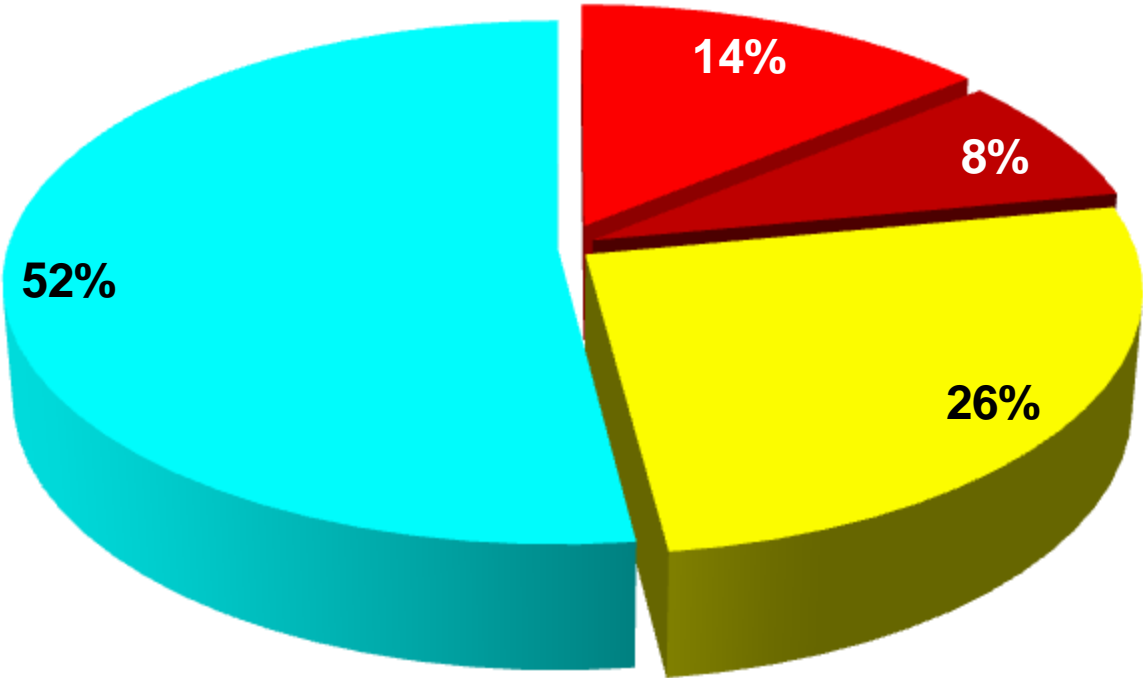
Estimates of the impact of increases in the mandated minimum wage and the magnitude of *Bolsa Família* transfers on per capita income accumulated from the poorest: Brazil



Estimates of the impact of increases in the mandated minimum wage and the magnitude of *Bolsa Família* transfers on per capita income accumulated from the middle of the distribution: Brazil



Distribution of workers with wages near the mandated minimum wage according the position in family and poverty status



- Head of a poor family
- Non head of a poor family
- Head of a nonpoor family
- Non head of a nonpoor family