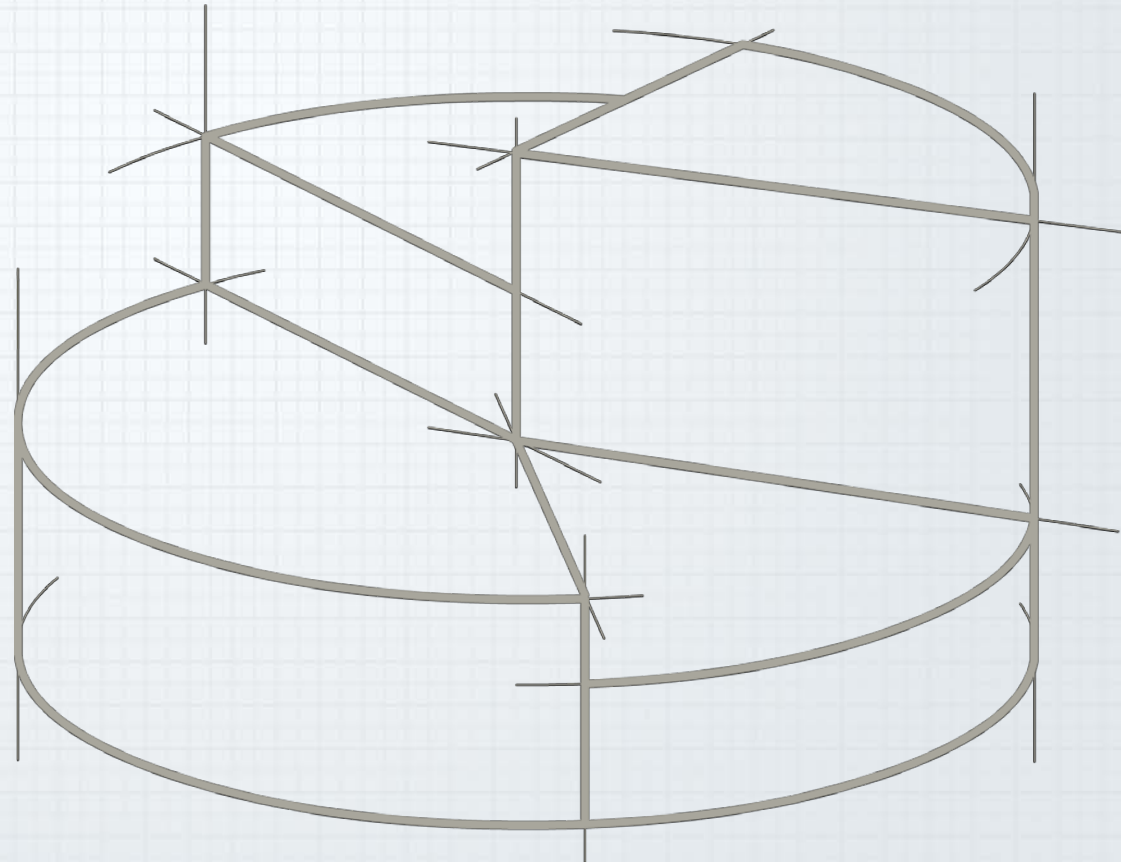


Inclusive Sustainable Development ?

BRAZIL and the Middle Path

Marcelo Neri



- SAE
- IPEA
- CDES
- FGV

Inclusive Sustainable Development?

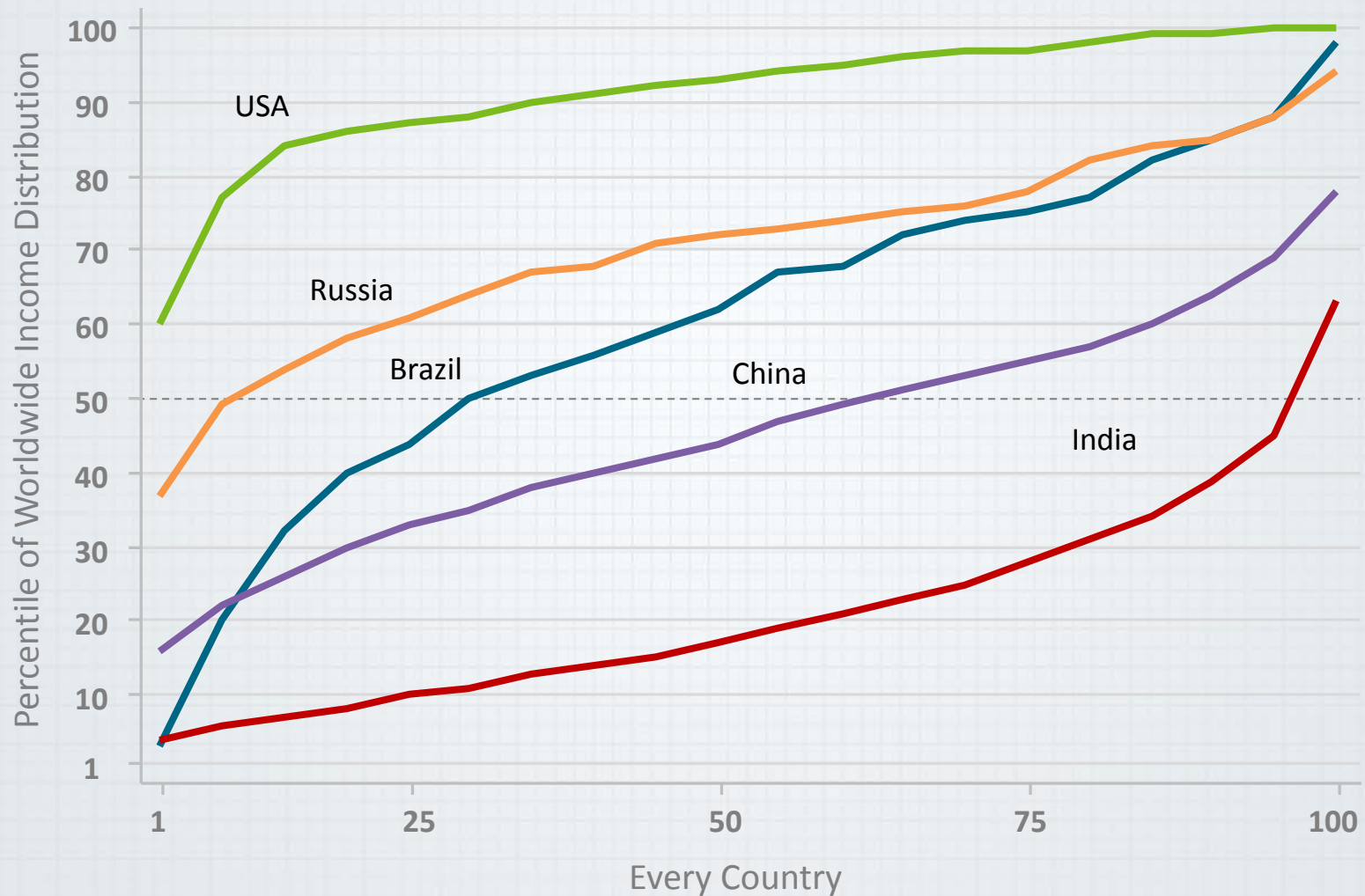
Brazil and the Middle Path

Main Issues:

- Global Perspective: Brazil as a small world**
- Brazil in the New Millenium**
- Is the Brazilian Model still working?**

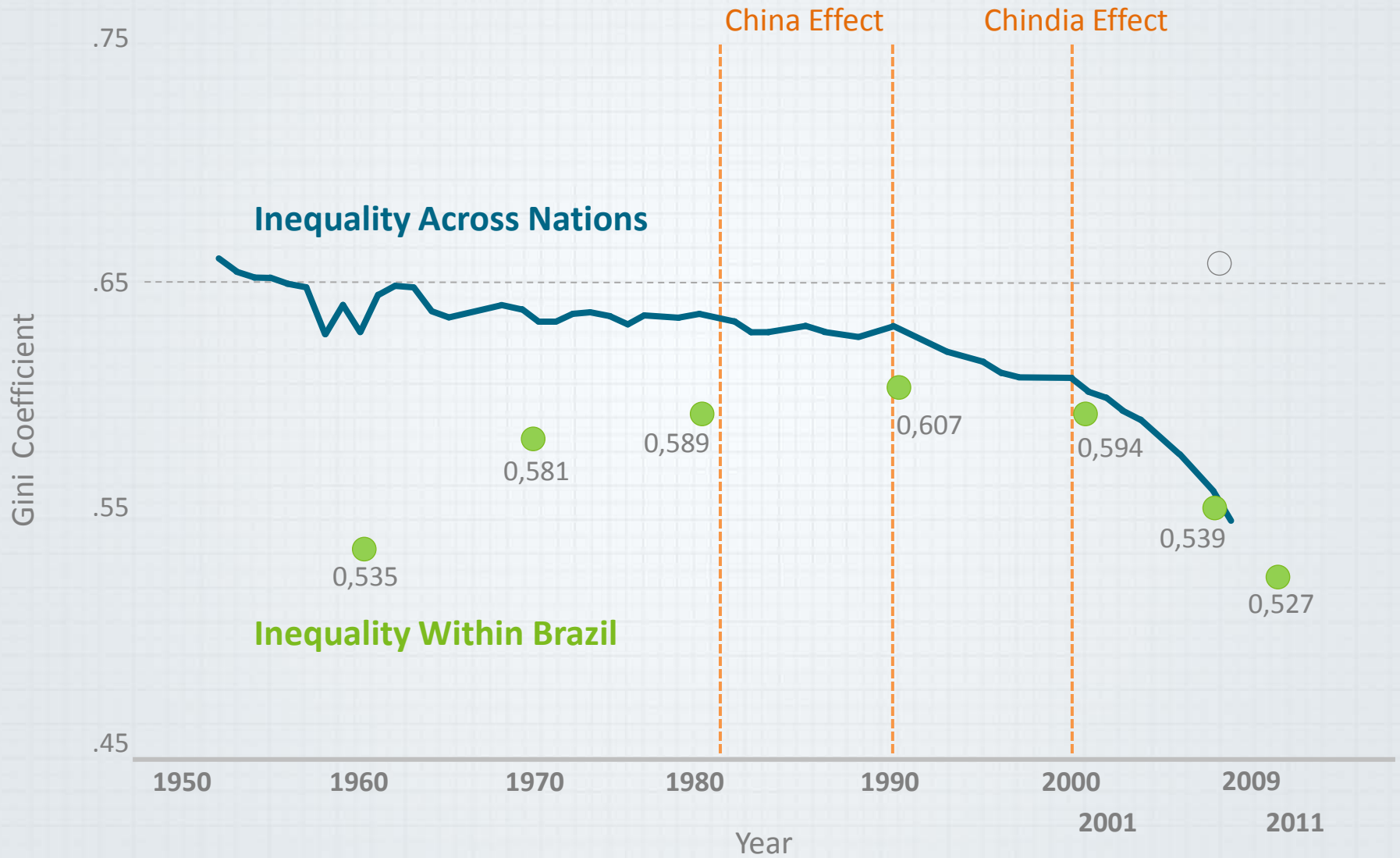
Income distribution: a worldwide comparison

“Brazil is everywhere in terms of income distribution, from Indian untouchables to wealthy Russians”

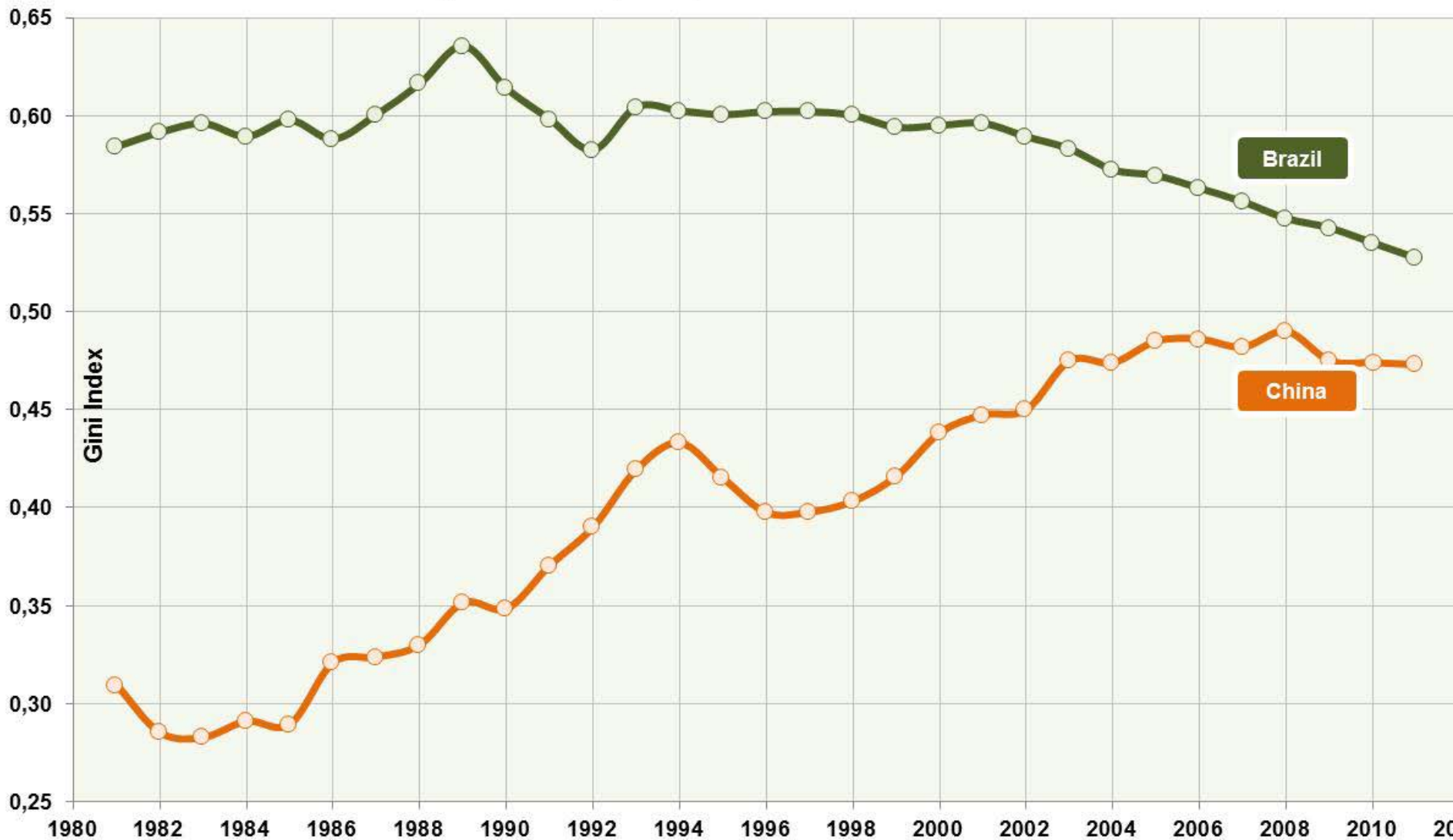


Brazil as a **Small World**

Brazil GDP Per Capita is 91% of the World Mean



Evolution of the degree of inequality, Brazil and China: 1981-2011



Source: 1976-2009 Instituto de Pesquisa Econômica Aplicada (IPEA), averages for the years of 1980,1991,2000; 2011 PNAD 2011.

Source: China 1981-2001 Ravallion and Chen (2007), 2002-2011 (Sicular, The Challenge of High Inequality in China, The World Bank, Aug/2013).

Brazil X BRICS

Income Distribution Dynamics

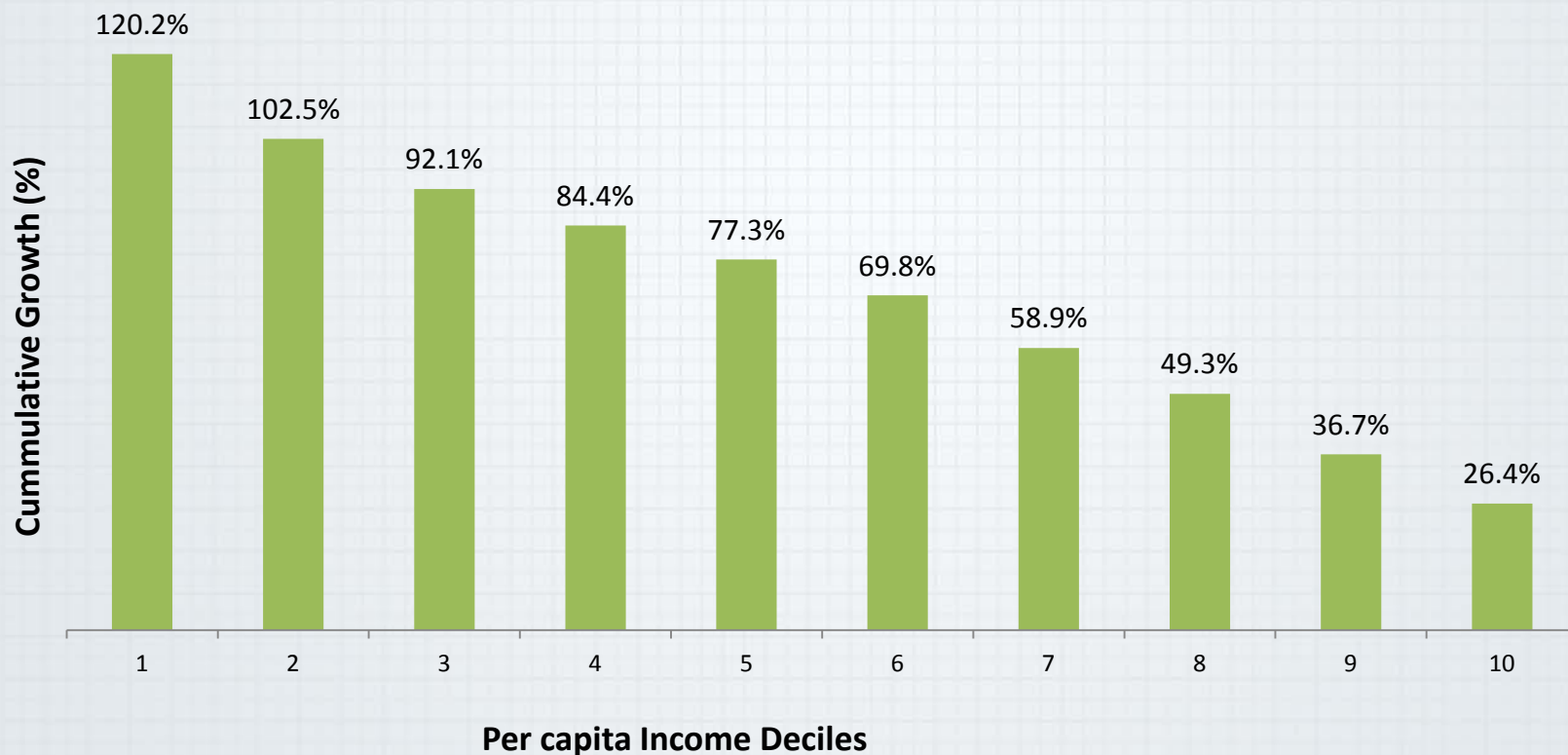
Rates of Changes Per Year

Evolution 2000s Circa 2007

	20% Less	20% Richest
Brazil	6,30%	1,70%
India	1%	2,80%
China	8,50%	15%
South Africa	5,80%	7,60%

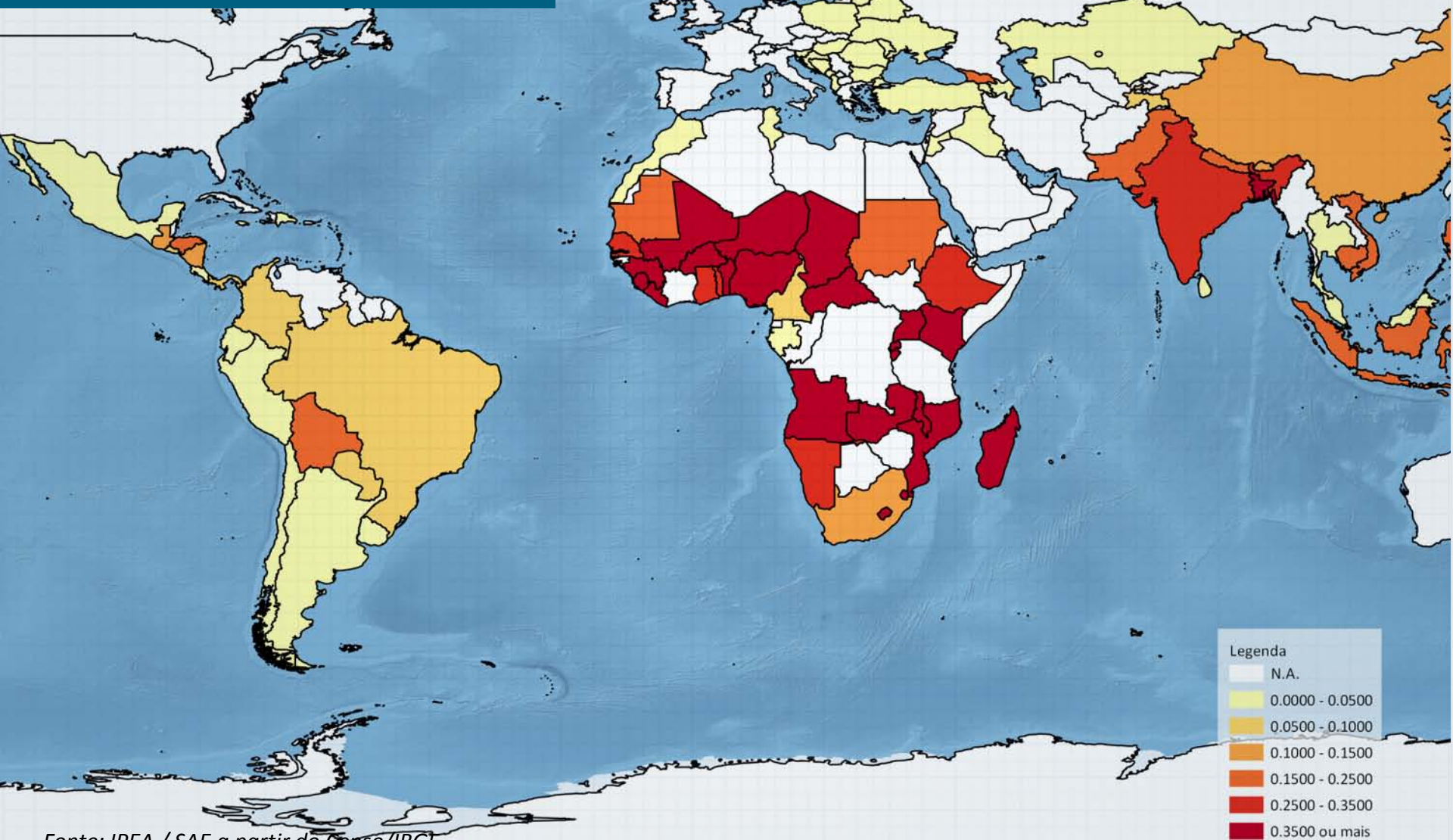
Cummulative Real Per Capita Growth by Income *Deciles* - Brazil

Cummulative Growth 2001-2012(%)



Extreme Poverty

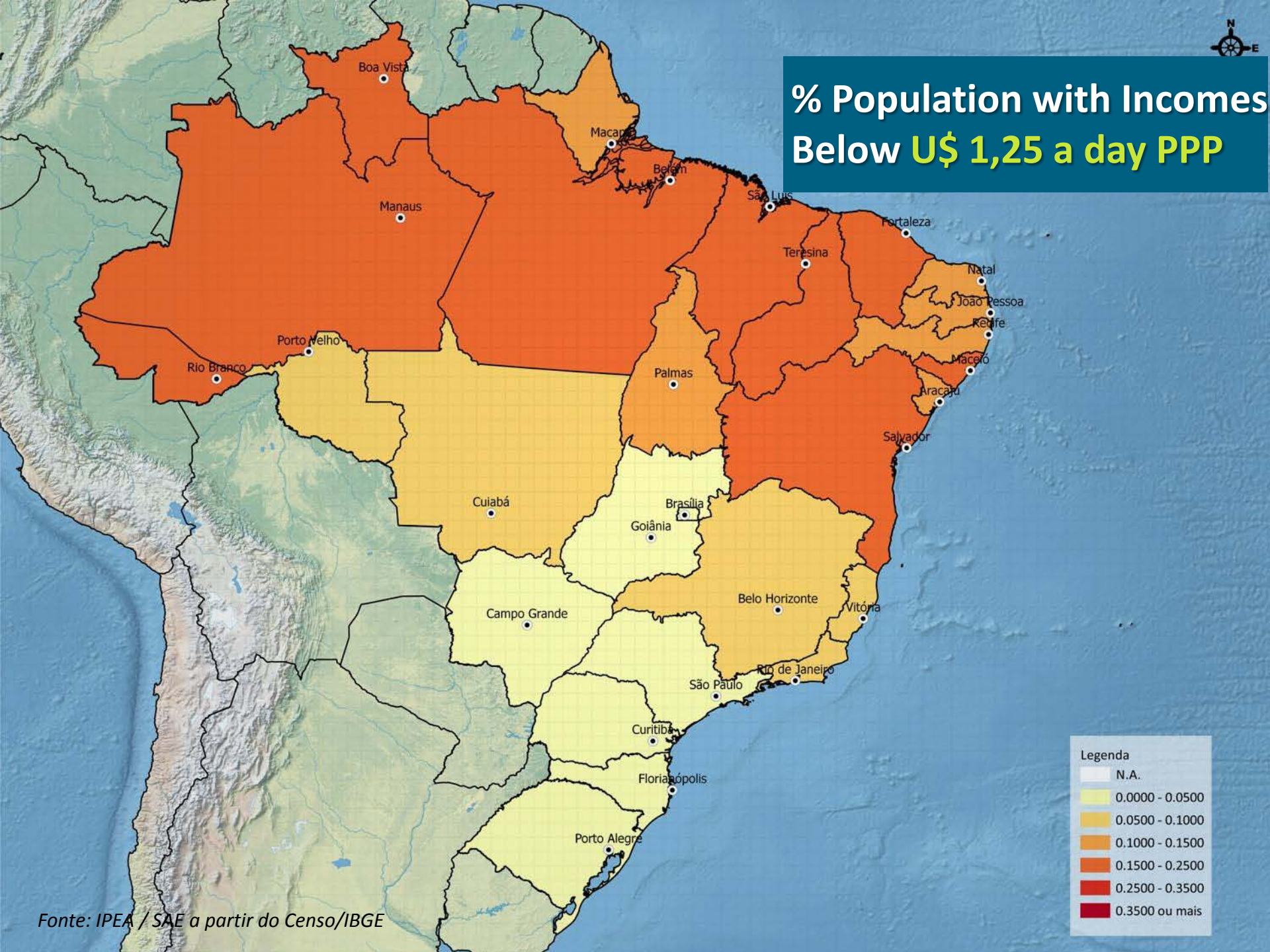
% Population with Incomes
Below **U\$ 1,25 a day PPP**



Fonte: IPEA / SAE a partir do Censo/IBGE



% Population with Incomes Below **U\$ 1,25 a day PPP**



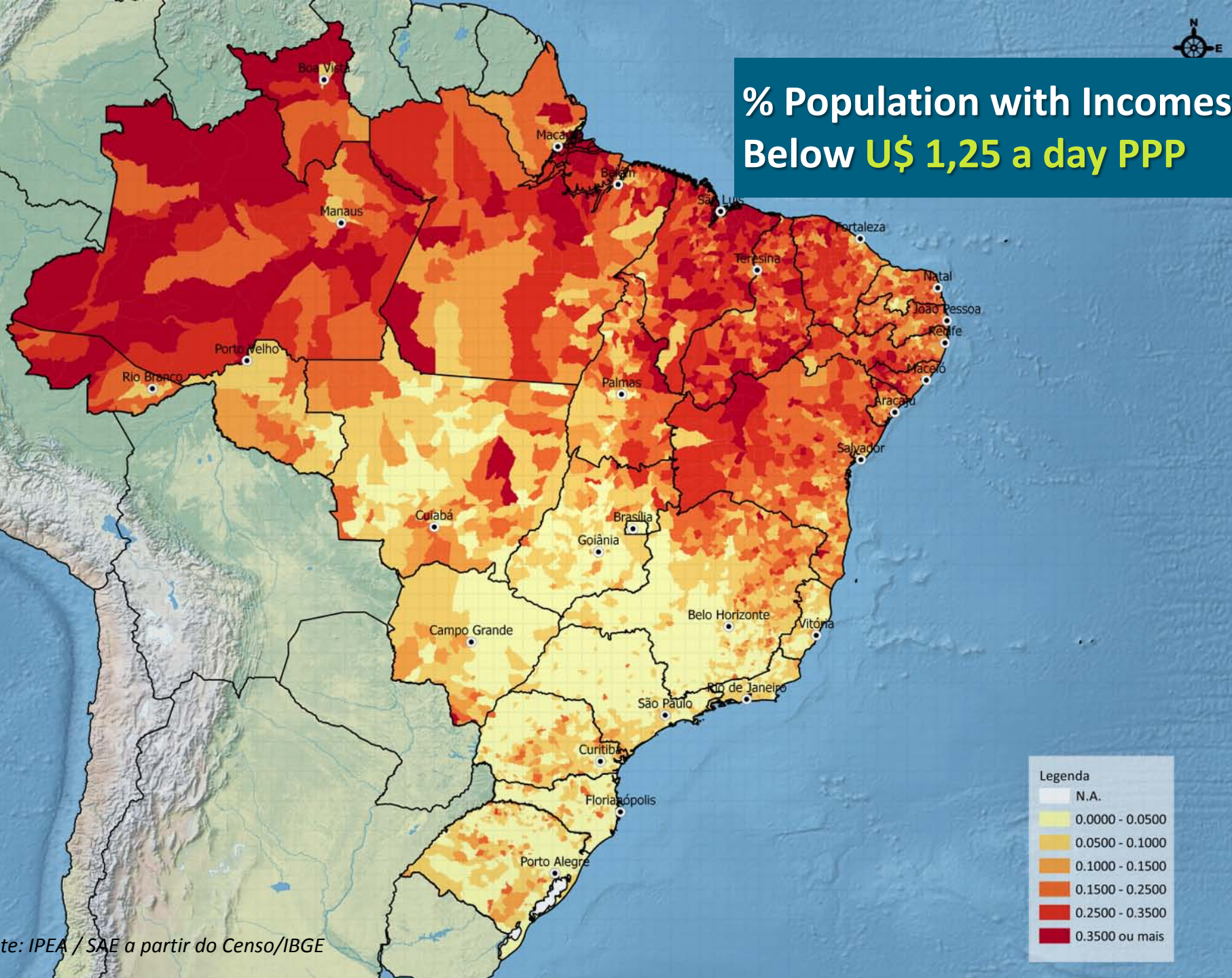
Legenda

White	N.A.
Yellow	0.0000 - 0.0500
Light Orange	0.0500 - 0.1000
Orange	0.1000 - 0.1500
Dark Orange	0.1500 - 0.2500
Red-Orange	0.2500 - 0.3500
Dark Red	0.3500 ou mais

Fonte: IPEA / SAE a partir do Censo/IBGE



% Population with Incomes Below **U\$ 1,25 a day PPP**



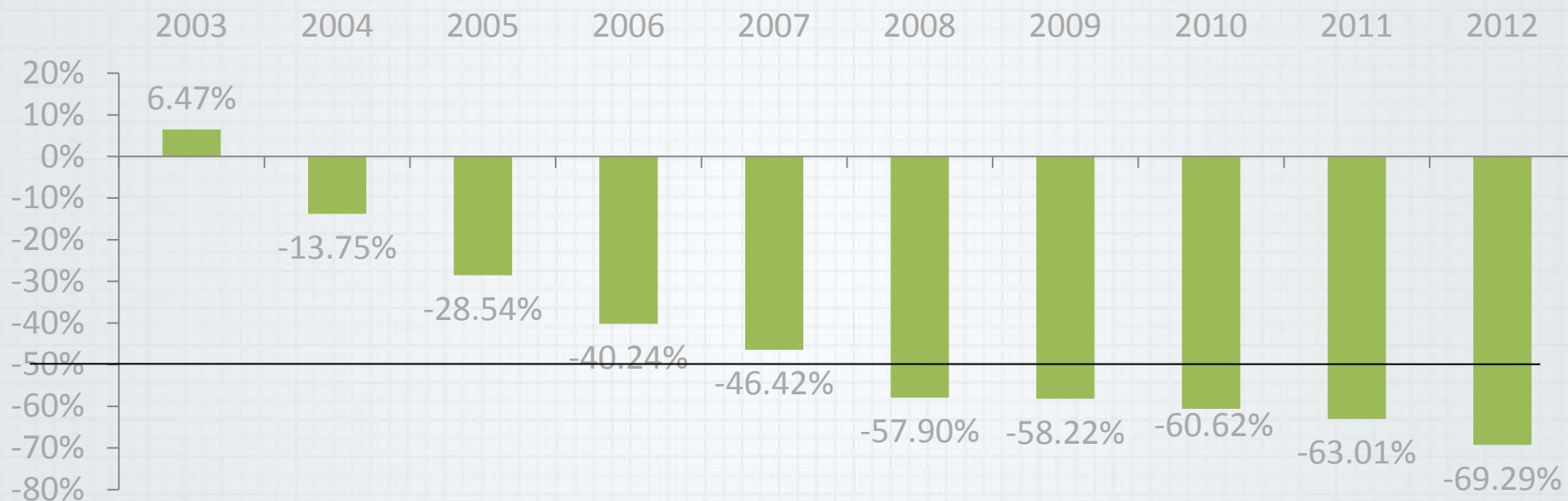
Fonte: IPEA / SAE a partir do Censo/IBGE

Poverty

Millennium development goal

Poverty Accumulated Variation since 2002

U\$S 1,25 PPP - Day



What best explains inclusion ? Growth or Equality ?

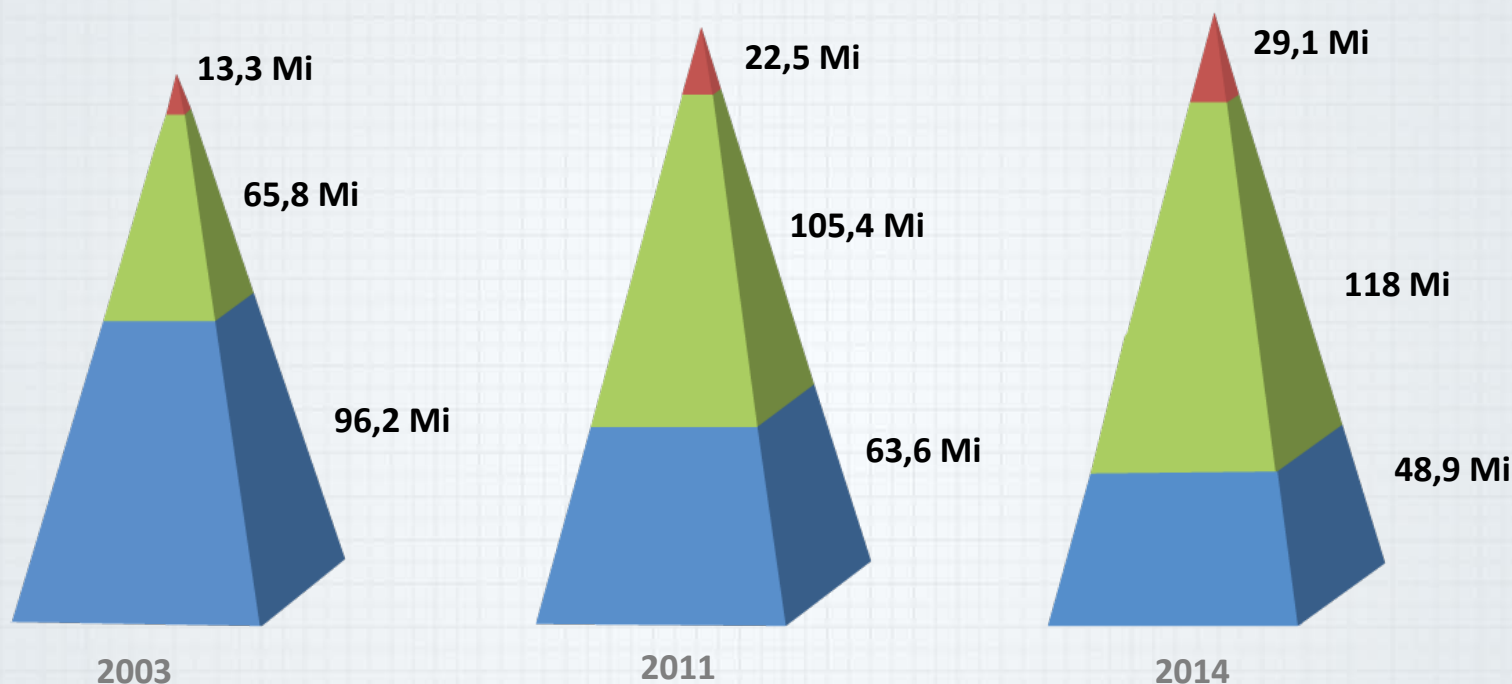
*Dynamic breaking down
of poverty Changes in
Brazil, 2002-2012*

Middle Path

Component that Explains	Proportion of extreme poor % of total fall
Income growth	50,5%
Inequality fall	49,5%
Total	100

Population Pyramid and Economic Classes 2003, 2011 e 2014

- Class AB
- Class C
- Class DE

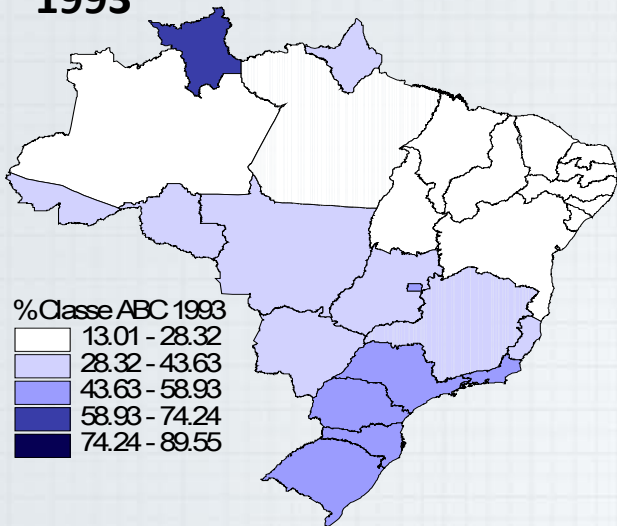


Changes in time: **Class C** + 40 million people 2003-11 and + 13 million 2012-14.
Classes AB + 9,2 million people from 2003 to 2011 and + 7,7 million from 2012 to 2014.

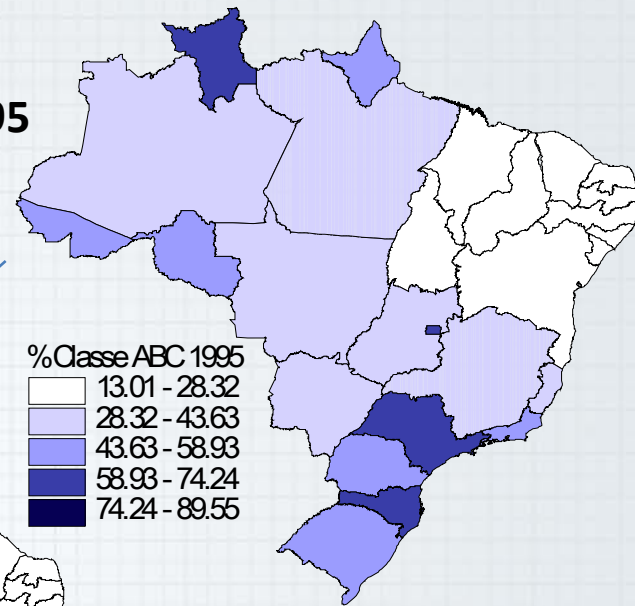
The **AB** population will grow proportionally + than **C** : 29,3% and 11,9%, respectively.
We will talk more and more in the future about a **new AB class**, just as we've been talking, until now, about a **new C class**.

Evolution of the Population Share of Classes ABC between Brazilian States 1993, 1995, 2003, 2009 e 2014

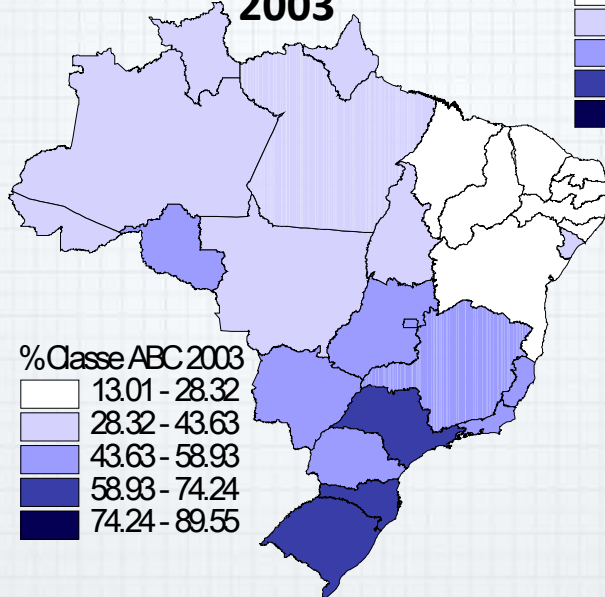
1993



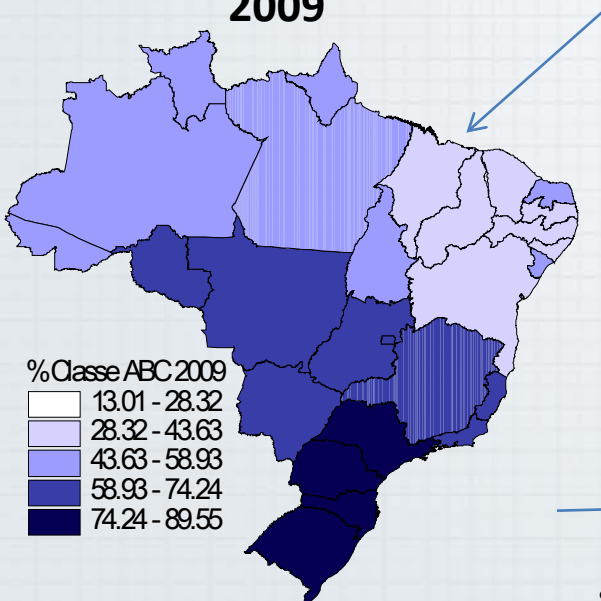
1995



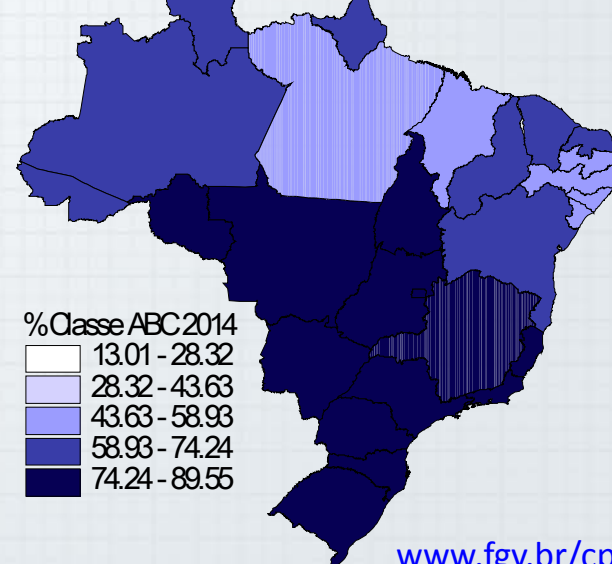
2003



2009



2014

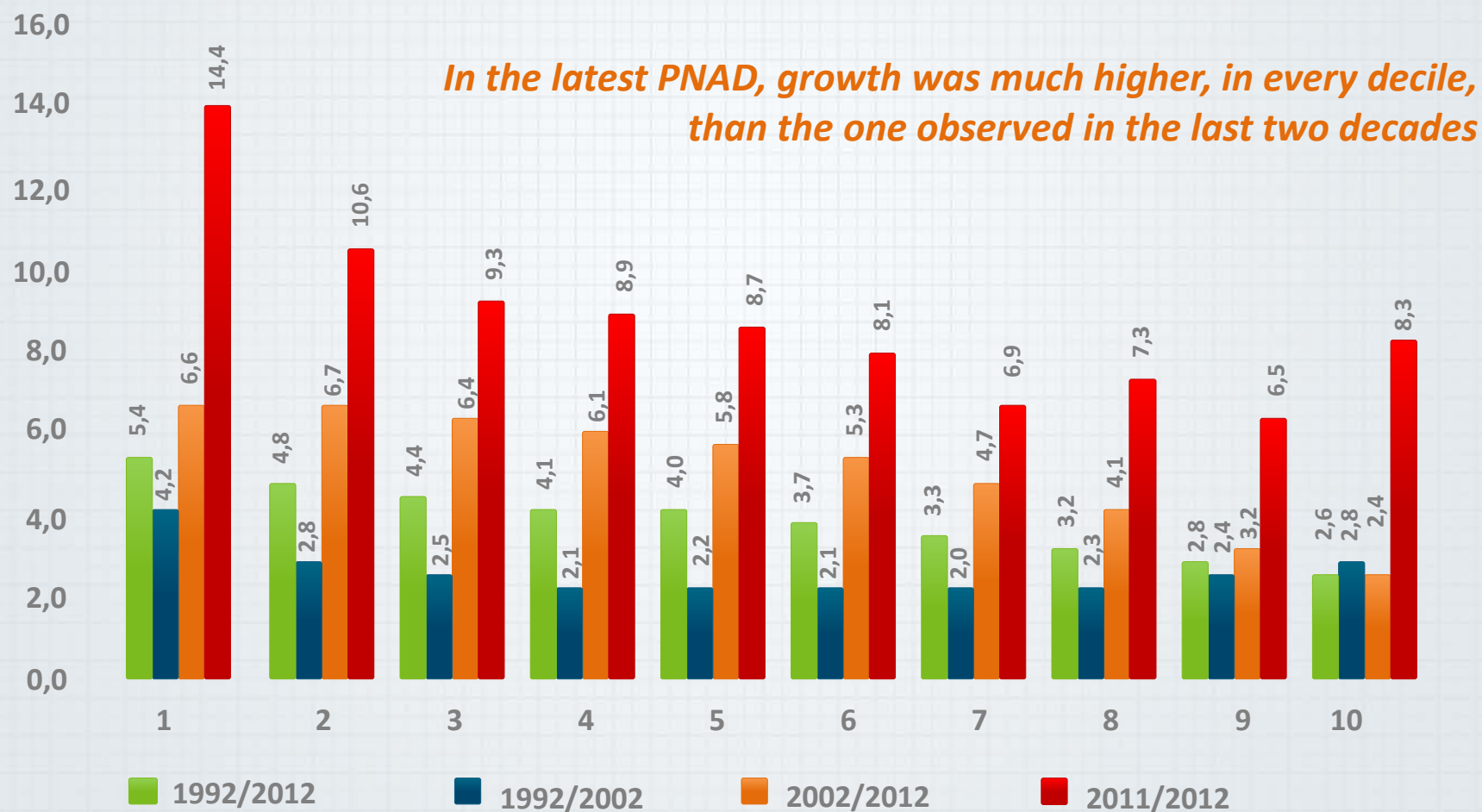


Source: CPS/FGV from PNAD/IBGE microdata

www.fgv.br/cps

Mean Annual Variation by Per Capita Income Deciles - Brazil

Income annual growth rates (%) - 1992-2012 & Sub-Periods



Four Goals of Inclusive Sustainable Development

Prosperity (Growth)

Summarizes changes in mean income/consumption streams (not only GDP and National Accounts but also Household Surveys data).

1

Equity

Looking at the distribution of income flows and asset stocks.

2

Sustainability

Measure available resources and the risk associated with achieved living standards.

3

Perceptions (Happiness)

The last dimension is subjective well-being.

4

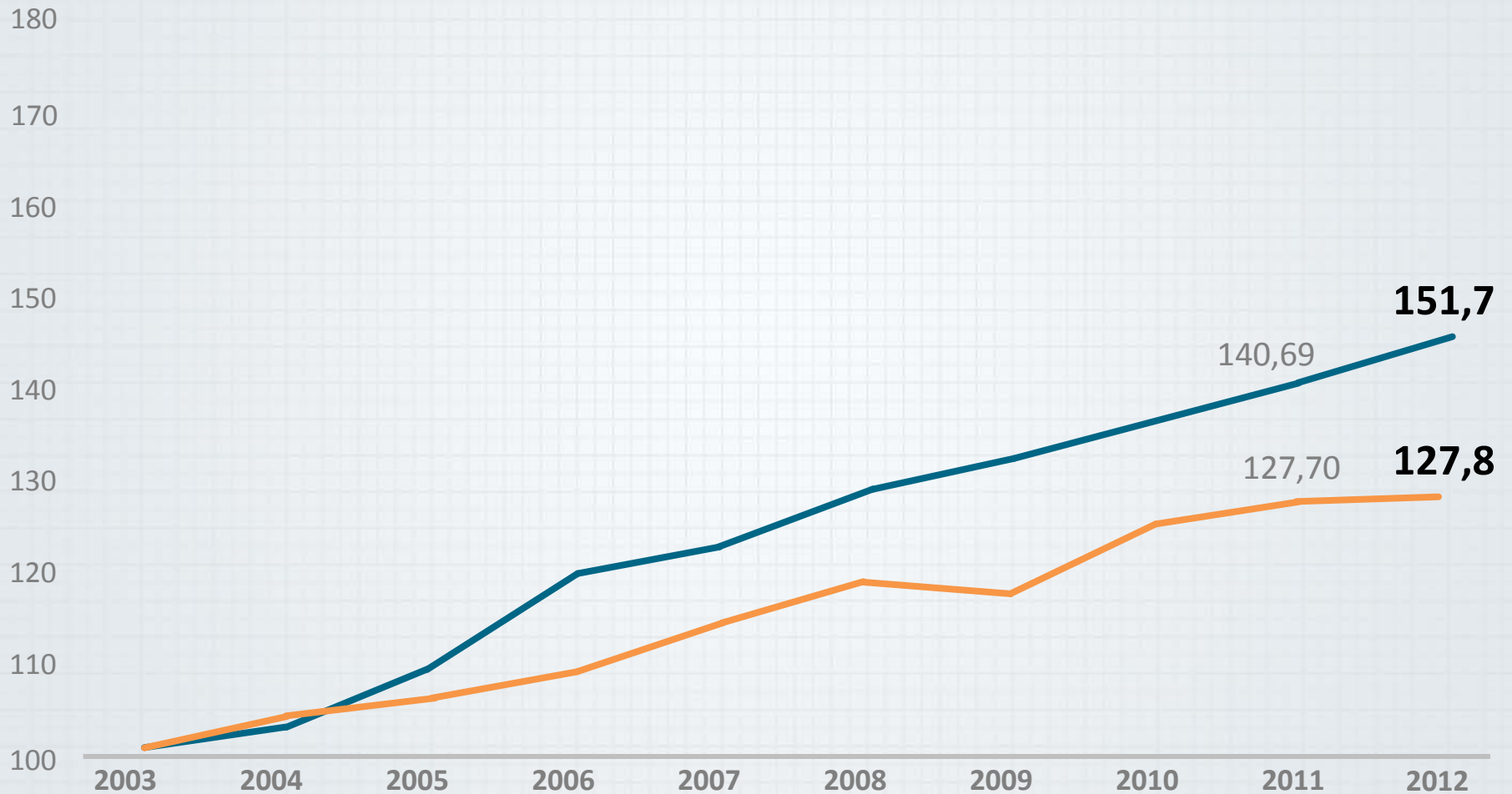
Growth & Inequality



How much did Brazil grow?

GDP X Mean NHHS

Real Per Capita 2003=100

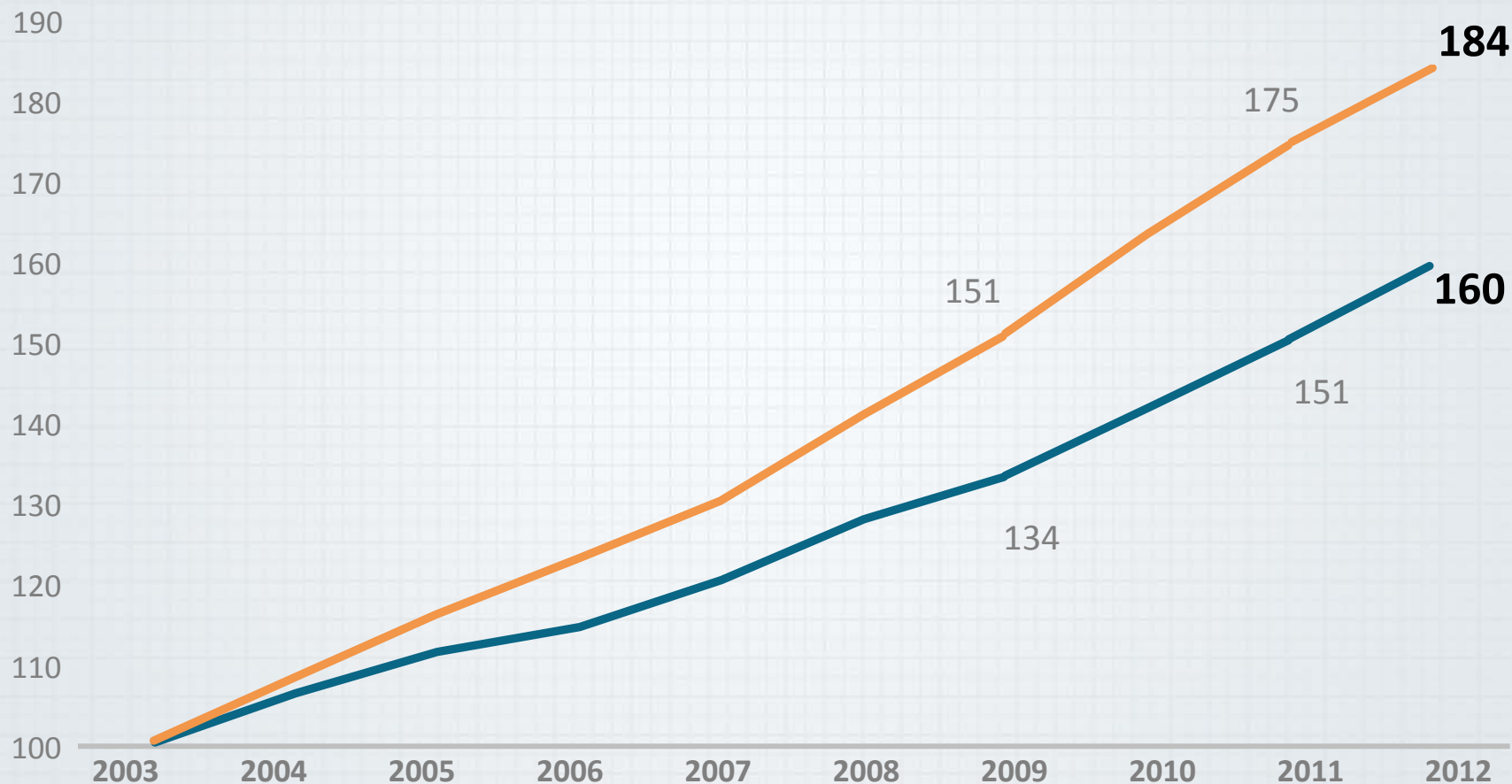


Source: IPEA, from microdata by PNAD/IBGE

How much did Brazil grow?

GDP Implicit Deflator PIB X CPI Deflator (INPC)

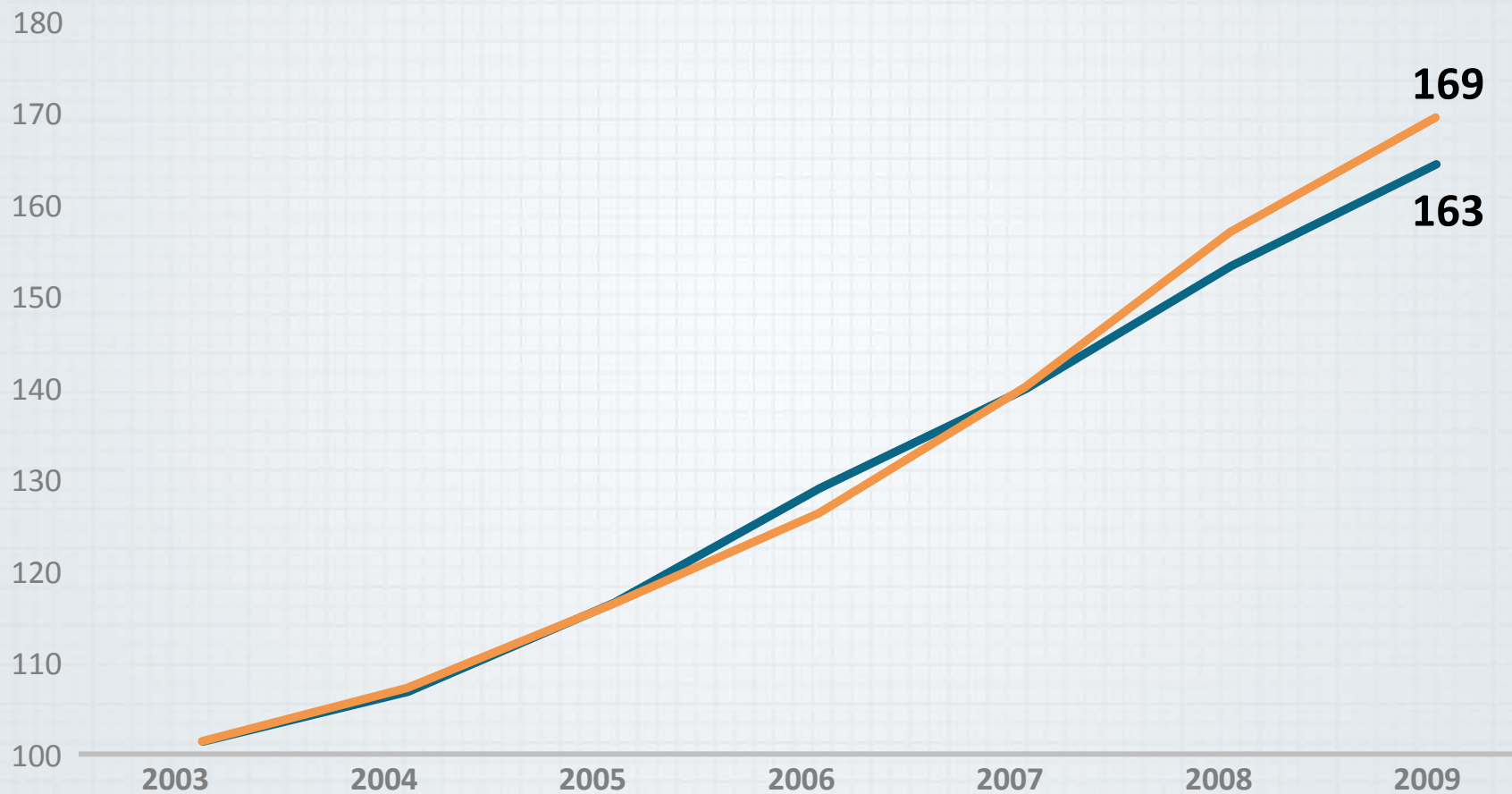
Real Per Capita 2003 = 100



How much did Brazil grow?

*Nominal Labor Income (National Accounts) X
Nominal Labor Income (National HHS PNAD)*

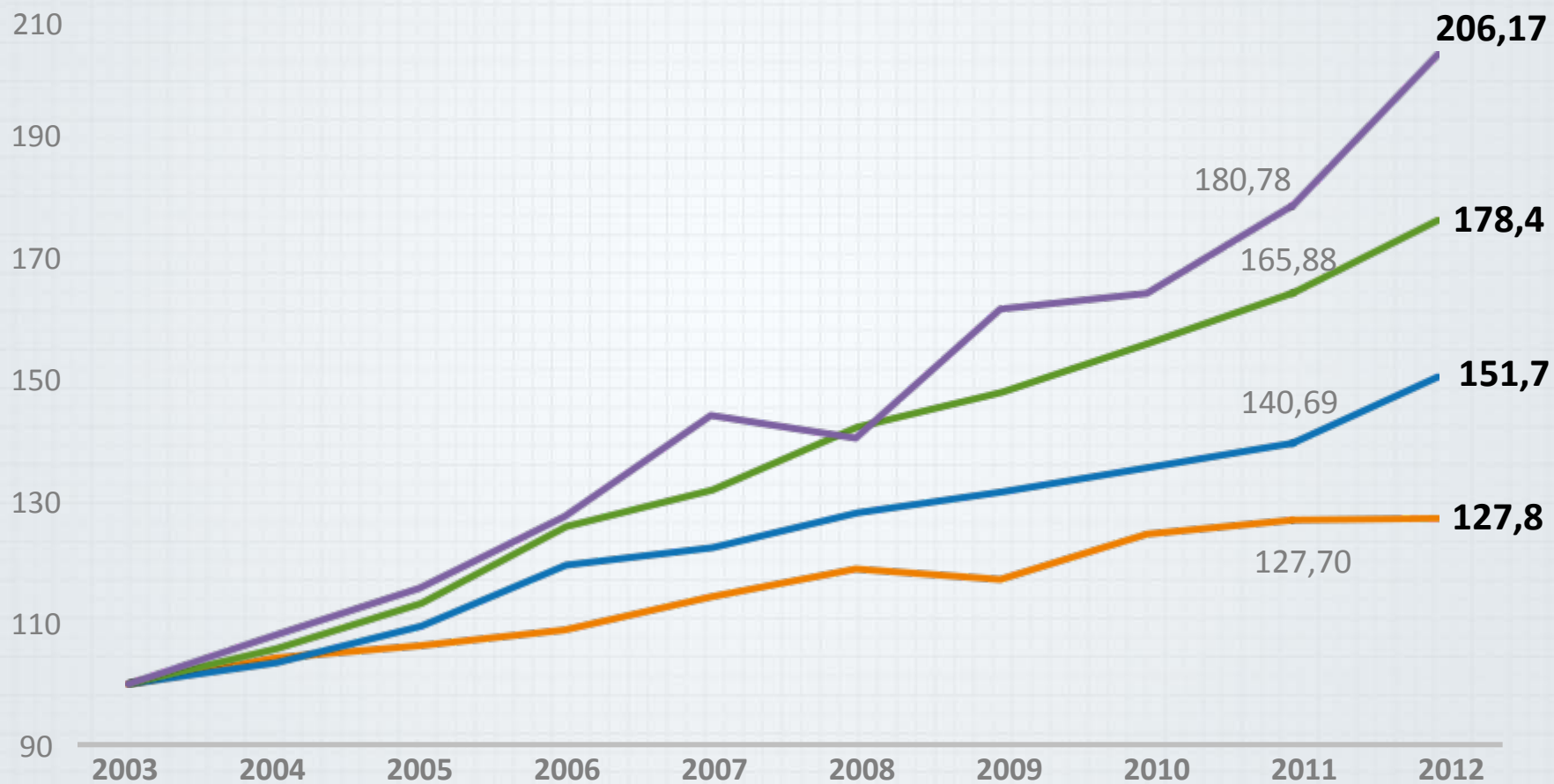
Real Per Capita 2003 = 100



How much did Brazil grow?

GDP X Mean NHHS X Median NHHS X 10% Poorest

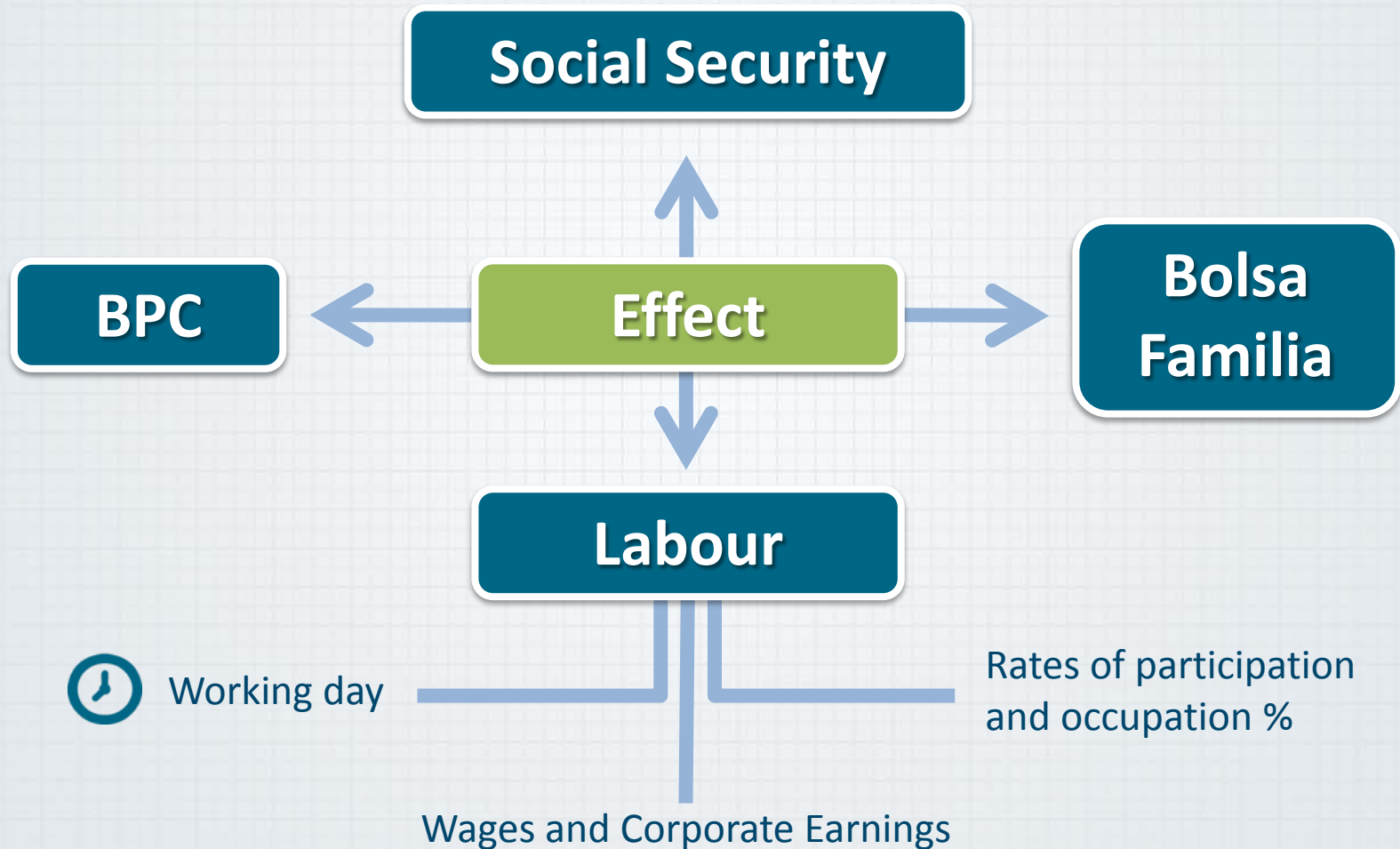
Real Per Capita 2003 = 100



Sustainability



Determinants of Variations in Income Inequality 2001 to 2010



Which source of income explains the growth and the fall of inequality from 2002 to 2012?

Deconstruction in the Changes in Income

Sources of Income	Fall of Gini (Social Benefit)	Growth in Mean Income (Fiscal Cost)	Social Benefit per Fiscal Cost Unit R\$
	Relative Contribution (%)		
Labor	54,9	76,41	
Bolsa Familia	12,2	2,35	5,2
Social Security above Minimum	11,4	8,53	1,07
Social Security = Minimum Wage	9,4	10,88	
Other sources of income	6,5	-0,1	
Benefício de Prestação Continuada (BPC)	5,4	2	2,7
Δ Total		100	

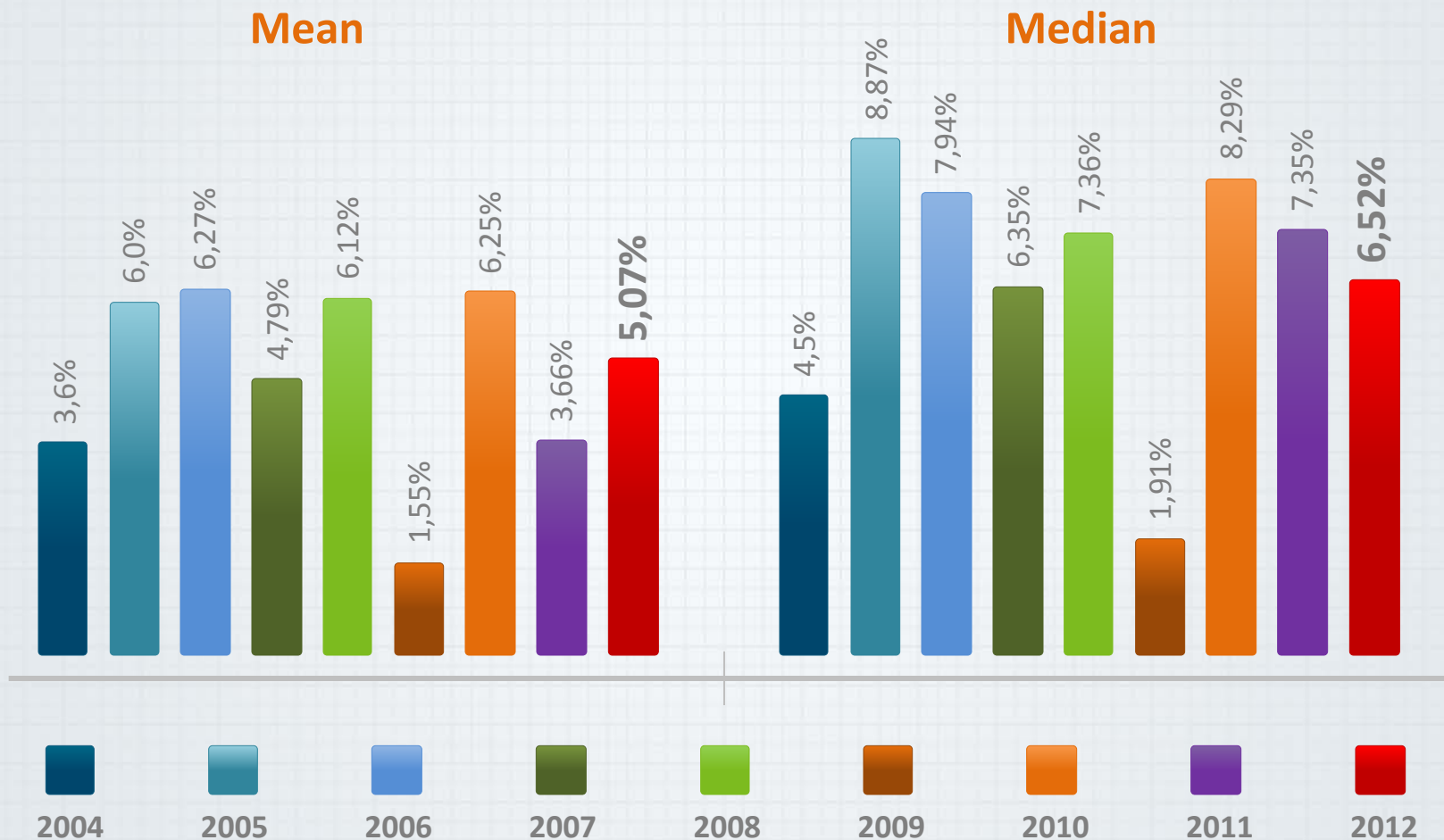
Every additional real spent with Bolsa Familia impacts inequality 369% e 86% more than in social security and BPC, respectively.

In terms of Welfare, what is the most effective combination of social policies ?

Per Capita Earnings Annual Variation

Six Main Metropolitan Regions

12 months



* Per Capita Household Income 15 a 65 Anos

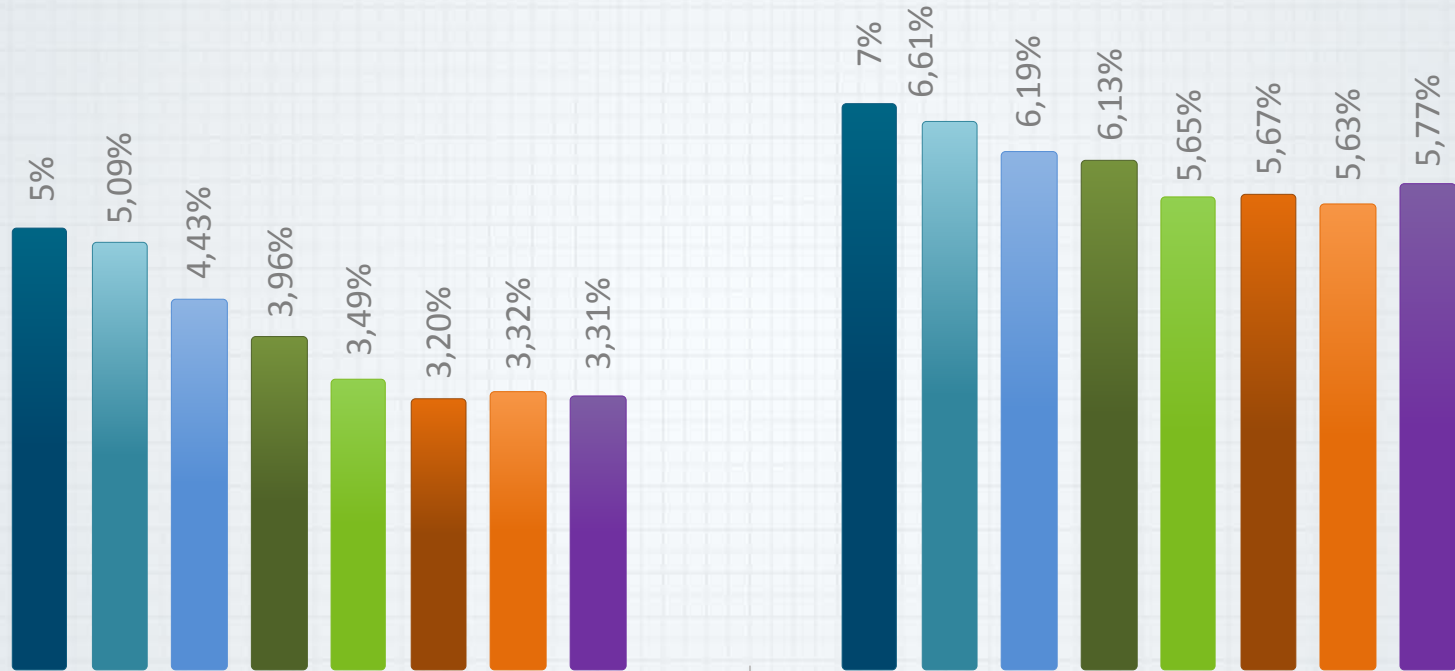
**Aug 2012 to Jul 2013 x Aug 2011 to Jul 2012

Per Capita Earnings 12 Month Variation

How about 2013?

Mean

Median



Feb to
Jan/13

Mar to
Feb/13

Apr to
Mar/13

May to
Apr/13

Jun to
May/13

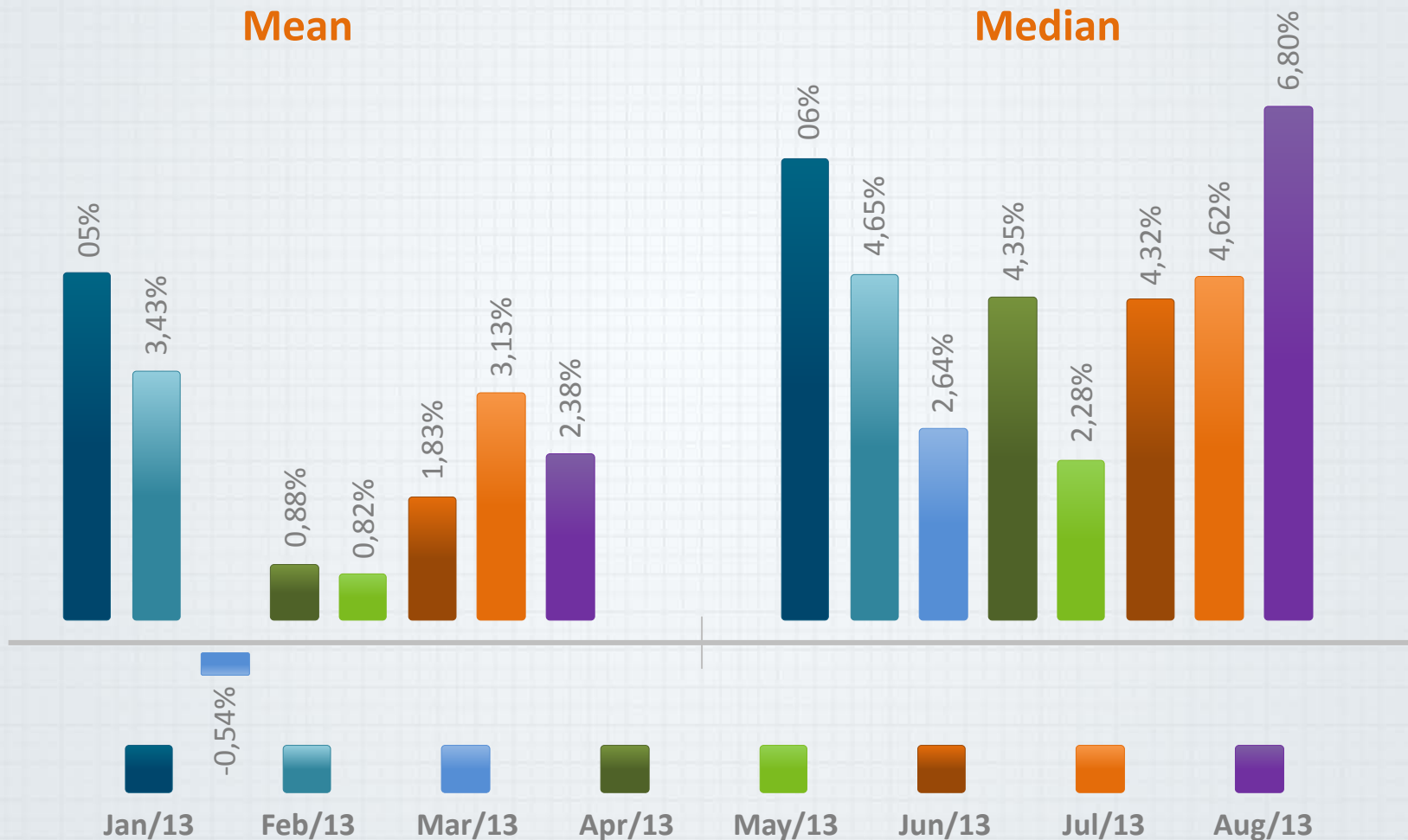
Jul to
Jun/13

Aug to
Jul/13

Sep to
Aug/13

How about 2013? Income 12 months Variation

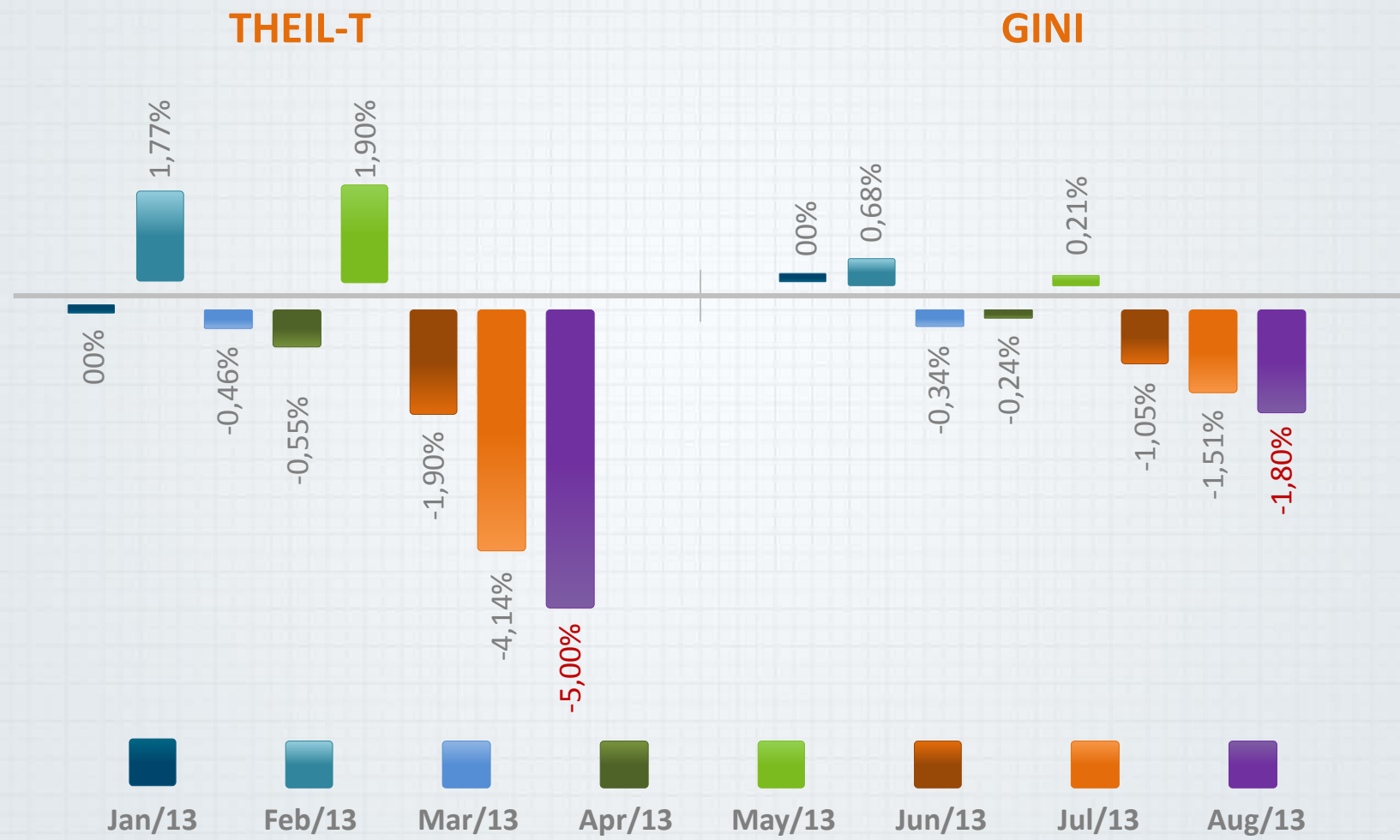
*Month w.r.t. same month in
the previous year*



Per capita Earnings Inequality

After a halt has accelerated its fall

Month w.r.t. same month in the previous year



Source : IPEA , from microdata of PNAD/IBGE

*Household Wage Per Capita, from 15 to 65 Years

Is Inequality still falling?

GINI

Gini Inequality index on Per Capita Labor Earnings , March 2002 to August 2013



Income Summary

Household Sources of Income *per capita* grew:
12 Months Between 2012 and 2013



4,06%

Income *per capita*
from **Social Security**
Up to July 2013

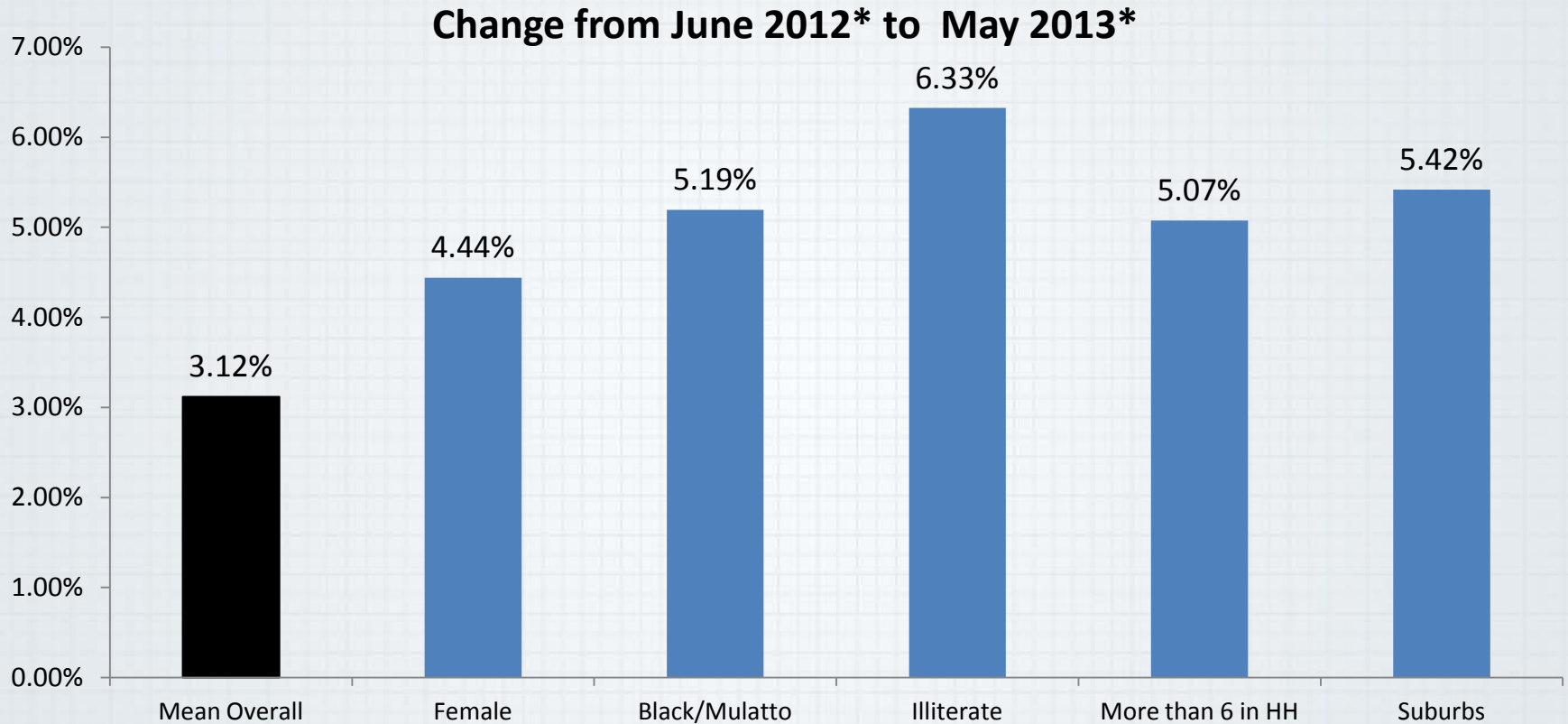
13,1%

Income from
Bolsa Família
Up to August 2013

Source: IPEA, from microdata by PNAD, PME and Contas Nacionais/IBGE

Horizontal Inclusion

Growth Rate of Individual Income Amongst Traditionally Excluded Groups



Sustainability ?

Fairness Effect

Fall of Education Return

*Income Per Capita Equation
PME 2002 to 2013 May**

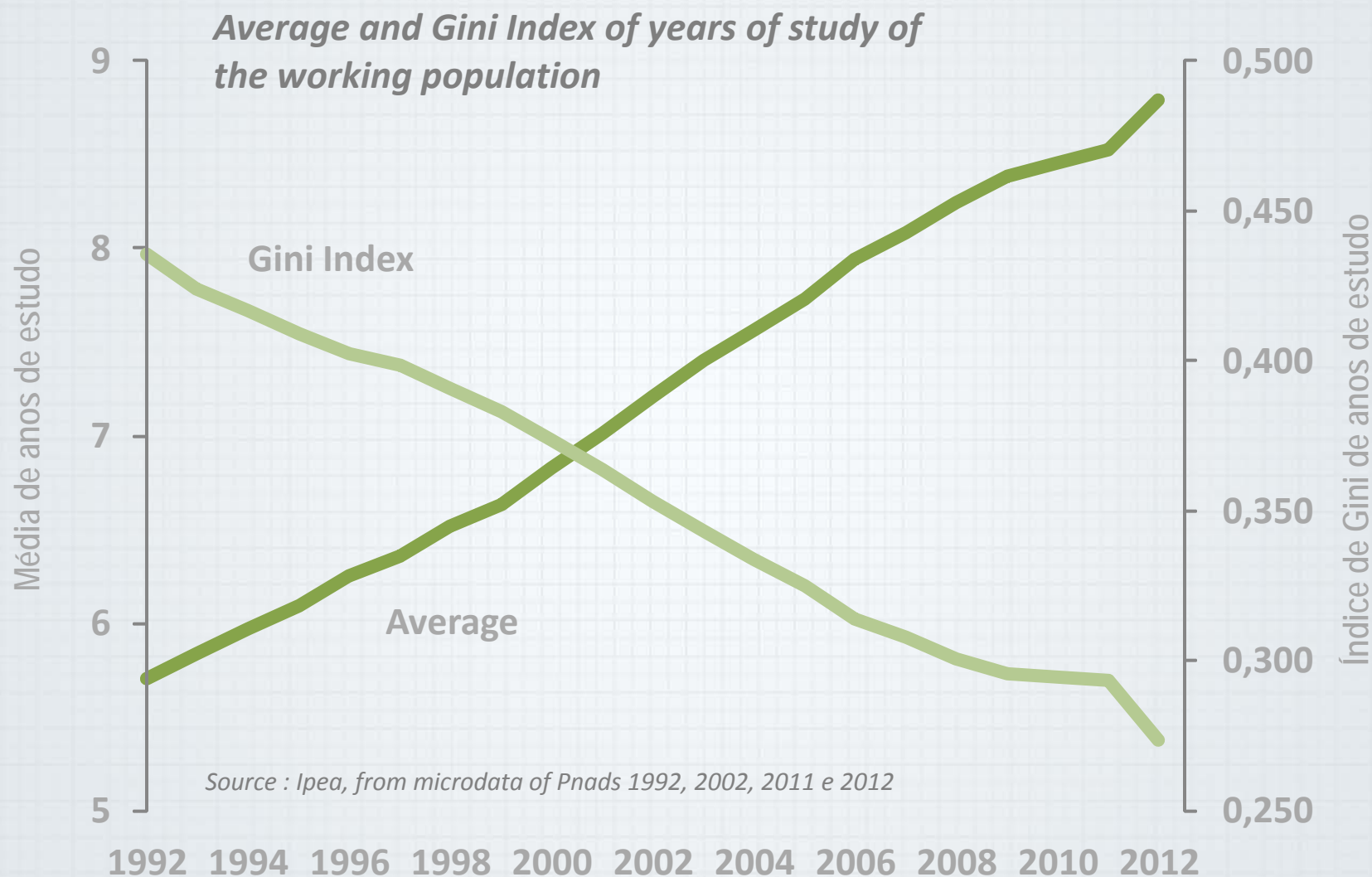
Interactive dummy variable Year – 11 years or more of study



*Variables : gender, age, colour, metropolitan region, number of residents,
position within the family, year and educational level.*

Education

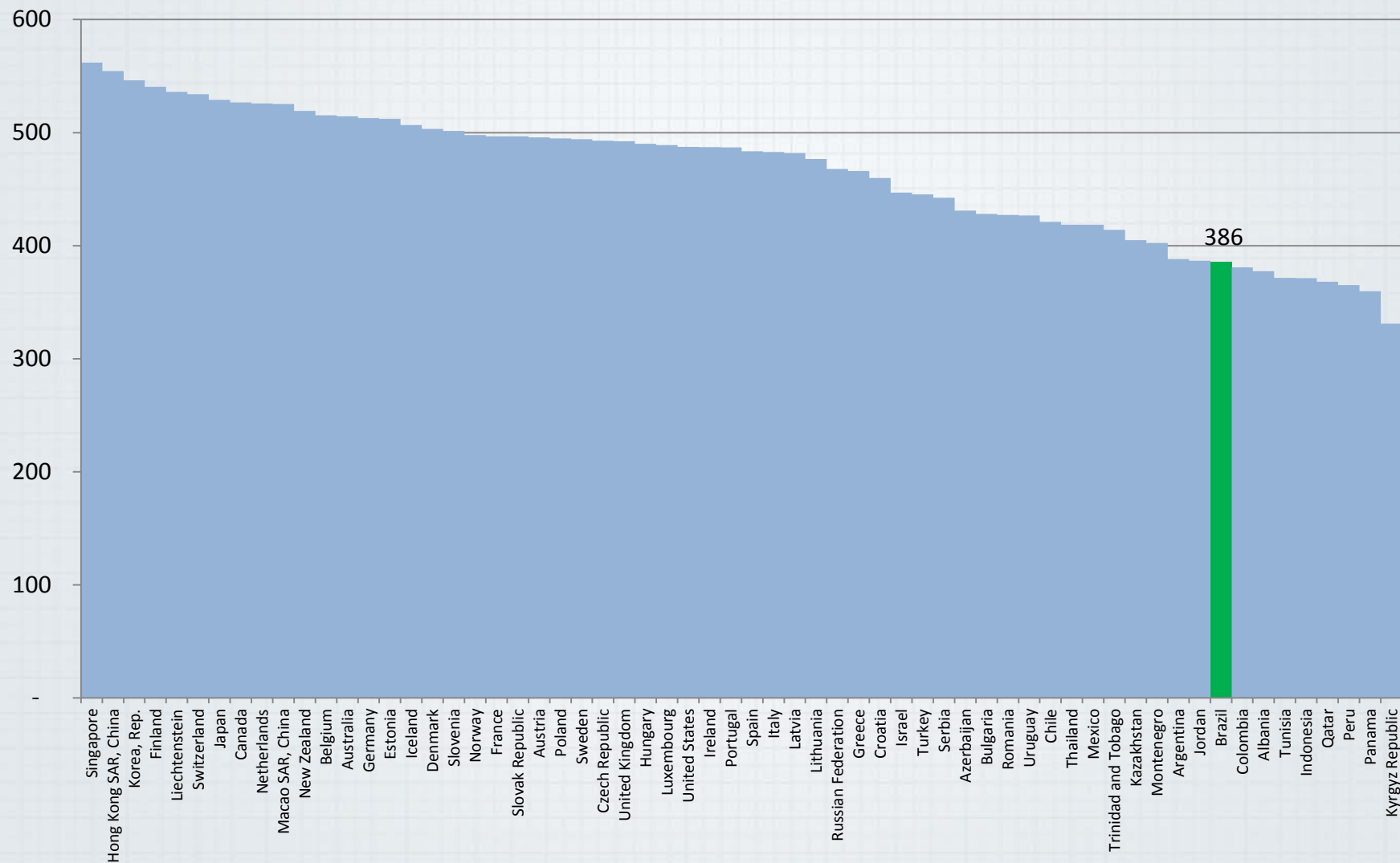
AVERAGE and GINI of Years of Schooling



Despite stagnation of illiteracy rates in 2012, there was an improvement in the mean number of years of study, with a reduction of disparities superior to that of every single year in the series

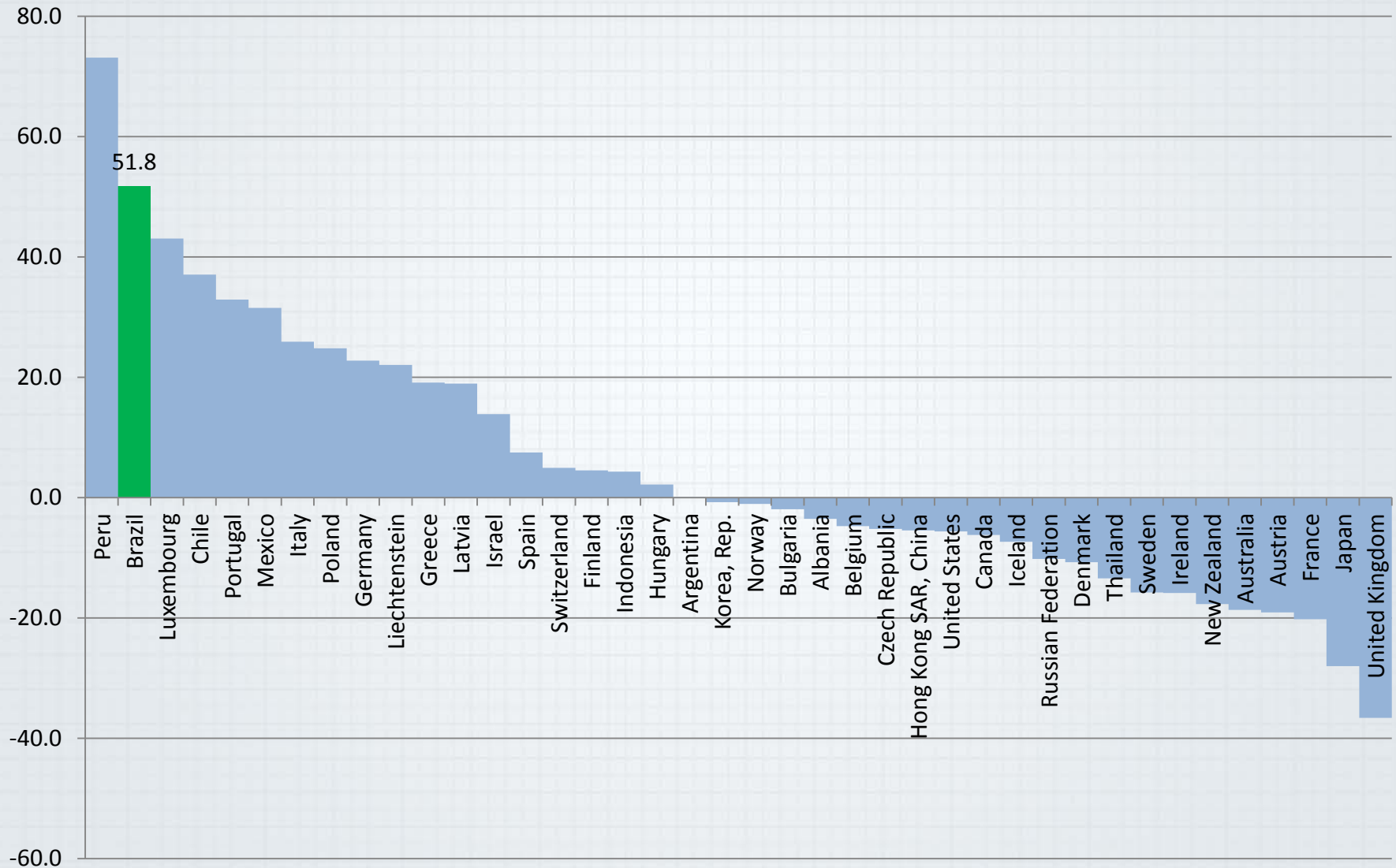
Maths 2009

Quality of education: ugly picture...



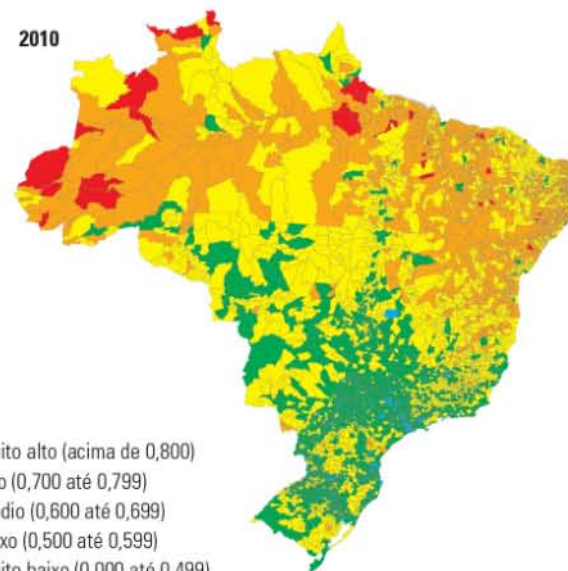
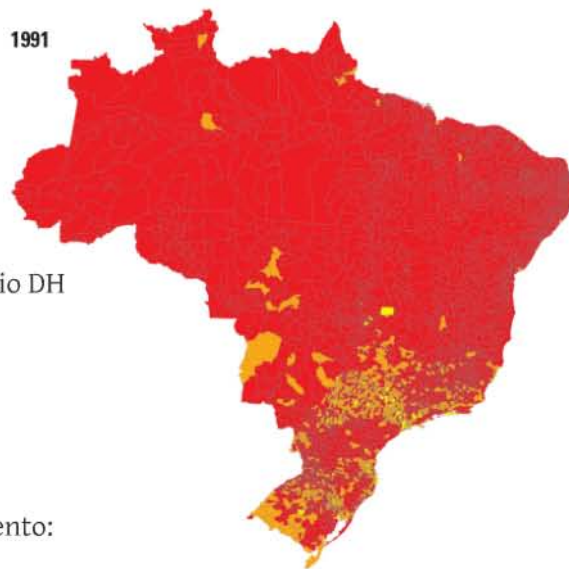
Maths: Growth 2000-2009

... Beautiful movie.



Human Development Index by Municipality – IPEA, UNDP and FJP

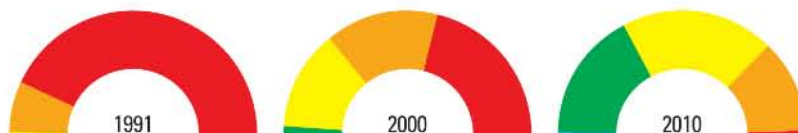
- Grande maioria dos municípios (74%): Alto e Médio DH
- Apenas 25% dos municípios: Baixo e Muito Baixo
- S (65%) e SE (52%) Alto Desenvolvimento
- CO (57%) e N (50%) Médio Desenvolvimento
- NE (61%) e N (40%) Baixo Desenvolvimento
- Nenhum município S, SE e CO: em Muito Baixo
- Nenhum município NE e N: em Muito Alto.
- Evolução – municípios Muito Baixo Desenvolvimento:
 - 1991: 85,8%;
 - 2010: 0,6%.



Desenvolvimento Humano	1991		2000		2010	
	Nº de municípios	%	Nº de municípios	%	Nº de municípios	%
Muito alto	0	0,0	1	0,0	44	0,8
Alto	0	0,0	133	2,4	1.889	33,9
Médio	43	0,8	1.451	26,1	2.233	40,1
Baixo	745	13,4	1.651	29,7	1.367	24,6
Muito baixo	4.777	85,8	2.329	41,8	32	0,6

Desenvolvimento Humano

- Muito alto
- Alto
- Médio
- Baixo
- Muito baixo

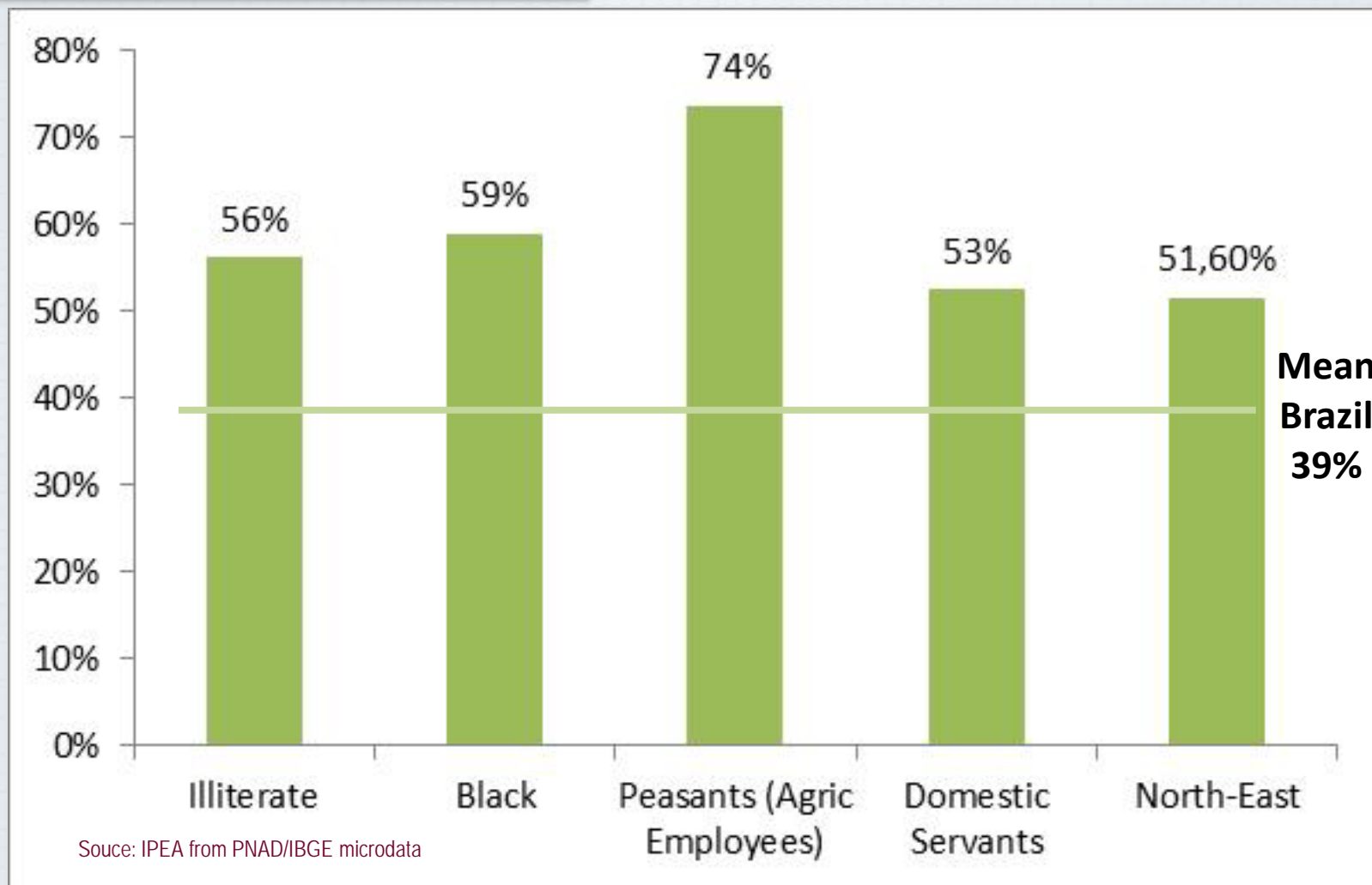


- Muito alto (acima de 0,800)
- Alto (0,700 até 0,799)
- Médio (0,600 até 0,699)
- Baixo (0,500 até 0,599)
- Muito baixo (0,000 até 0,499)

Fonte: Ipea/PNUD/FJP a partir dos microdados do Censo Demográfico/IBGE.

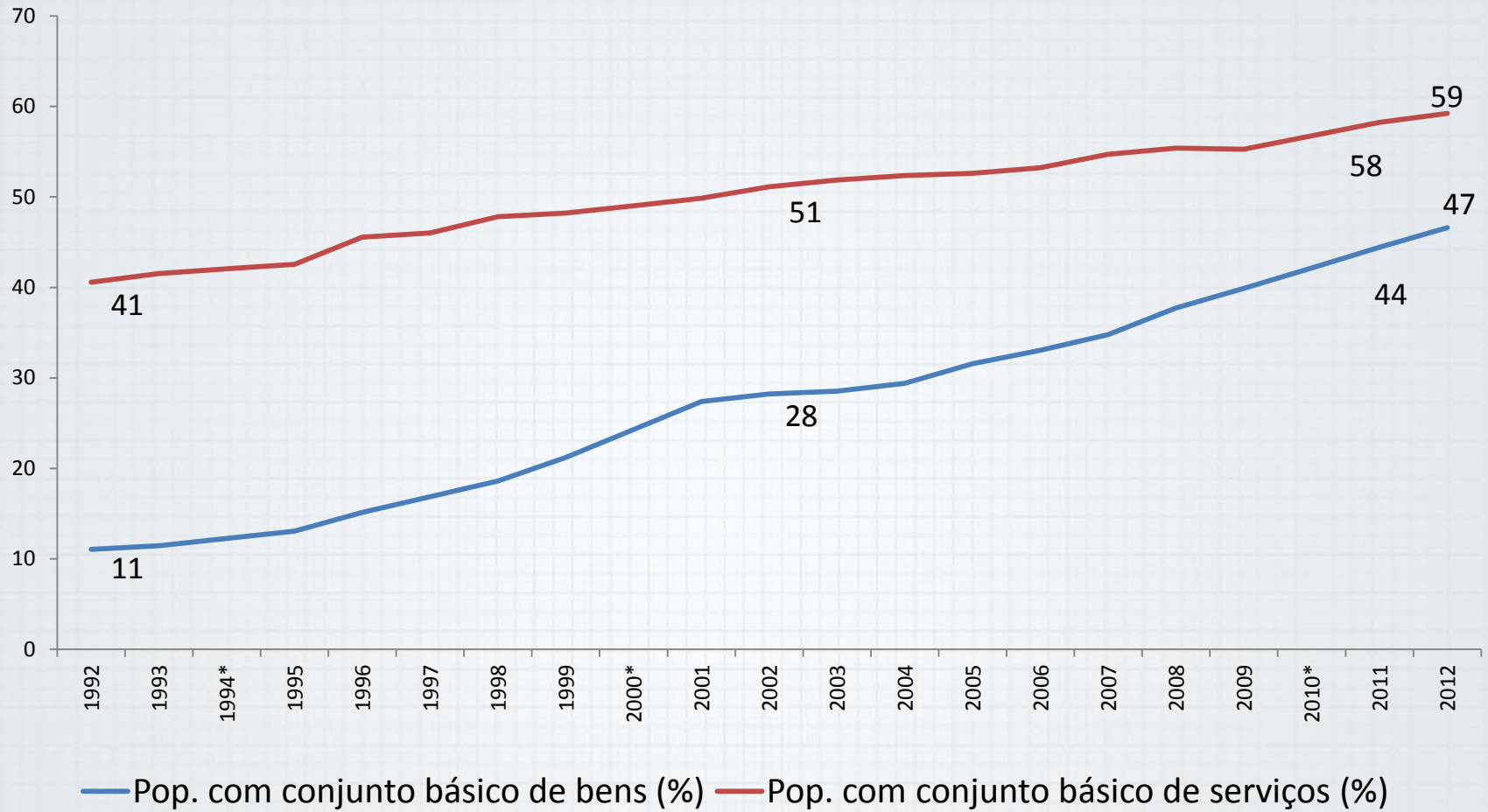
Residential Capital Effect

2003 a 2012



The inequality of residential capital fell 25% against a fall of 11% in the case per capita income (Gini)

Coverage of Basic Goods and Services



Goods in households grew + than public services

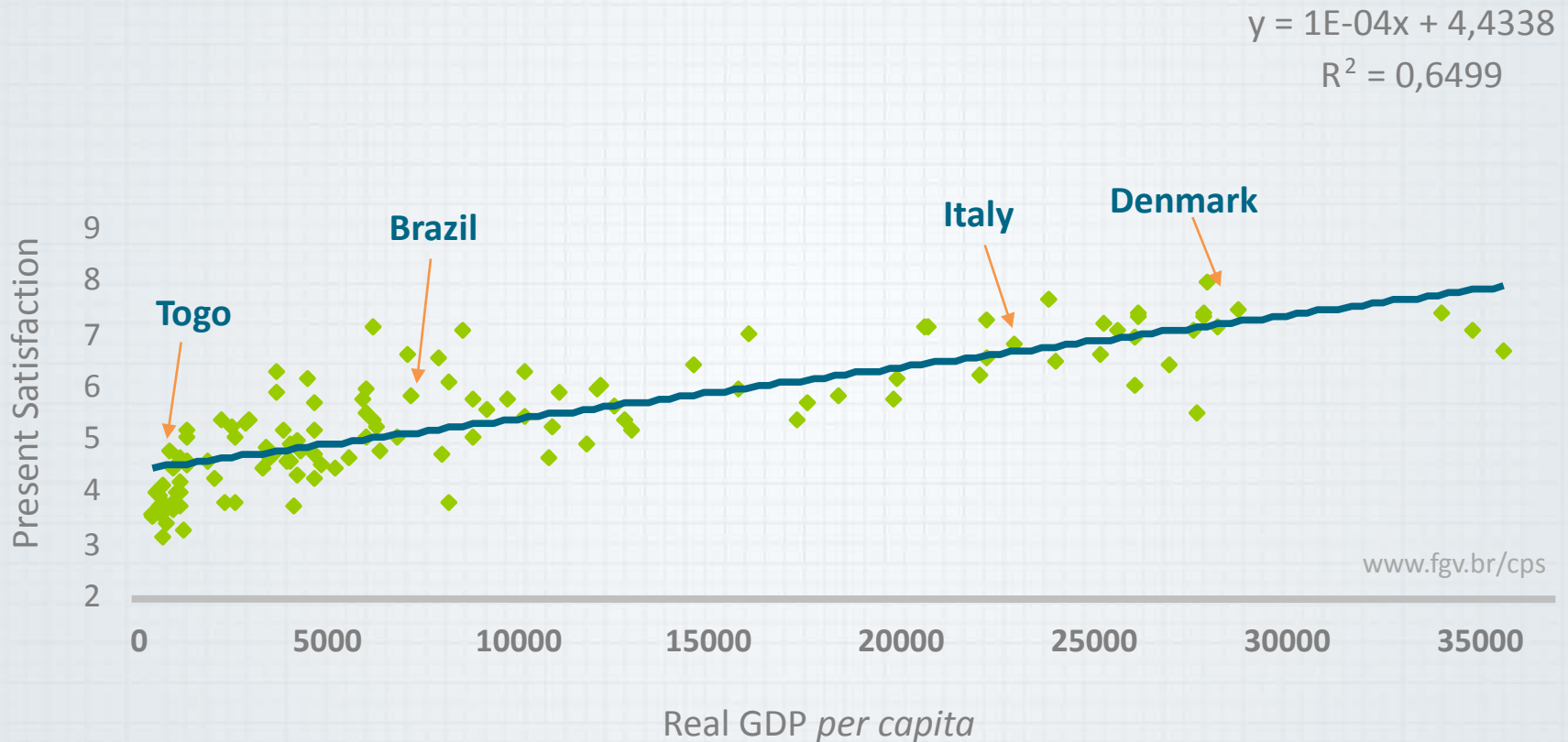
Happiness



Does Money bring Happiness?

Life Satisfaction X GDP Per Capita PPP

Present Satisfaction x Real GDP *per capita*



www.fgv.br/cps

Present Happiness

Life Satisfaction Today

2006 to 2012

	2012		2011		2010		2009		2008		2007		2006		Change 2010-12/ 2006-08	Overall Mean				
	level	rank	level	rank	level	rank	level	rank	level	rank	level	rank	level	rank						
<i>Portugal</i>	4,99	82	5,22	75	4,87	80	5,32	59	5,72	37			5,41	51	-9,67%	5,22				
<i>Italy</i>	5,84	49	6,06	41	6,35	31	6,33	25	6,78	21	6,57	18	6,85	19	-9,65%	6,33				
<i>Greece</i>	5,10	75	5,37	68	5,84	47	6,04	33			6,65	16	6,01	36	-14,11%	5,73				
<i>Spain</i>	6,29	31	6,52	33	6,19	36	6,20	29	7,29	8	6,99	11	7,15	12	-11,34%	6,62				
	Brasil April 2013 = 6,81*						August 2013 = 6,78*						October 2013 = 7,00*							
<i>Brazil</i>	6,93	18	7,04	16	6,84	20	7,00	11	6,69	23	6,32	24	6,64	21	5,90%	6,77				
<i>Russia</i>	5,62	56	5,39	66	5,38	64	5,16	69	5,62	40	5,22	51	4,96	73	3,73%	5,37				
<i>China</i>	5,09	76	5,04	79	4,65	92	4,45	93	4,85	76	4,86	66	4,56	95	3,57%	4,82				
<i>South Africa</i>	5,13	73	4,93	90	4,65	93	5,22	64	5,35	53	5,20	54	5,08	70	-5,89%	5,09				
<i>Latin America</i>																				
<i>Chile</i>	6,60	24	6,53	32	6,64	26	6,49	20	5,79	35	5,70	34	6,06	34	12,65%	6,30				
<i>Colombia</i>	6,37	28	6,46	35	6,41	29	6,27	28	6,17	30	6,14	27	6,02	35	4,96%	6,28				
<i>Mexico</i>	7,32	7	6,91	20	6,80	22	6,96	12	6,83	19	6,53	19	6,58	23	5,47%	6,91				
<i>Peru</i>	5,82	50	5,89	44	5,61	54	5,52	47	5,13	63	5,21	53	4,81	77	14,32%	5,48				

Brazil is 18th in the World Ranking of Happiness for 2012

Source: Gallup World Poll microdata

Four Goals of Inclusive Sustainable Development

- Emphasize **income and consumption viewed from families** (not just GDP *per capita*); **Did the Mean Grow ?**
- Measures for **Equality**; **Was Growth Inclusive?**
- **Subjective Well-Being**; **Did People feel it?**
- **Wealth Stocks** (Environment, Labor, Human Capital, Savings, Productivity);
Is It Sustainable?