Inequality in the Developing Giants (2021 Book)–
https://library.oapen.org/viewer/web/viewer.html?file=/bitstream/handle/20.500.12657/48448/9780198863960.pdf?sequence=1&isAllowed=y

What are the main drivers of Brazilian income distribution changes in the new millennium? – Brazil - Marcelo Neri FGV Social
https://www.cps.fgv.br/cps/bd/curso/Drivers_IncomeDistribution_Neri_Brazill_Updated_GMD.pdf

Objectives

Joint look at inequality, mean and social welfare. Measurement and analysis of the second moment of Brazilian income distribution without losing sight of the first moment.

The second general point in all contributions is to emphasize changes and not only levels of these dimensions in different points in time.

Measurement and causal issues that affect inequality should also have implications on the mean, and vice-versa. Furthermore, differences across time are a way to deal with measurement problems and to identify causality. It makes it easier to compare different data sets and periods of analysis

Overview (6 papers plus summing up) Focus Here on Top End

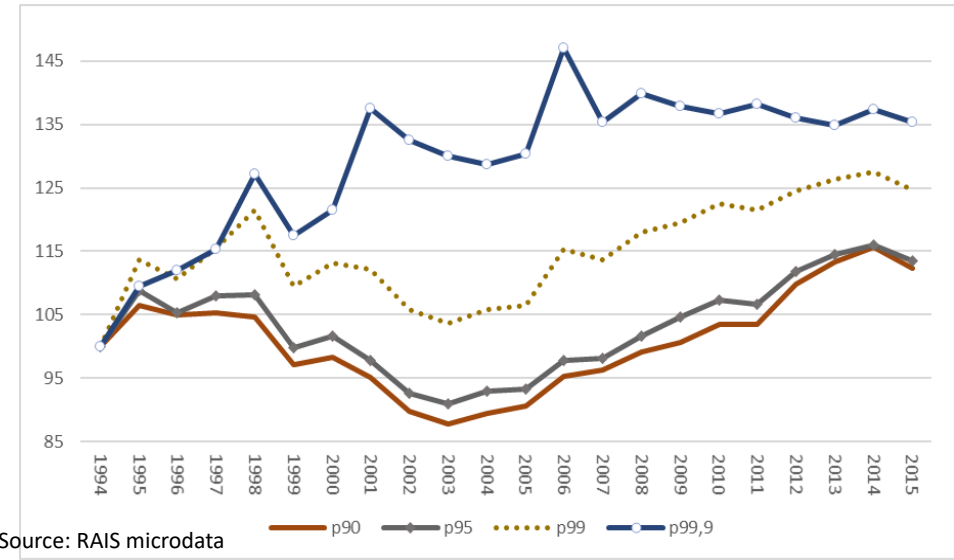| Inequality in Brazil by Topic, Technique, Dataset, Period of Time and Income Concept				
Inequality Topic	**Technique**	**Dataset Used**	**Period of Time**	**Income Concept**
1. Firms Effects	J-Divergence Decompositions	RAIS (matched employer-employee)	1994 – 2015	Individual Formal Earnings
2. Gender Gap	Regression Models	RAIS (matched employer-employee)	1994 – 2015	Individual Formal Earnings
3. Intergenerational Transmission of Education & Returns	Omitted Variables, Measurement Error and Markov Regressions	PNAD special supplements (household survey)	1996 & 2014	Individual Earnings
4. Missing Incomes Imputation	Combine Regressions and Stochastic Imputation	PNAD (household survey)	2001 - 2015	Per capita (All Sources)
5. Fiscal Policy Instruments	Microssimulation Dynamic	PNAD + POF + AR (income & expenditure surveys and adm e records)	2003 - 2015	Per capita (All Sources)
6. Top Incomes	Pareto Interpolation	PNAD + PIT (household survey and income tax records)	2007 - 2015	Individual (All Sources)

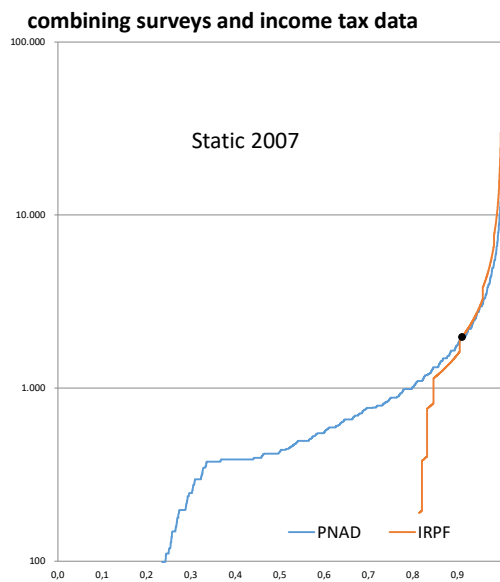# Formal Labour Market in Brazil: Cumulative Growth Curve 1994 – 2015

• Lower percentiles

Source: RAIS microdata
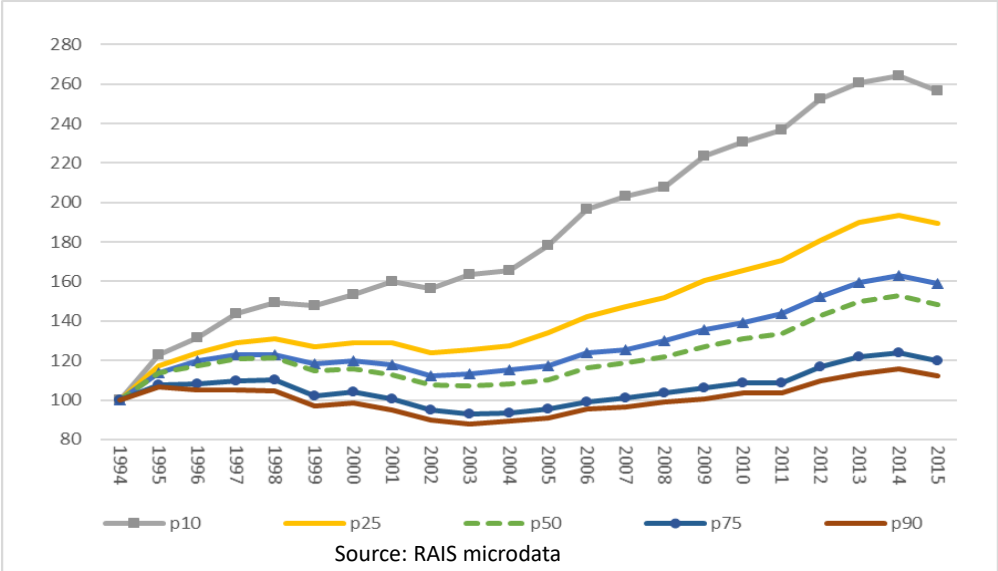
Formal Labour Market in Brazil:
Cumulative Growth Curve 1994 – 2015

• Top percentiles

Source: RAIS microdata
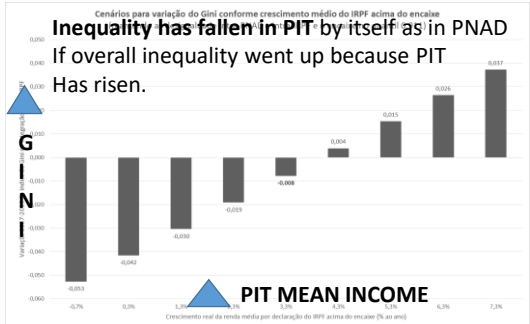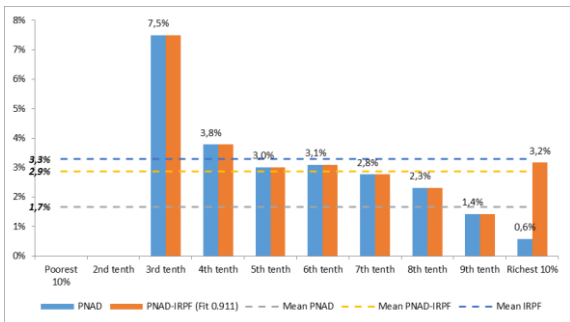
combining surveys and income tax data

Static 2007

PNAD   IRPF

If you declare you pay tax so we can use PIT (IRPF) for higher incomes.
How about exempt incomes?

Growth Rates 2007-15

Cenários para variação do Gini conforme crescimento médio do IRPF acima do encaixe

Inequality has fallen in PIT by itself as in PNAD
If overall inequality went up because PIT
Has risen.

PIT MEAN INCOME

Crescimento real da renda média por declaração do IRPF acima do encaixe (% ao ano)

Summarizing Top Incomes Results

combining surveys and income tax data

Mean income (constant R$ at 2015 prices)

	2007	2015	Var. total	Var. anual
PNAD	1.316	1.521	15,56%	1,82%
PNAD-IRPF (PIT)	1.666	2.118	27,13%	3,05%

Inequality (Gini)

	2007	2015	Var. total	Var. anual
PNAD	0,625	0,582	-7,82%	
PNAD-IRPF (PIT)	0,700	0,693	-1%	

Social welfare Gini index based

	2007	2015	Var. total	Var. anual
PNAD	494	636	28,72%	3,21%
PNAD-IRPF (PIT)	499	651	30,48%	3,38%

Static - The level of inequality measure rises when higher top incomes replace previous lower estimates based on surveys, this same exercise also **increases by construction, the mean and the social welfare levels** associated with it.
Dynamic - The **movement** of these combined estimates present a **slower inequality trend fall** than pure household surveys, at the same time **income mean growth trends rose at a faster pace which implies higher social welfare growth rates than suggested by previous surveys estimates.** Inequality rise depends on how datasets are **combined.**

Levels 2020 and Pandemic 2019-2020 See https://cps.fgv.br/en/wealth

Income inequality in Brazil is even greater than imagined (Neri and Hecksher 2023). Combining the Personal Income Tax (PIT - IRPF) database with that of the Continuous Pnad, they show that: 1) **Levels 1%+ R$ 27000; 0.1%+ 95000 in combined data x 16000; 31000 respectively in pure PNADC.**

2) the **Gini index** for individual adults income **reached 0.7068 in 2020, well above the 0.6013 calculated by the pure IBGE data**, which uses only the continuous Pnad. **Every 0.03 point equals one big change in inequality** according to Tony Atkinson. For the calculation of the Gini, the closer the index is to 1, the greater the inequality. The PIT manages to better capture income from capital gains, such as profits in the financial market or distributed by companies, so it brings more realism to the income of the richest.

3) **Changes -** We use the same method as the French economist Thomas Piketty, author of the best seller Capital in the 21st Century through generalized Pareto interpolation. The study shows that, even with Emergency Aid, contrary to what was believed, inequality did not fall **during the pandemic**. By the usual approach, **the Gini would have fallen from 0.6117 to 0.6013 between 2019 and 2020, whereas in the combination of bases the Gini rises from 0.7066 to 0.7068. This is because the losses of the richest (of the 1%+ was -1.5%; while the 10%+ was -1.2%) were less than half of those of the Brazilian middle class (-4.2%), the big loser of the pandemic.**