

High earners in South Africa

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Johann Rupert courtesy Wikimedia Commons

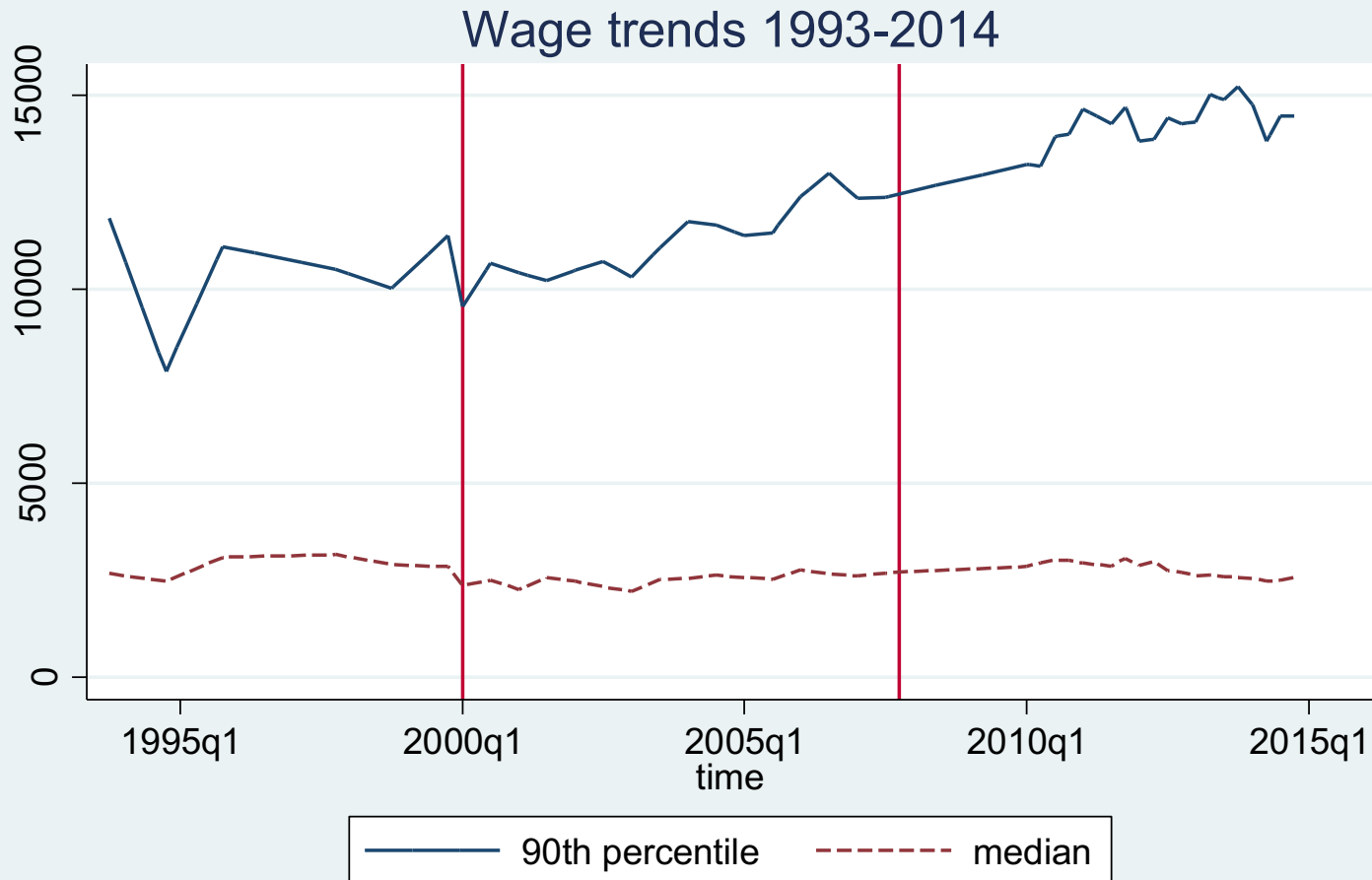
Motivation

We know that poverty is a big problem in South Africa; affluence has been studied less. But in order to understand inequality we need to have an accurate picture of the rich. Unfortunately measuring high incomes is difficult.

Overview

- What has happened to top earnings since 1994?
- What does this mean for inequality?
- How sure are we of our data?
- How can we explain the trends?

Evolution of top earnings



Real earnings adjusted to February 2011
Vertical lines at beginning and end of LFS

Trends

Top earners (those earning more than 90% of all earners) have had real increases in earnings but those around the median have not.

What does this do for inequality?

Gini coefficient

- Summary measure of inequality
 - Goes from zero (perfect equality) to one (maximum inequality)
- Most popular measure

Gini coefficient for earnings

Earnings inequality in PALMS



— gini 95% CI

Rand earnings for bracket responses and outliers imputed.

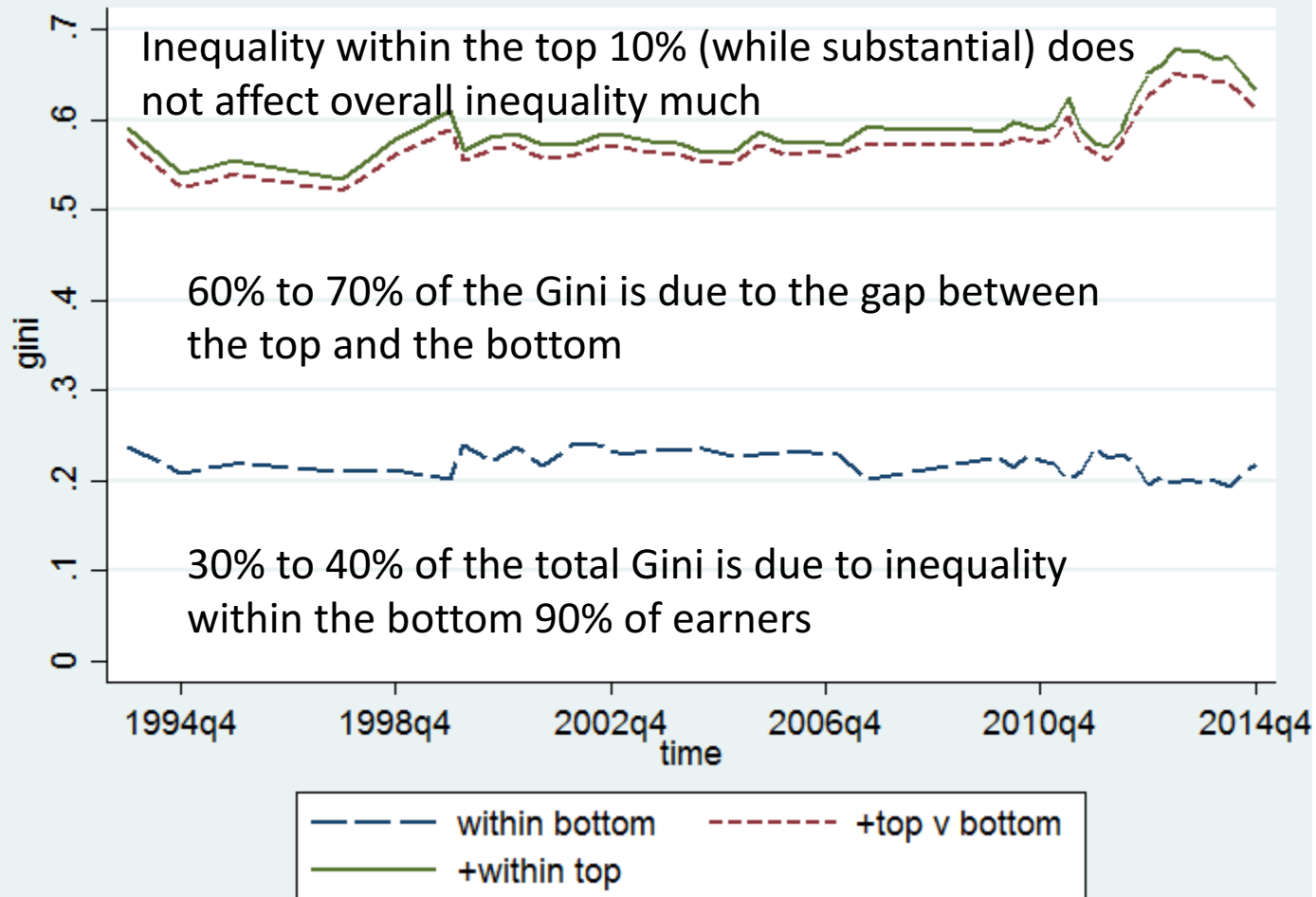
Earnings inequality increased

But there are some strange trends towards the end. What is the role of the rich?

Decompose the Gini

- Portion of the overall Gini due to inequality **within** the bottom 90%
- Inequality due to the gap **between** the bottom 90% and the top 10%
- Inequality **within** the top 10%

Decomposing the earnings Gini



Measuring high earnings

There are lots of problems in measuring the earnings of the rich:

- There is only a small chance that the rich will be sampled in the big nationally representative surveys (QLFS)
- If they are sampled, they are less likely to participate or to respond to the earnings questions

Plus there will be some bogus “rich” people (due to bad responses)

What can we do?

- Compare the earnings from the surveys to earnings recorded in tax data
- “Model” high earnings (using the Pareto distribution)

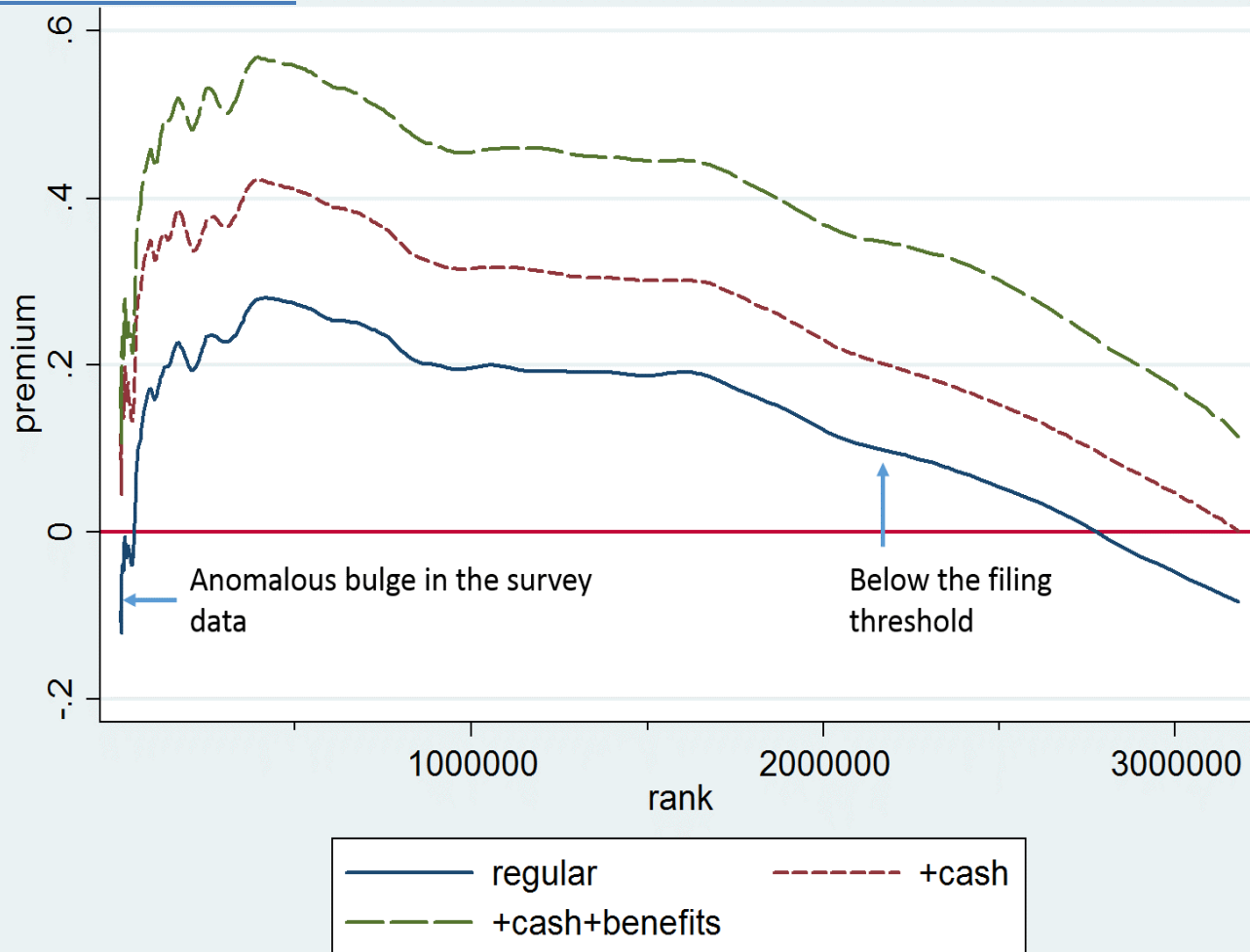
Comparing survey and tax data

Split earners up into wage earners and self-employed (measured differently in the surveys). Then we line up the population as captured in the surveys/tax records from richest to poorest and compare the relative earnings between them.

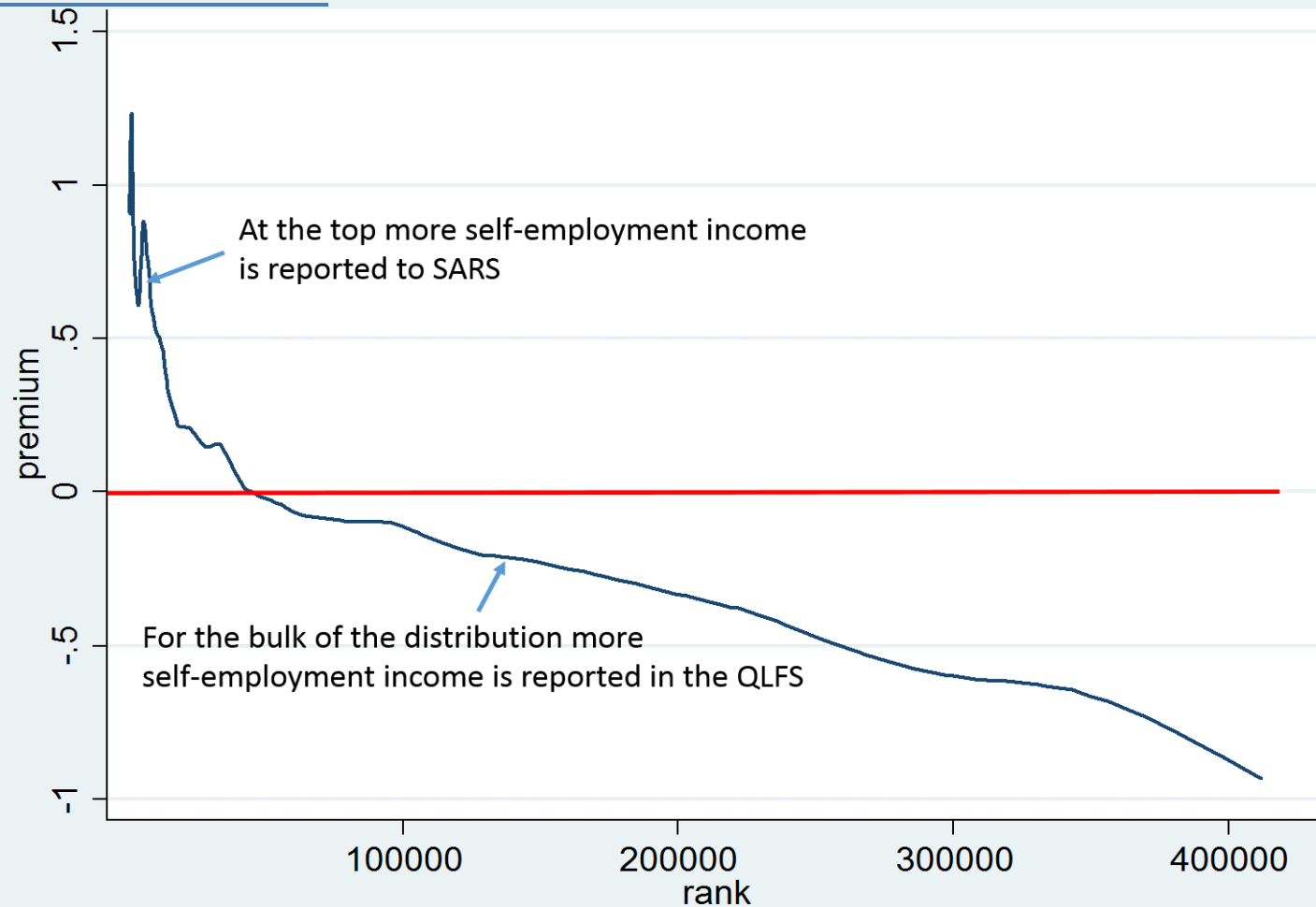
Sources:

- REDI3x3 working paper 41/SALDRU working paper 212
- Econ3x3 blog post

Tax data wages $\pm 40\%$ higher



Self-employed: it's complicated



Modelling top earnings

Underreporting of wages, particularly at top, means Gini is probably higher.

A sample of the micro tax data is available for only one tax year (2011). We can get a sense of what may have happened by fitting a “Pareto distribution” to the top.

Suggests that over the last twenty years the top of the distribution has become more stretched.

Sources:

- RED13x3 working paper 46/SALDRU working paper 224

Earnings and overall inequality

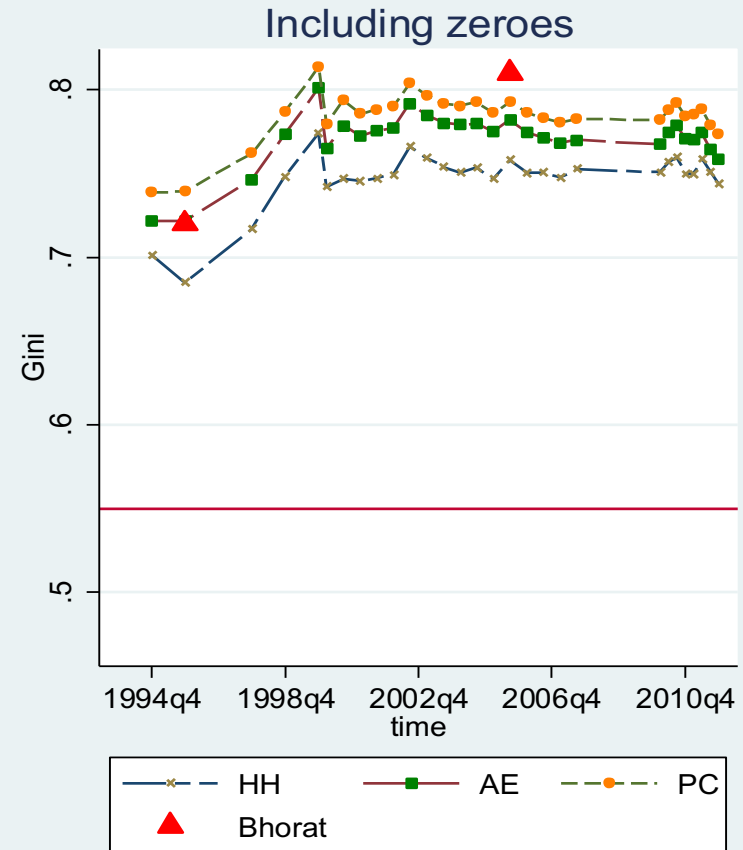
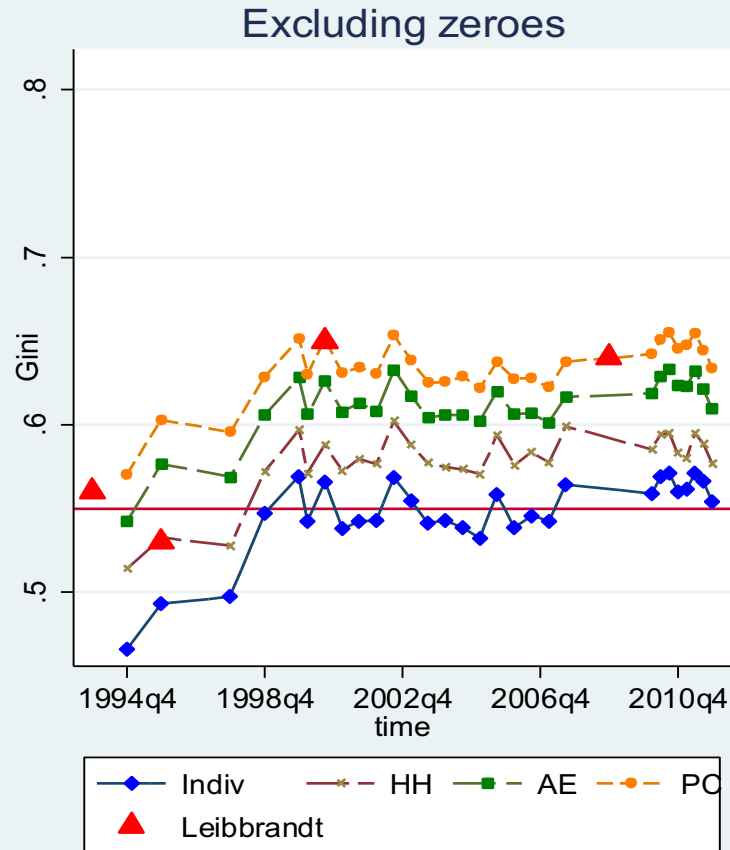
Why do earnings matter? Biggest driver of overall inequality (Leibbrandt *et al* 2010)

Sources:

- “Wages and Wage Inequality in South Africa 1994-2011: Part 2 - Inequality Measurement and Trends”, South African Journal of Economics, vol 85(2):298-318

Transmitting wage inequality

Wage Income Inequality 1994-2011



Household dynamics matter

Inequality in household labour income is higher than wage inequality

- Sorting into households: high earners tend to live in households with more than one earner
- Household size matters: high earners tend to live in smaller households
- How one equalises household income matters

Explanations

Three types of explanations for the trends:

- Markets are driving higher earnings at the top: globalization, “superstar” economy
- Institutions are driving changes: deregulation, weakening of unions, incentive pay
- Measurement problems: changes in sampling, processing

Good measurement is hard:

- People that we measure have an interest in shaping the outcome
- Proper measurement requires functioning institutions: SARS, Stats SA, SALDRU

THANK YOU

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