

Why is Inequality So Unequal Across the World?

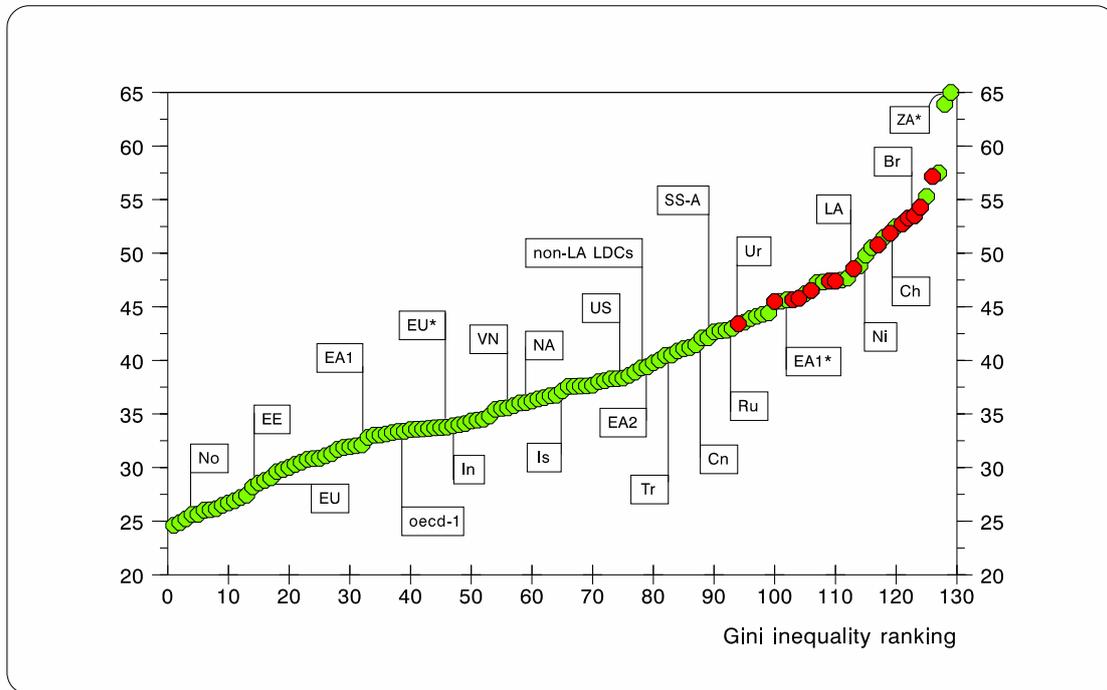
José Gabriel Palma
Cambridge University

Sources:

- <http://www.econ.cam.ac.uk/research/repec/cam/pdf/cwpe1111.pdf>
- <http://www.econ.cam.ac.uk/research/repec/cam/pdf/cwpe1437.pdf>, and
- “Do nations just get the inequality they deserve? The Palma-ratio re-examined”. Paper presented at the Plenary Session “Shared Prosperity and Growth” of the 17th World Congress of the International Economic Association, June 2014, forthcoming, K Basu and JE Stiglitz (eds.), *Inequality and Growth: Patterns and Policy*, New Palgrave, 2016.

FIGURE 1

Gini indices of personal income distribution in 129 countries, c. 2012



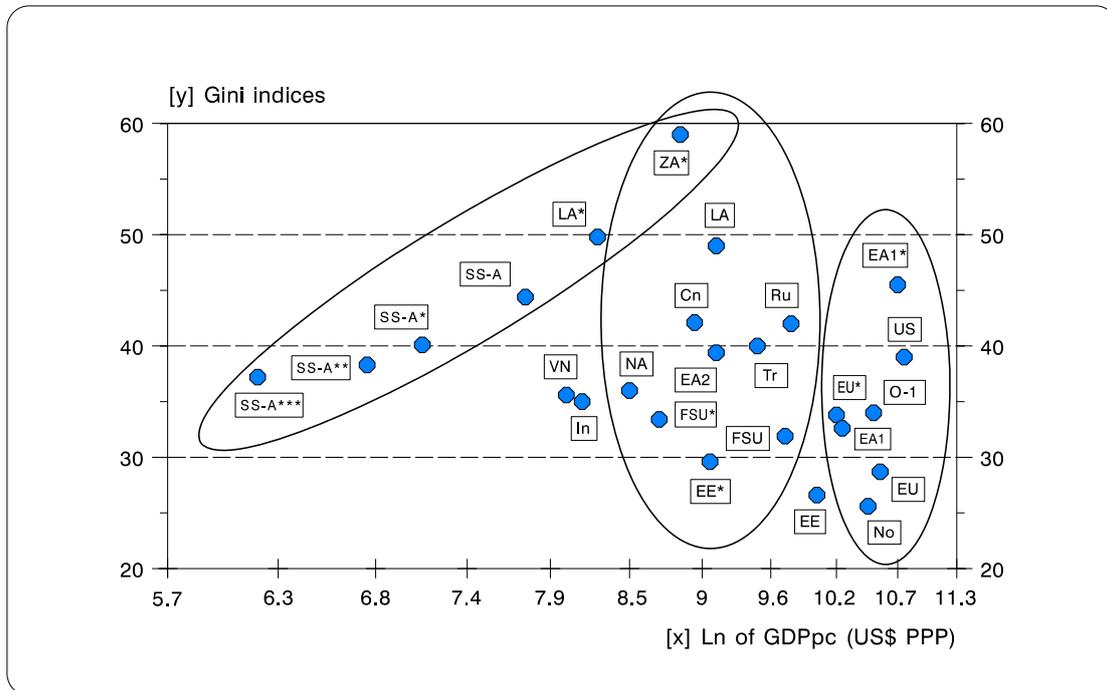
- Highlighted countries are those of Latin America; the two countries with the highest Gini are South Africa and Namibia (with the former, literally, off the chart at 65.4).
- In the case of regions, the statistic used to measure centrality is the median. **Br**=Brazil; **Ch**=Chile; **Cn**=China; **EA1**=Korea and Taiwan; **EA1***=Hong Kong and Singapore; **EA2**=Indonesia, Malaysia and Thailand; **EE**=Eastern Europe; **EU***=Mediterranean EU; **EU**=rest of Continental Europe; **In**=India; **Is**=Israel; **LA**=Latin America¹; **NA**=North Africa; **Ni**=Nigeria; **No**=Nordic countries; **OECD-1**=Anglophone OECD (excluding the US); **Ru**=Russia; **SS-A**=Sub-Saharan Africa; **Tr**=Turkey; **Ur**=Uruguay; **US**=United States; **VN**=Vietnam; and **ZA***=South Africa.² Unless otherwise stated, these acronyms will be used throughout the paper.
- For the sources of the data, see Appendix 1. Unless otherwise stated, these will be the sources of all figures in this paper.

¹ Here Latin America excludes Argentina and Venezuela due to unreliable data (especially in the latter); among the many issues behind this phenomenon, high and repressed inflation inevitably creates significant distortions in household surveys.

² If one uses for South Africa the World Bank-WDI dataset (instead of the OECD's), the Gini falls to (the still astonishing level of) 63.1.

FIGURE 2

Gini indices and log of GDP pc, c. 2012



- Acronyms as in Figure 1, and **EE***= Eastern Europe with an income per capita below US\$15,000; **EE**=those above that level; **FSU***=Former Soviet Union with an income per capita below US\$10,000; **FSU**=those above that level (excluding Russia); **LA***= Latin America with an income per capita below US\$8,000; **LA**= those above that level; **O-1**=OECD-1= Anglophone OECD, excluding the US; **SS-A*****=Sub-Saharan Africa with an income per capita below US\$650; **SS-A****=those between US\$650 and US\$1,000; **SS-A***= those between US\$1,000 and US\$2,000; and **SS-A**=those above that level. South Africa's actual Gini is 65.4.³ **GDP pc**=Expenditure-side real GDP per capita (PPPs) in 2011. In this and following graphs, the range of the horizontal axis corresponds to the actual range of GDP pc in the sample.
- Sources: for income distribution as in Appendix 1; and for GDP pc, the Penn World Table (2014; PWT8.0). Unless otherwise stated, throughout the paper 'US\$' will refer to this dollar.

³ In this and following graphs, 'middle-income (mineral-rich) Southern Africa' is proxied by South Africa, as there are only data for this country and Namibia. This is so because the last reported data for Botswana (Gini of 61) only refers to 1994 (so it is not included in my sample; see Appendix 1). At the same time, the increasing number of close relatives in the region (e.g., Angola and Zambia) still do not qualify properly as 'middle income'.

FIGURE 3

Income shares of decile 10 and log of GDP pc, c. 2012

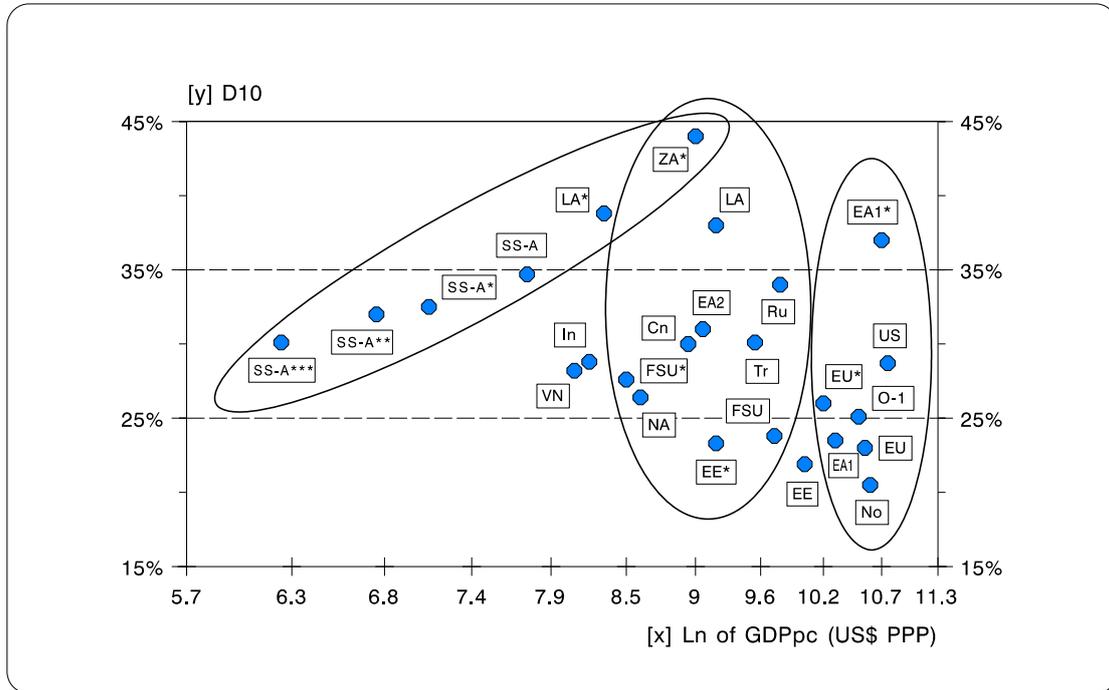
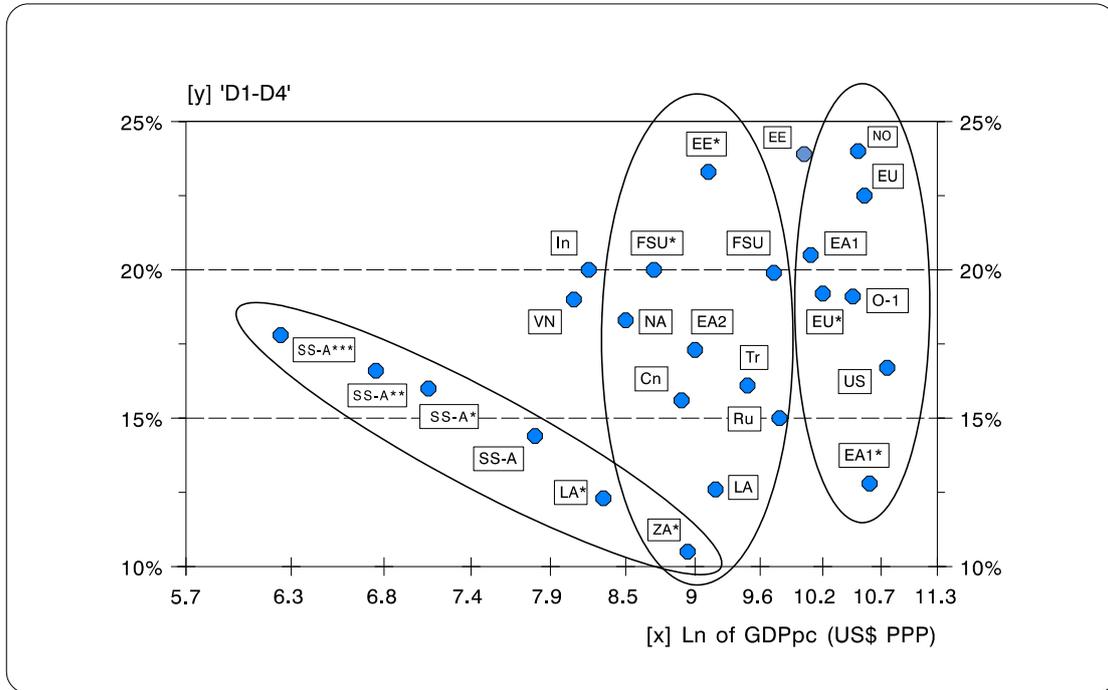


FIGURE 4

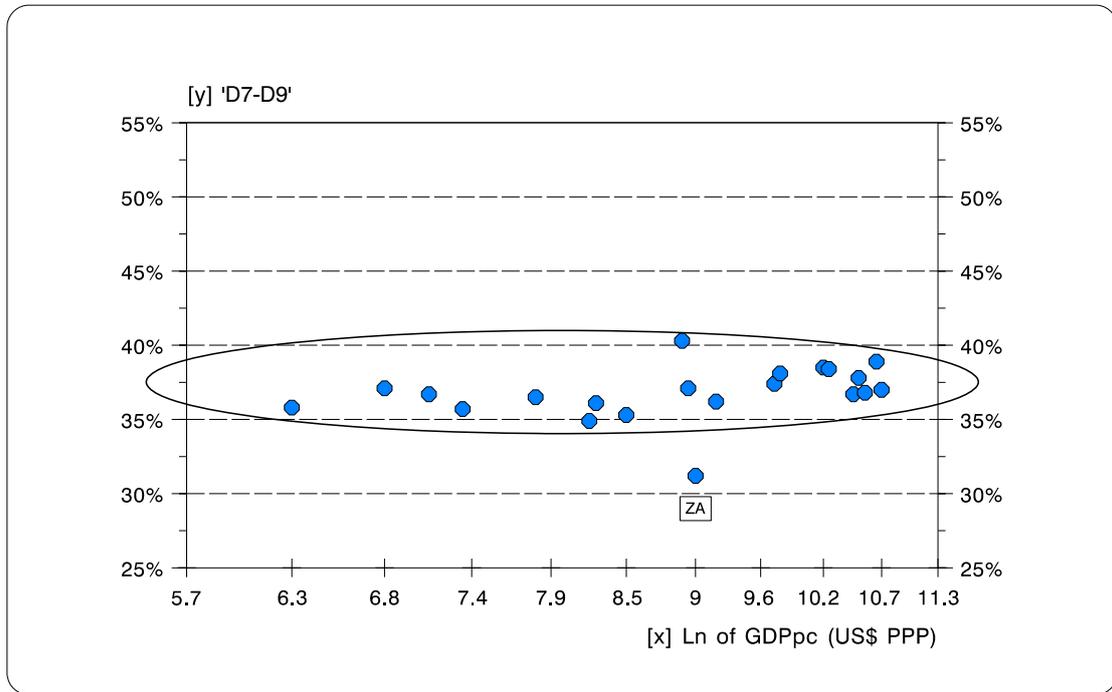
Income share of the bottom 40% and log of GDP pc, c. 2012



- South Africa's actual income-share for 'D1-D4' is 6.4%. Acronyms as in Figures 1 and 2.

FIGURE 6

Income shares of D7 to D9 and log of income pc, c. 2012



- Acronyms and sources as in Figures 1 and 2.

– What about the role of education?

Table 1 presents a set of statistics for the whole sample (129 countries).

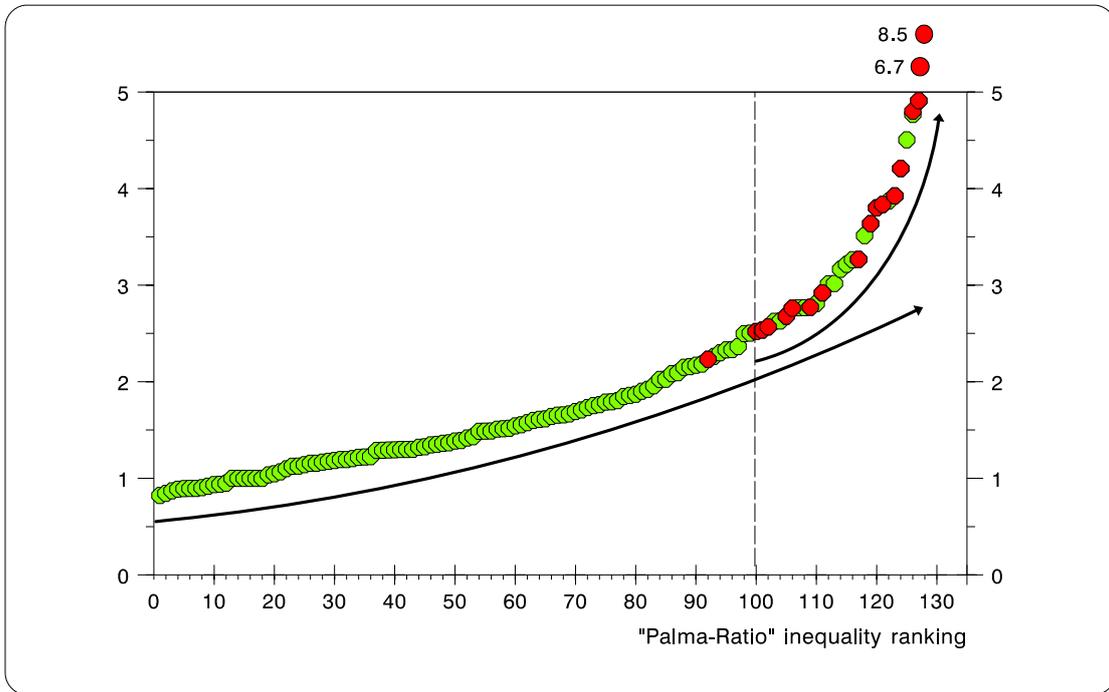
TABLE 1
Measures of Centrality and Spread for Income Groups, c. 2012

	H Mean	Median	Average	st dev	c of var
D10	29.1	29.4	30.5	6.9	0.227
D1-D4	16.4	18.0	17.5	4.0	0.230
D5-D10	51.8	52.5	52.1	3.4	0.066
D7-D9	36.7	36.9	36.8	1.7	0.047

• **H Mean**=harmonic mean; **st dev**=standard deviation; and **c of var**=coefficient of variation.

FIGURE 7

"Palma Ratio" of personal income distribution in 129 countries, c. 2012

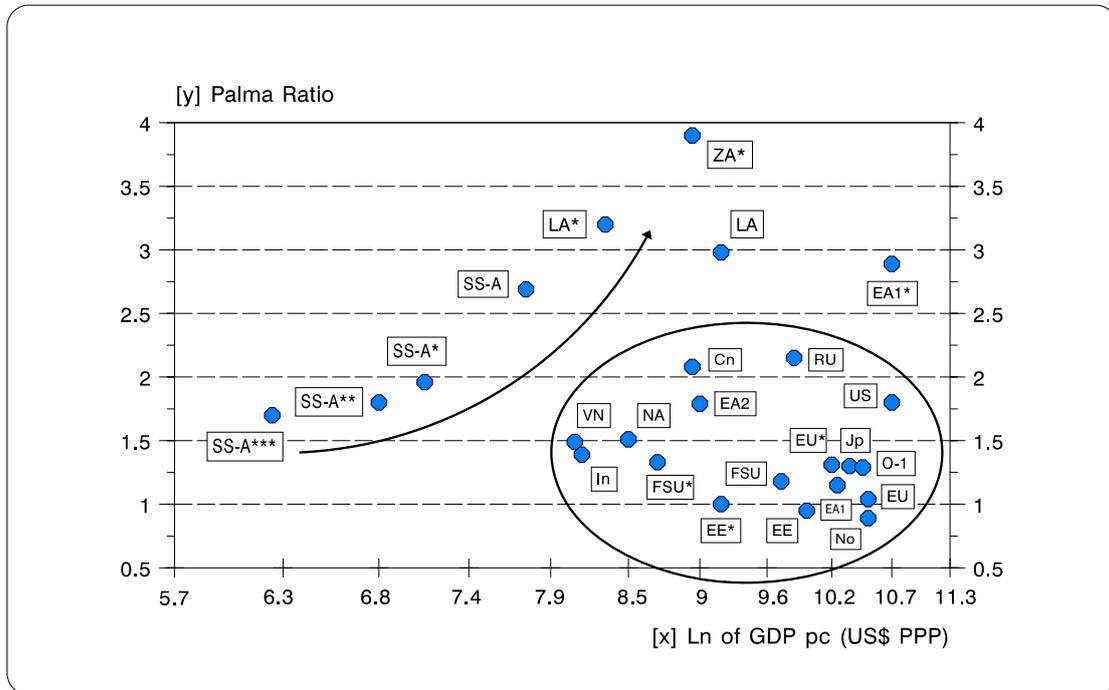


- Highlighted countries are those of Latin America and (mineral rich) middle-income Southern Africa. The last two, Namibia and South Africa, are (again) literally off the chart!⁴

⁴ If one uses the World Bank-WDI dataset (instead of the OECD's), South Africa's 'Palma Ratio' falls to (the still dismal level of) 7.1 — in fact, since the Fall of Apartheid in 1994 and the beginning of democracy, inequality in South Africa has increased among *all* races and geotypes (see Leibbrandt, et al, 2010; and Palma, 2011).

FIGURE 8

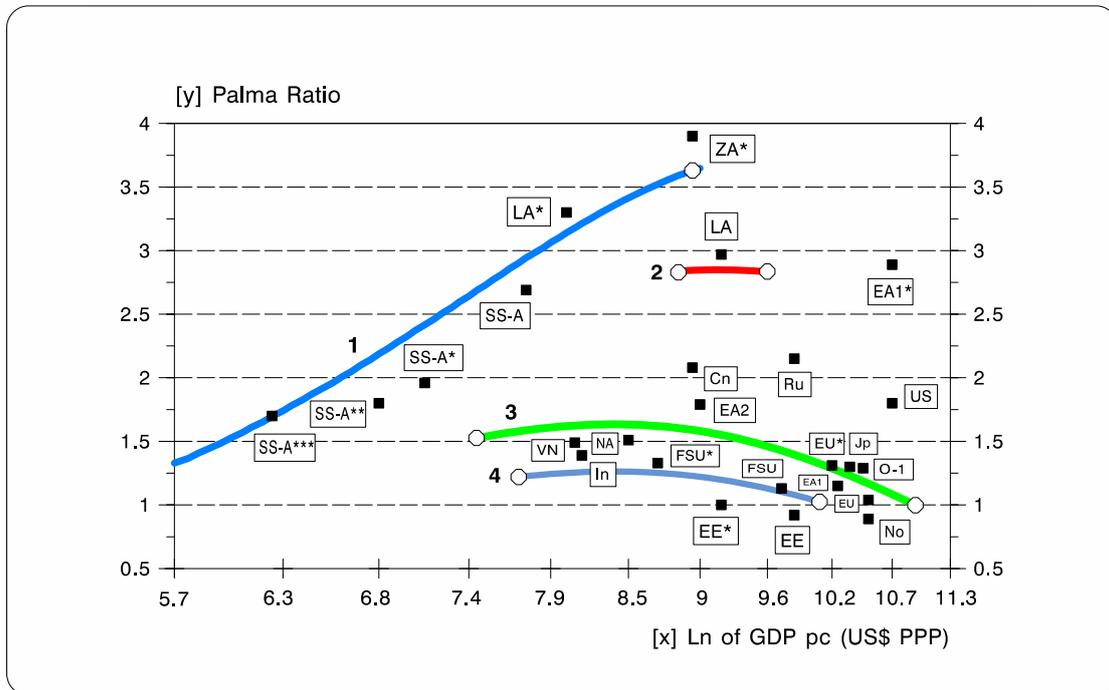
Palma Ratios and log of GDP pc, c. 2012



- Acronyms as in Figures 1 and 2.

FIGURE 9

Palma Ratios and log of GDP pc: "two parallel universes"?, c. 2012

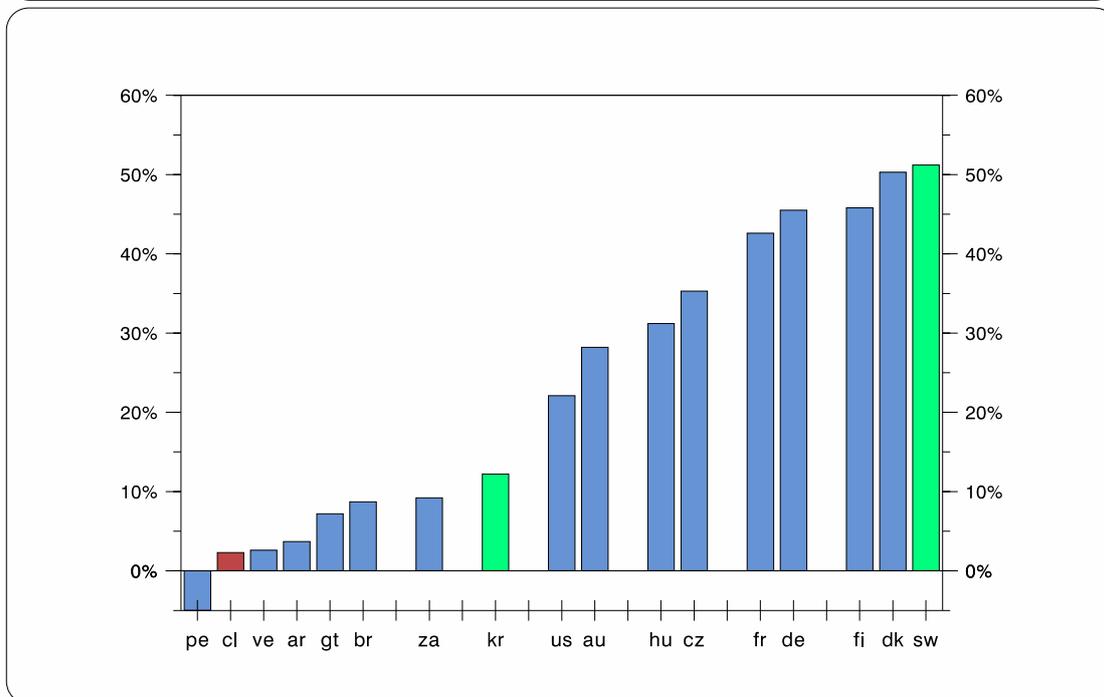


- The regression now has three intercept dummies: Eastern Europe and former Soviet Union (EE, EE*, FSU and FSU* — line 4), Qatar, and the EA1* (Hong-Kong and Singapore). It also has two slope dummies (on the GDP pc square variable); one includes all four groups of Sub-Saharan African countries (SS-A***, SS-A**, SS-A* and SS-A), as well as Southern Africa (including South Africa and Namibia), and Latin American countries with a GDP pc below US\$8,000 (LA*) — line 1. The other represents the rest of Latin America (LA — line 2). Line 3 is the base regression. All parameters are statistically significant at the 1% level. 't' statistics are based on 'White's heteroscedasticity adjusted standard errors'. The R² of the regression is 67%. Regional dummies are reported only within the GDP pc range of its members. The base regression is reported from Bangladesh to Norway (i.e., the whole span of the non-Sub-Saharan Africa sample, except for Ethiopia and Nepal on the low GDP pc side, and Qatar one the other side).

- Acronyms as in Figures 1 and 2.

FIGURE 10
Fall in inequality after taxes and transferences

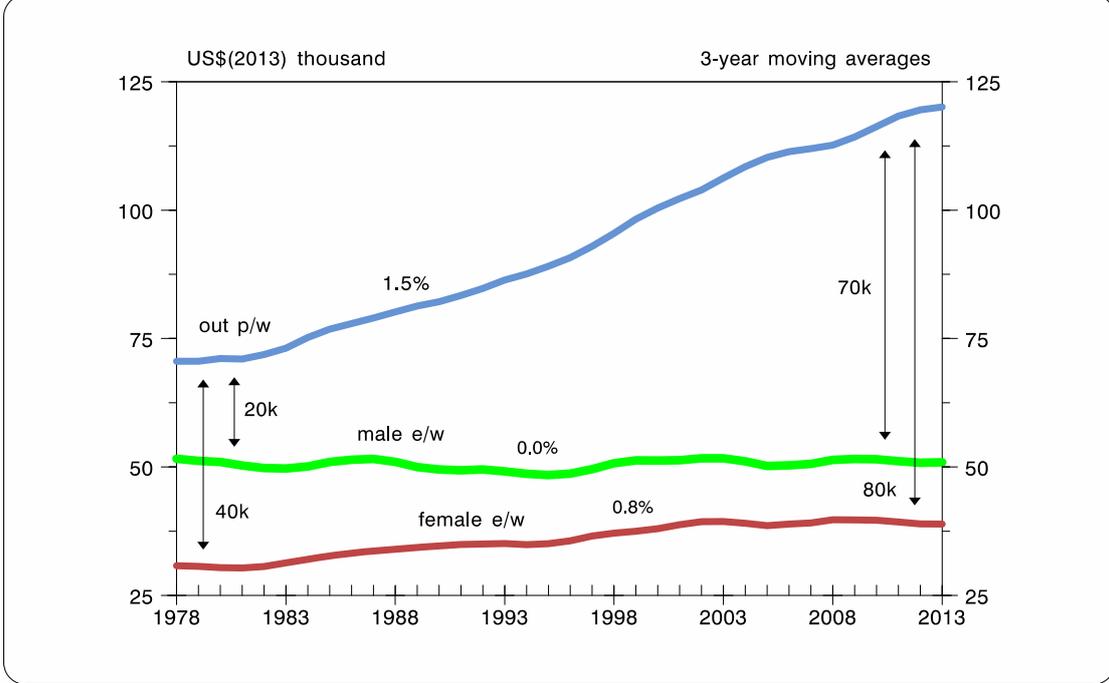
Índice de Gini: mejora entre antes y despues de impuestos y transferencias (%), c. 2010



- Acronyms as in Figures 1 and 2.

FIGURE 11

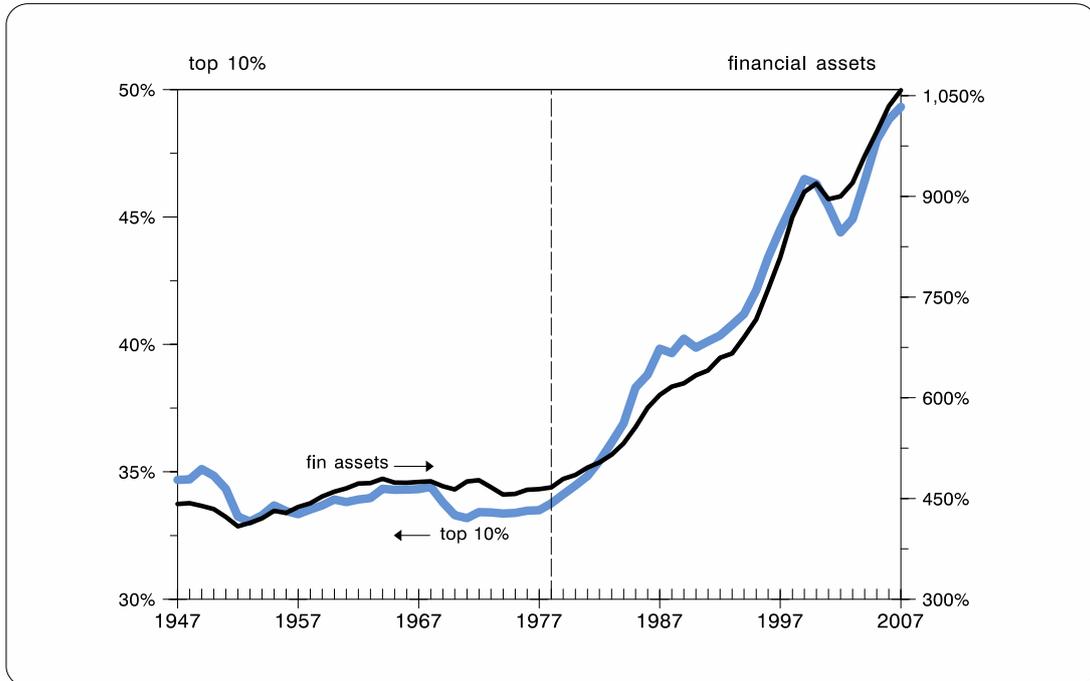
US: output per worker and real earnings per worker by gender, 1978-2013



- e/w=earnings per worker.

FIGURE 12

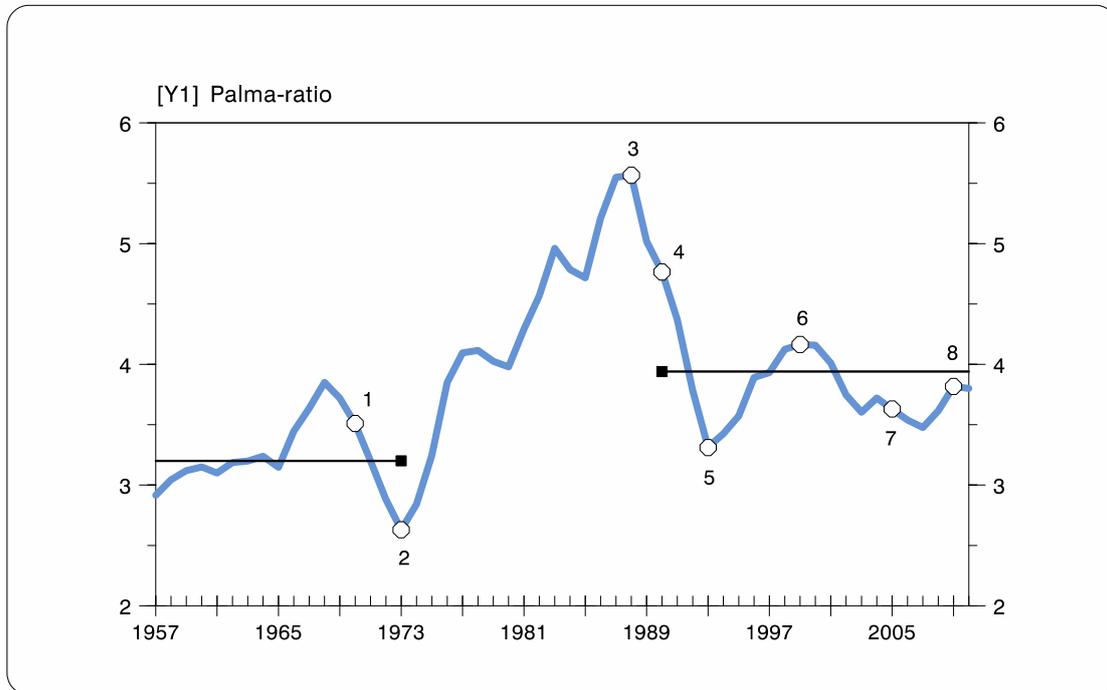
US: income share of the top 10% and value of financial assets as % of GDP, 1947-2007



- **fin assets**=value of financial assets as percentage of GDP; and **top 10%**=income share of the top 10% (includes realised capital gains). 3-year moving averages.
- **Sources:** Alvaredo et. all. (2014), and US Federal Reserve (2014).

FIGURE 13

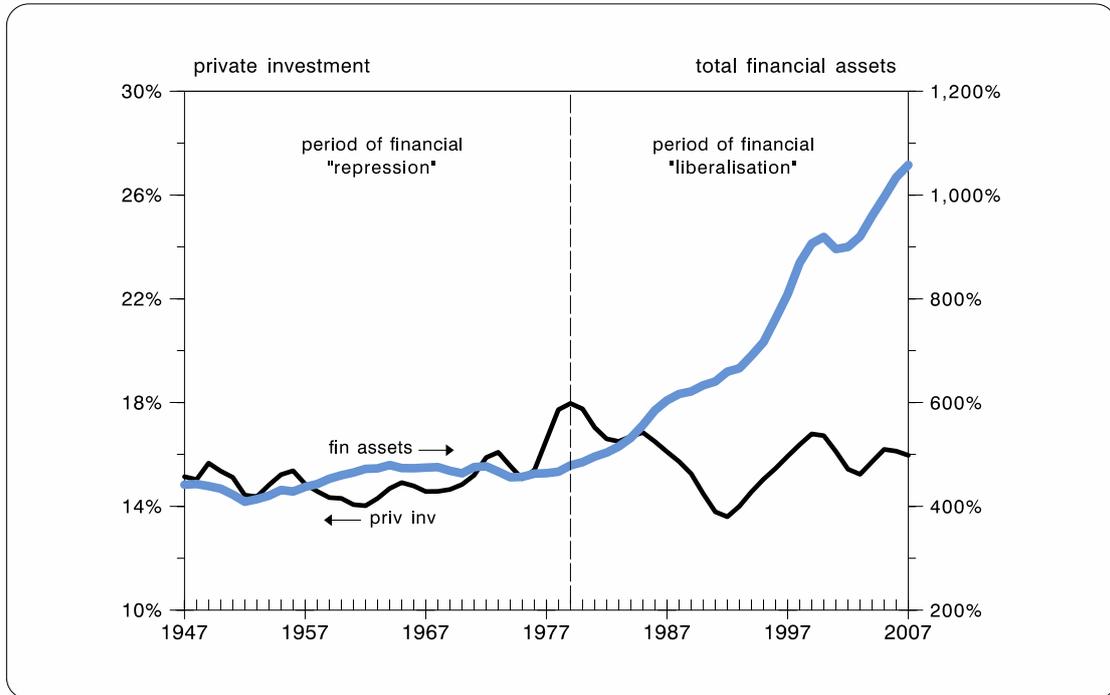
CHILE: Palma-ratio, 1957-2010 -- a ratchet effect?



- 1=election of Allende; 2=Pinochet's coup d'état; 3=the year Pinochet called a plebiscite seeking a mandate to remain in power for another eight years; 4=first democratic government (centre-left coalition) that took office in 1990 after Pinochet lost his 1988-plebiscite (and was forced to call presidential elections at the end of 1989); 5=second democratic government (same centre-left coalition, but a return to more 'free-market' distributional policies); 6-7 and 7-8=next two governments by the same coalition. 3-year moving averages.
- Source: calculations done by Pamela Jervis and myself using the FACEA (2012) database. Chile is one of the very few countries in the developing world that has a relatively robust set of historical data for such a long period of time — at least for the 'Greater Santiago', where almost 40% of Chile's population live..
- Black lines are harmonic means between the pre- and post-Pinochet periods (i.e., between 1957 and the *coup d'état* in 1973; and the return to democracy and 2010; this was the last year for which I was able to get these data).

FIGURE 14

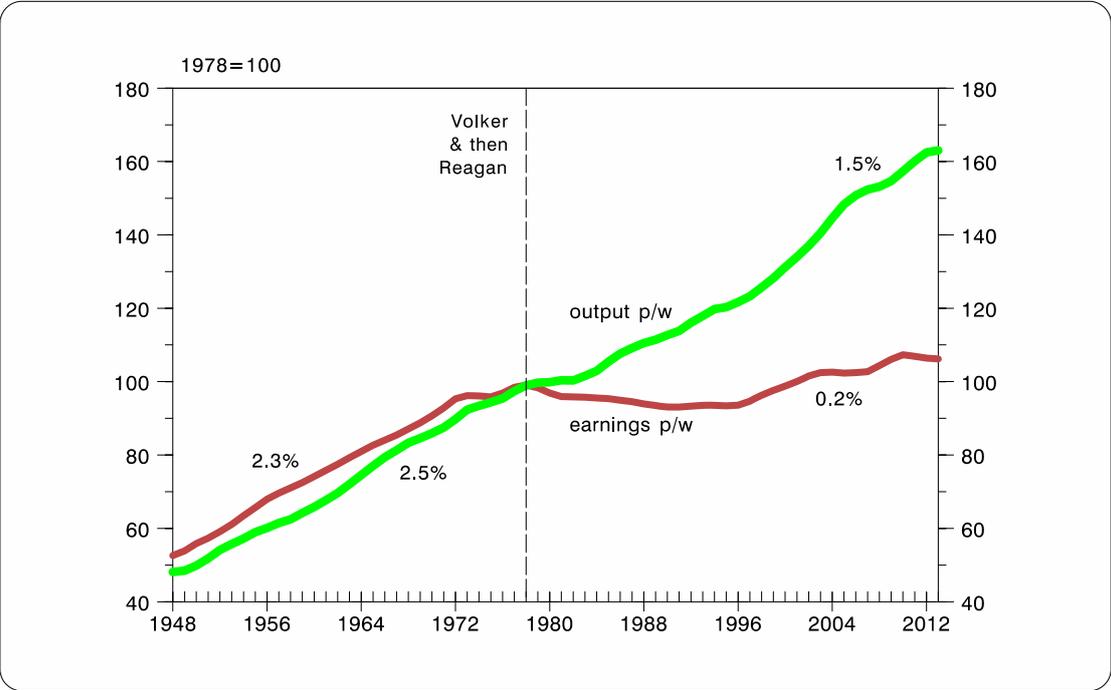
US: total financial assets (all sectors) and private investment as % of GDP, 1947-2007



- **fin assets**=stock of total financial assets (all sectors); and **priv inv**=private investment (excludes private inventories). Both series are expressed as percentage of GDP. 3-year moving averages.
- Sources: US Census Bureau (2014), and US Federal Reserve (2014); see also Palma (2009).

FIGURE 15

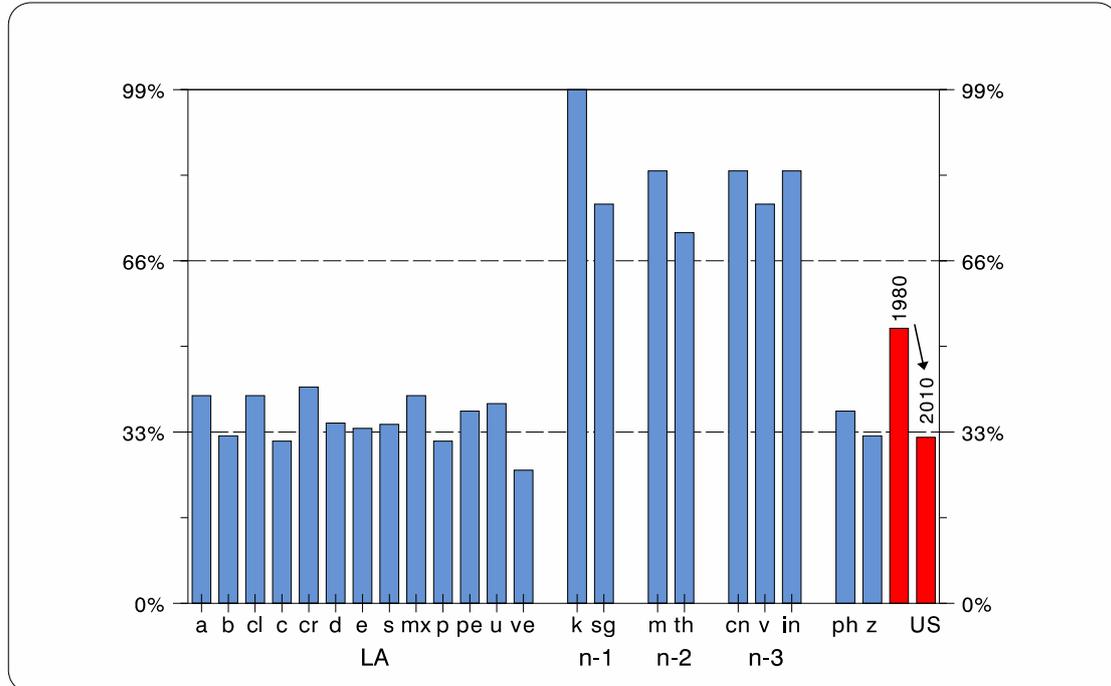
US: output per worker and real earnings per worker, 1948-2013



LA and Asia: two different steady states —
a case of multiple stable equilibria?

FIGURE 16

Private Investment as a percentage of the income share of the top decile, c. 2010



- **LA**=Latin America (**a**=Argentina; **b**=Brazil; **cl**=Chile; **c**=Colombia; **cr**=Costa Rica; **d**=Dominican Republic; **e**=Ecuador; **mx**=Mexico; **p**=Paraguay; **pe**=Peru; **s**=El Salvador; **u**=Uruguay; and **ve**=Venezuela); **n-1**=first tier NICs (**k**=Korea; and **sg**=Singapore); **n-2**=second-tier NICs (**m**=Malaysia and **th**=Thailand); **n-3**=third-tier NICs (**cn**=China; **in**=India; and **v**=Vietnam); **US**=United States (in 1980 and in 2010); **P**=Philippines; and **z**=South Africa.
- Sources: for the share of the top 10% as in Appendix 1 (except for the US, which is Alvaredo, Atkinson, Piketty and Saez, 2014 — this different source complicates the comparison of the US ratio with that of other countries in the graph). And for private investment data, the IMF-databank.