

# Trends in within-country income and non income inequality during the last 30 years

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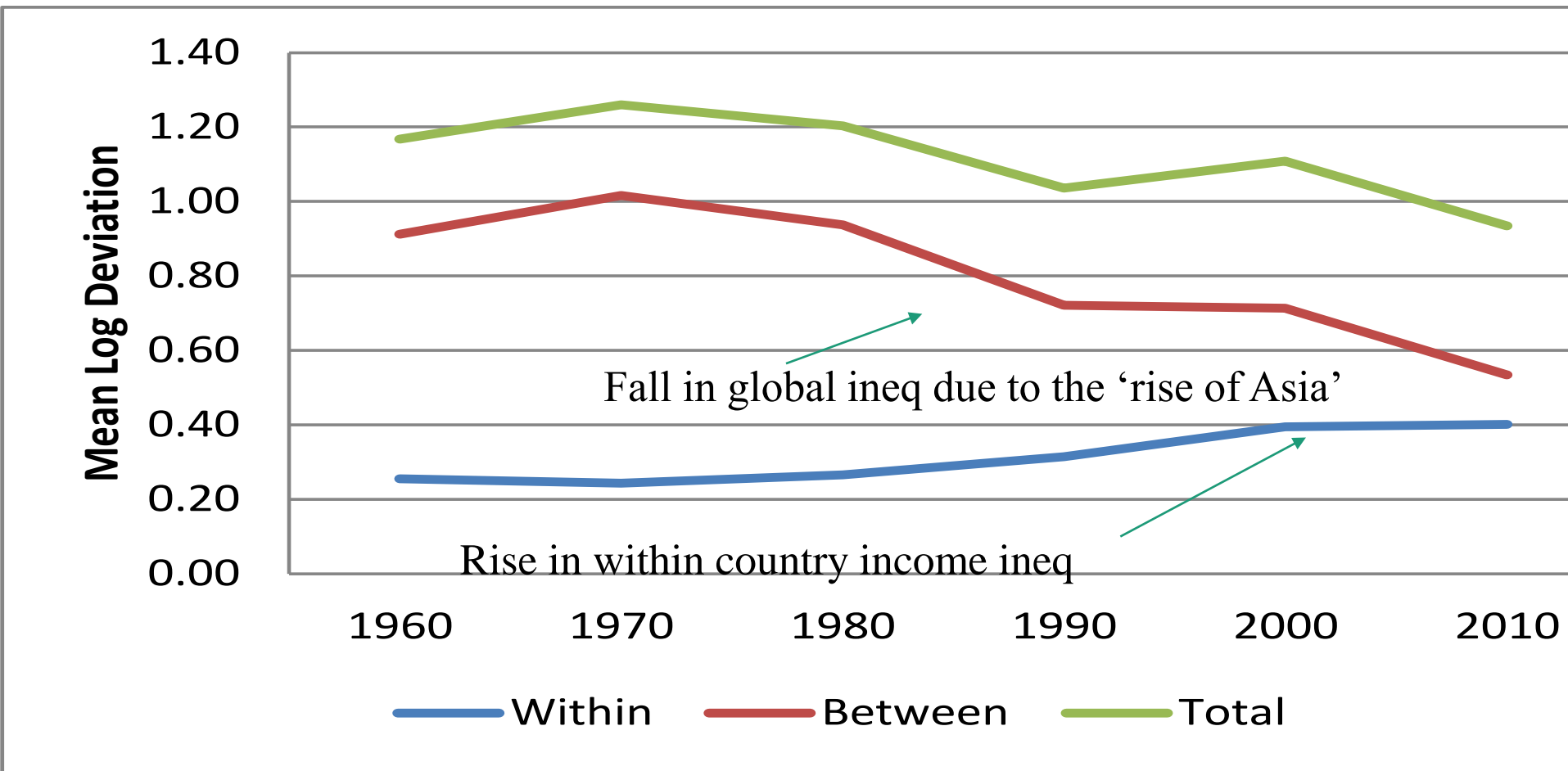
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EWG of DPSP,  
NY-Florence 25 June 2018

# 1. Global inequality trends (brief mention only)

# Global, between- & within-country inequality

**Figure 1: Within and Between Country Inequality Components**



Source: Global Income and Consumption Database.

# Winners and losers of falling between-country inequality, 1988-2008

Figure 4. Change in real income between 1988 and 2008 at various percentiles of global income distribution (calculated in 2005 international dollars)



e: The vertical axis shows the percentage change in real income, measured in constant international dollars. The horizontal axis shows the percentile position in the global income distribution. The percentile positions run from 5 to 99 in increments of five, while the top 5% are divided into two groups: the top 1%, and those between 95<sup>th</sup> and 99<sup>th</sup> percentiles.

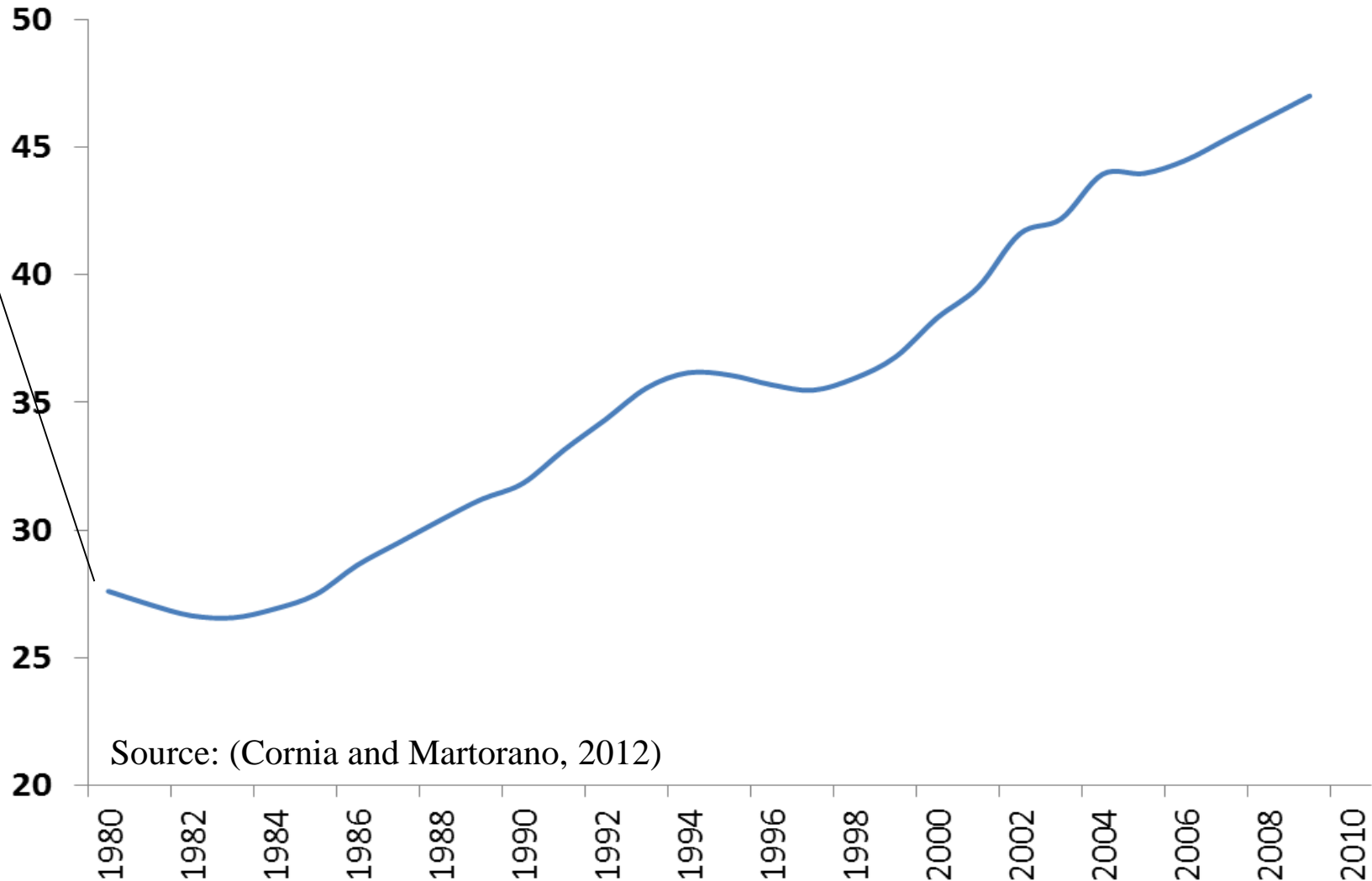
2. Regional inequality trends  
since 2000:  
five rising (in red),  
but three falling (in green,  
LA & SSA most important cases )

## Trends in income inequality by main regions - 1980-2000 and 2000-2010

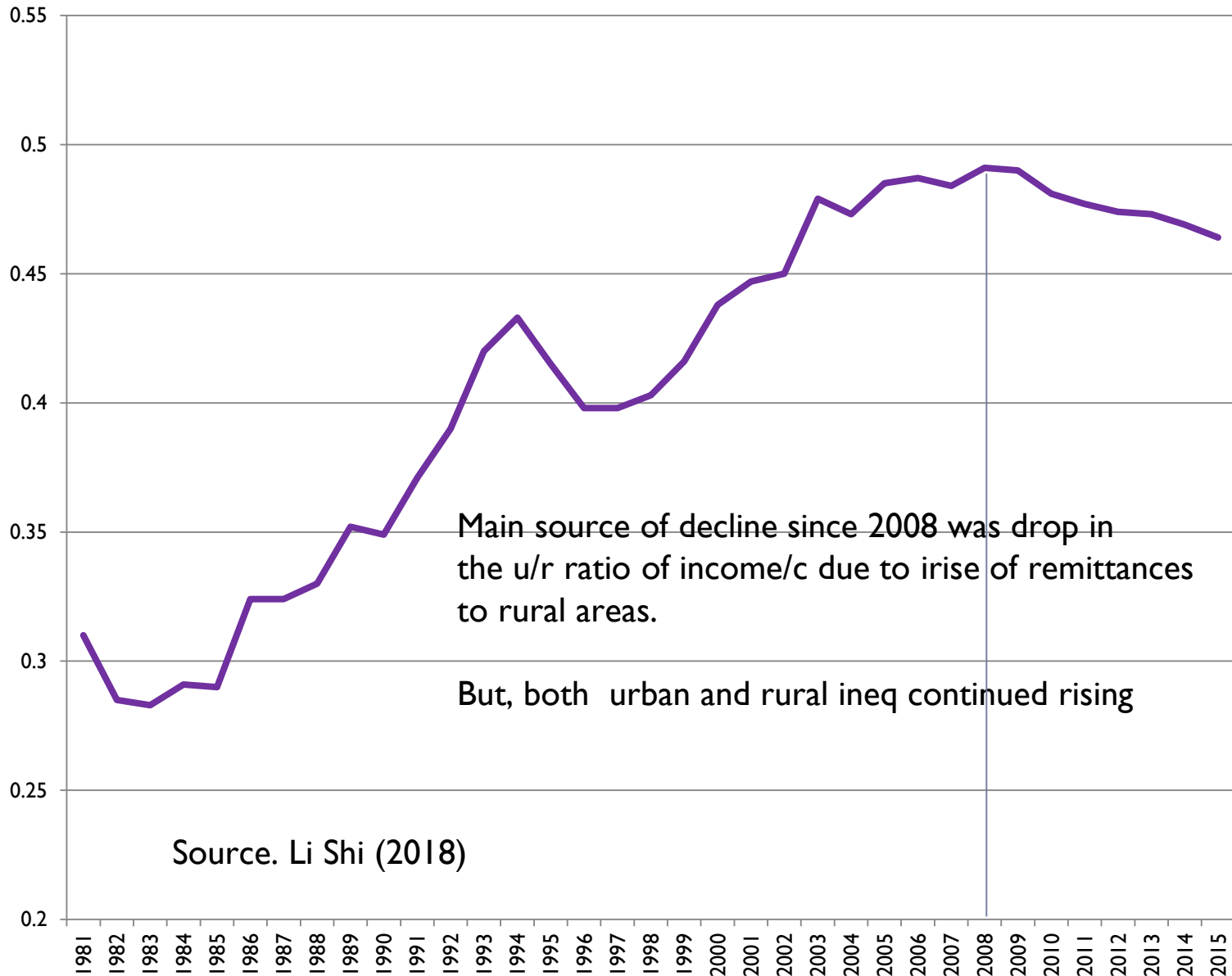
	OECD	European Transition Economies	Asian Transition Economies	America	MENA	South East Asia	South Asia	Sub- Saharan Africa	World
<b>1980s (or earlier available year) and 1990s</b>									
Specific period for Each region <sup>1/3</sup>	1980- 2001	1990- 1998	1980- 2000	1980- 2002	1980- 2000	1980- 1995	1980- 2000	1980- 1995	
Rising inequality	14	24	2	14	2	5	3	9	73 (69%)
No change	1	0	1	1	3	0	0	2	8 (8%)
Falling inequality	6	0	0	3	3	2	2	8	24 (23%)
<b>Total</b>	21	24	3	18	8	7	5	19	105 (100%)
<b>2000-2010 (or similar period)</b>									
Specific period for each region <sup>1/3</sup>	2000- 2010	1998- 2010	2000 – 2009	2002- 2010	2000- 2007	1995- 2009	2000- 2010	1995- 2007	
Rising inequality	9	13	2	2	4	3	4	7	44 (41%)
No change	4	5	1	1	0	0	1	1	13 (12%)
Falling inequality	8	6	0	15	4	4	0	13	50 (47%)
<b>Total</b>	21	24	3	18	8	7	5	21	107 (100%)

Source: Cornia and Martorano (2112) Countries have been assigned to the **rising** inequality, no change or **falling** inequality categories on the basis of an analysis of time trends and of the difference between the initial and final Gini coefficients for each of the two sub-periods considered i.e. 1980-2000 (top panel) and 2000-10 (bottom panel).

# China: 20 pts Gini rise, 1980-2009

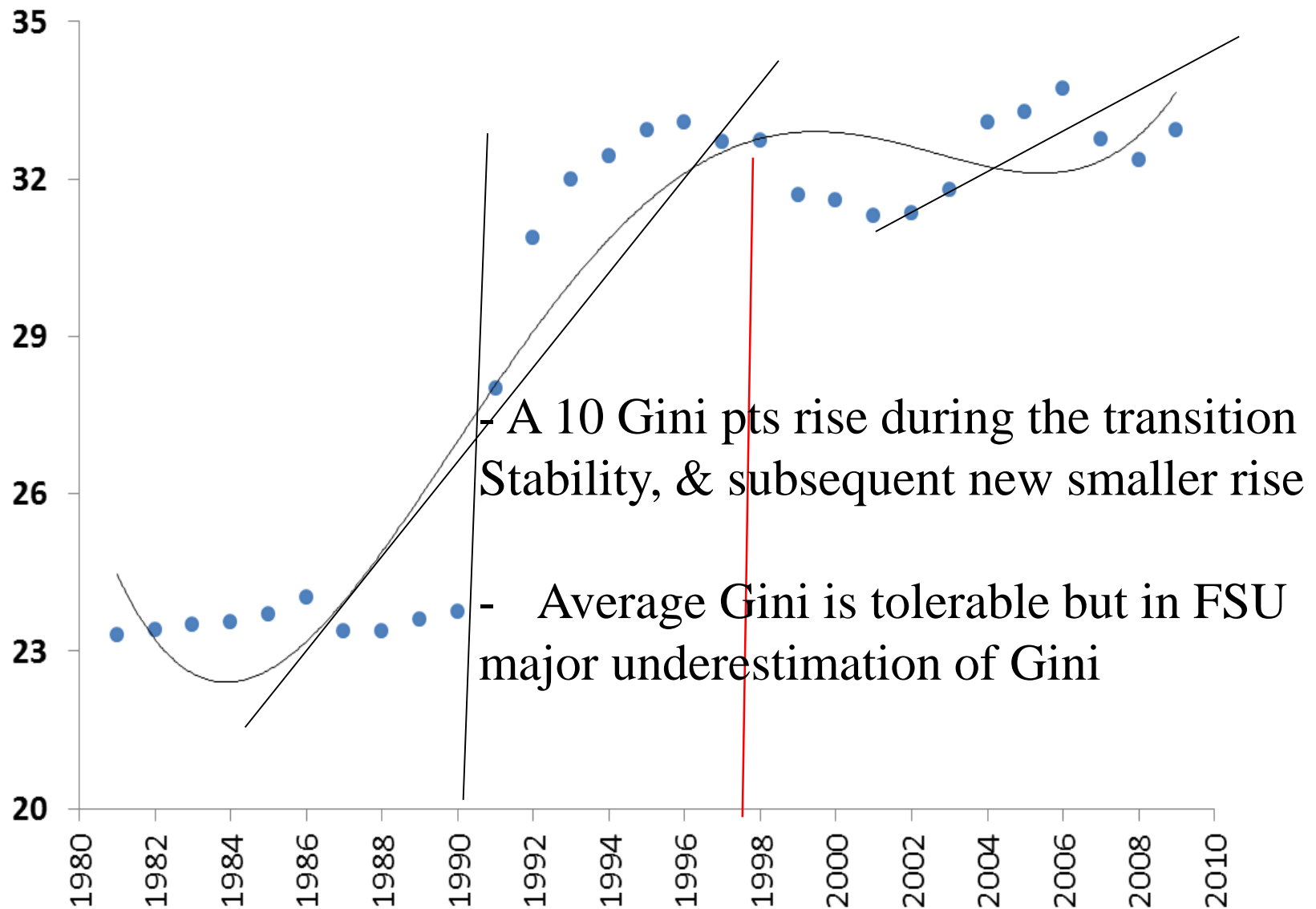


# National Gini income inequality of China

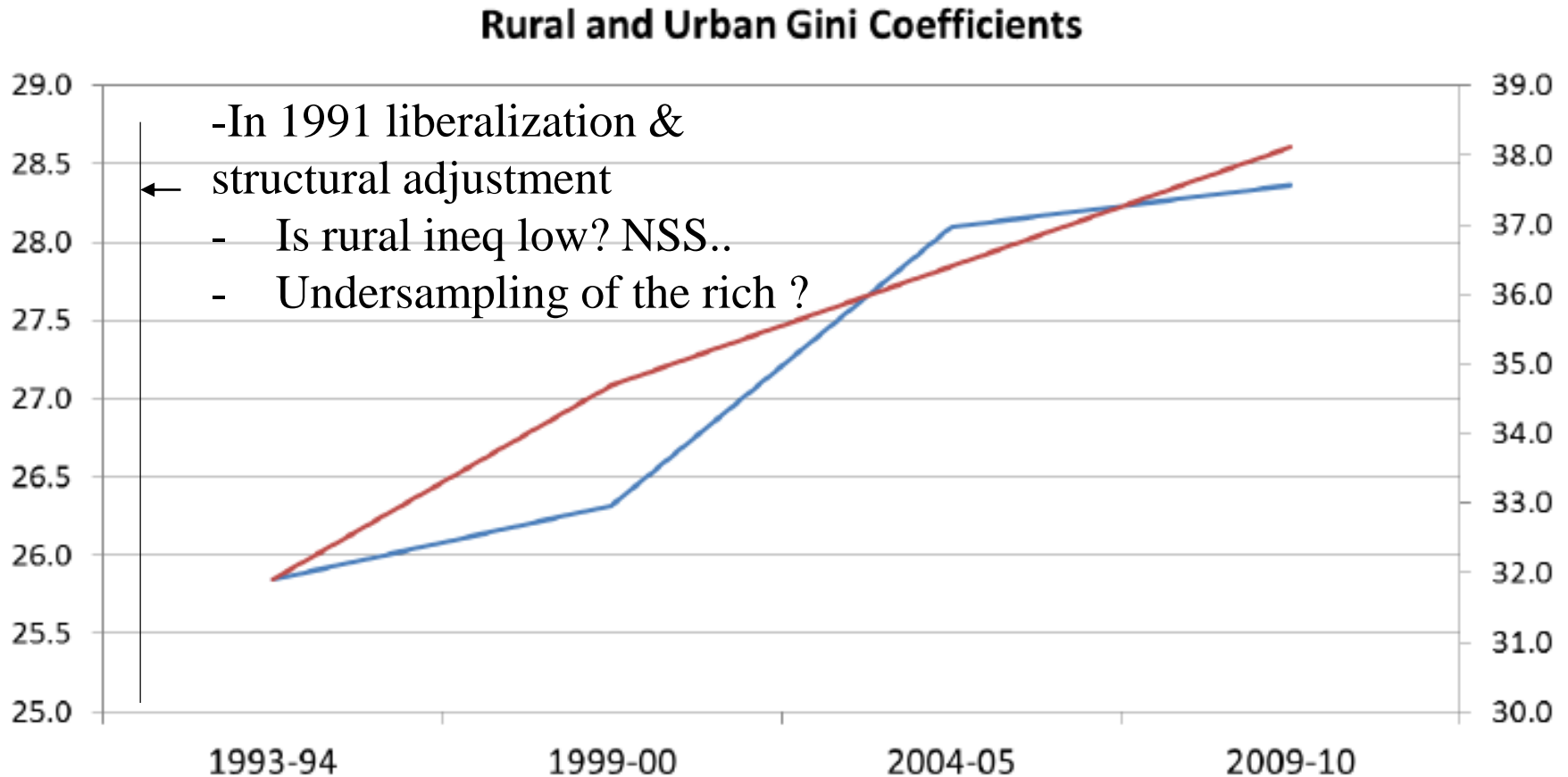




# EE-FSU: 11<sub>pts</sub> Gini rise 1990-98, 2<sub>pts</sub> rise 2002-09



**India & S. Asia: +2 pts rural Gini (left scale) +6.5 pts urban Gini, right scale – 1993-2010. Also large increase in urban –rural income gap**



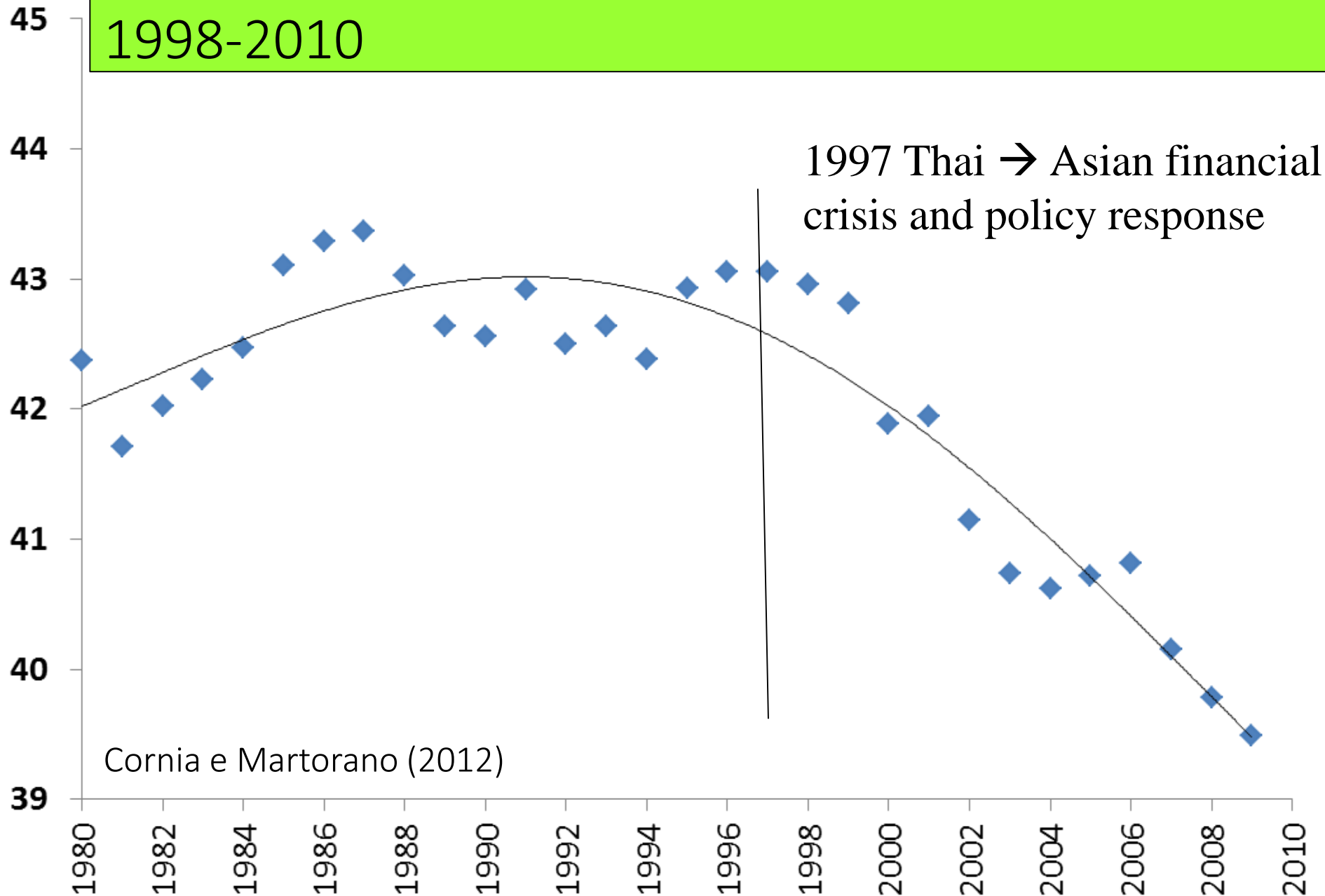
Source: (Himansu and Lanjouw 2015) — Rural — Urban

Gini rose over 1990-2010 also in **Bangladesh, Sri Lanka, Pakistan and Indonesia** (Kanbur et al 2014)

# OECD: Fast rising Gini in 1985-2000, less in 2000s

—	Mid 1985	Around 1990	Mid 1990s	Around 2000	Mid 2005	Around 2010	$\Delta$ Gini 1985- 2000	$\Delta$ Gini 2000 2010	Gini fall due to tax & transfer 2010
Australia			0.309	0.317	0.315	0.344	+ 0.8	+ 2.7	0.135
Canada	0.293	0.287	0.289	0.318	0.317	0.320	+ 2.5	+ 0.2	0.127
N. Zealand	0.271	0.318	0.335	0.339	0.335	0.317	+ 6.8	- 2.2	0.137
U. Kingdom	0.309	0.355	0.337	0.352	0.335	0.341	+ 4.3	- 1.1	0.182
USA	0.340	0.349	0.361	0.357	0.380	0.380	+ 1.7	+ 2.3	0.119
Average						0.342	+ 3.2	+ 0.4	0.140
Greece	0.345		0.345	0.354	0.340	0.337	+ 0.9	- 1.7	0.180
Italy	0.287	0.275	0.326	0.321	0.330	0.319	+ 3.4	- 0.2	0.184
Japan	0.304		0.323	0.337	0.329	0.336	+ 3.3	- 0.1	0.152
Average						0.331	+ 2.5	- 0.7	0.172
France			0.277	0.287	0.288	0.303	+ 1.0	+ 1.6	0.202
Germany	0.251	0.256	0.266	0.264	0.285	0.286	+ 1.3	+ 2.2	0.206
Netherland	0.272	0.292	0.297	0.292	0.284	0.288	+ 2.0	- 0.4	0.136
Average						0.292	+ 1.4	+ 1.1	0.181
Denmark	0.221	0.226	0.215	0.227	0.232	0.252	+ 0.6	+ 2.5	0.177
Finland	0.209		0.218	0.247	0.254	0.260	+ 3.8	+ 1.3	0.219

# Malaysia, S.Korea, Philipp., Thai: 3.5 pts Gini drop, 1998-2010



# A 7.8 Gini pts average ineq decline in LA 2002-2015



Source: Cornia 2018

# Factors behind the rapid and near universal fall in LA ineq 2002-15

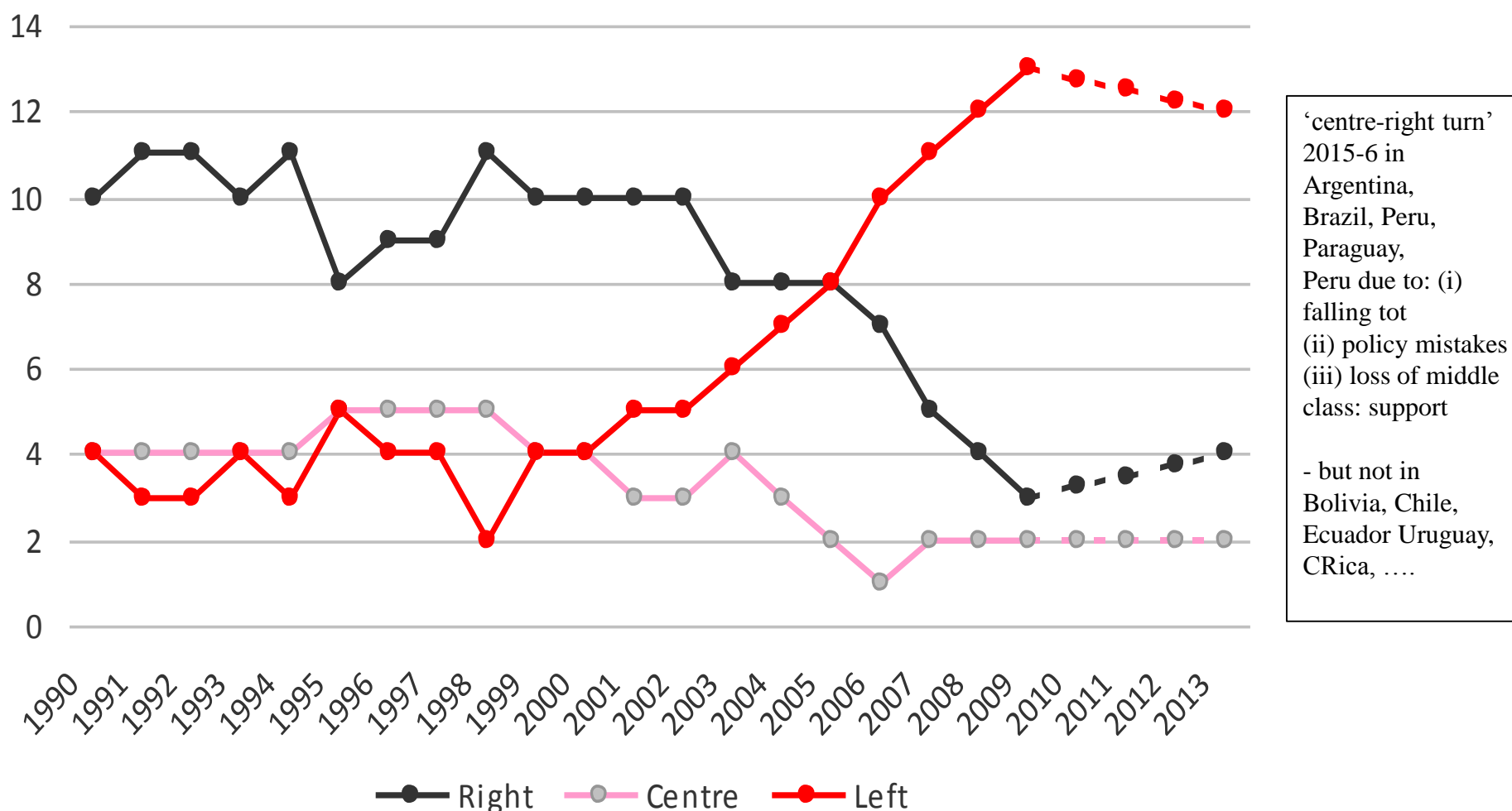
- (i) a decline of in **wage -premium** (skilled /unskilled wage ratio) due to
  - stagnant demand for skilled labour (after its rapid increase during the 1990s);
  - rising supply of skilled labour following rise in public spending on education and decline of educational inequality;
  - high demand of unskilled workers due to policies in favour of labour-intensive sector;
  - falling supply of unskilled labour due to + education, fall in births & emigration.
- (ii) drop in **urban-rural wage gap** (competitive RER & rise in world agric.prices).
- (iii) rise **social assistance transfers** due to ↑ tax collection & better targeting
- (iv) rise of **remittances in total income** (equalizing in some, not in others)

# Impact of policy changes and 'their politics'

- Gradual return to democracy since late 1980s-90s
- Shift towards toward centre-left regimes since late 90s (Figure)
- Policies (mostly 'social-democratic' not radical)
  - Prudent, countercyclical macro policy
  - Active tax policy (regional revenue /GDP rose 3.5 points since 2002)
  - Active labour market policies (collective wage negotiation, higher minimum wages, rise in n. of workers covered by collective contracts, etc)
  - Social assistance and social insurance (costing 0.5-1.5% of GDP)
  - But no structural transformation – just the opposite (re-primarization)

# The 'left turn' of the 2000s ... a new 'right turn' since the mid 2010s ?

Trends in ideological orientation of 18 L.A. governments, 1990–2013





# SSA's Gini trend bifurcation: 17 countries down, 12 up

Average Gini coefficient (un-weighted) of consumption expenditure/c, 1993-2011

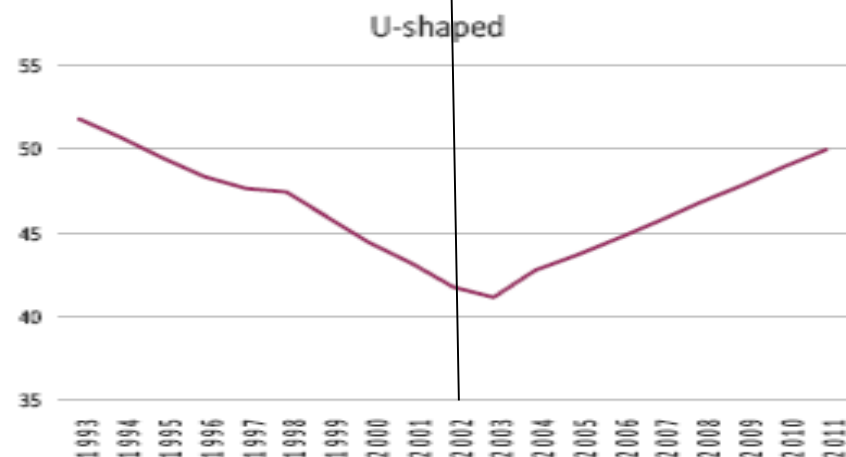
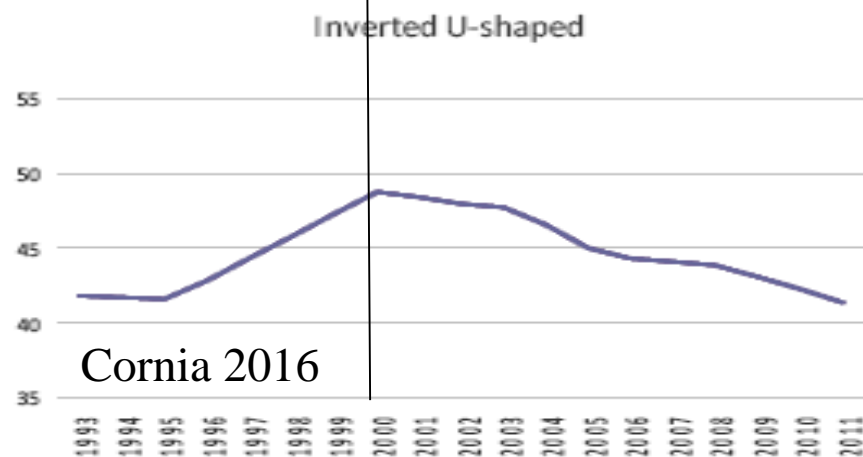
**13 Falling Gini:** *B. Faso, Cameroun, Ethiopia, Gambia, Guinea, G. Bissau, Lesotho, Madagascar, Mali, Niger, Senegal, S. Leone, Swaziland*

**7 Rising Gini:** *Botswana, Cote d'Ivoire, Ghana, Kenya, Mauritius, S. Africa, Uganda*



**4 Inverted U-shaped Gini:** *Angola, Mauritania, Mozambique, Rwanda*

**5 U-shaped Gini:** *CAR, Malawi, Nigeria, Tanzania, Zambia*

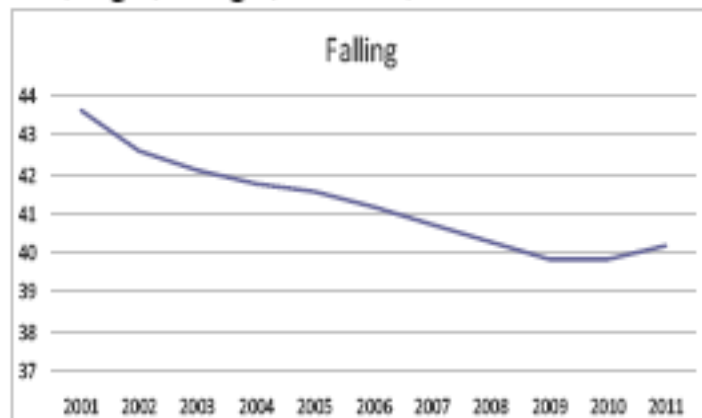


Cornia 2016

# Looking only at 2000s: 17 falling ineq.&12(60%pop) rising ineq.

Average trends of the Gini coefficient (un-weighted) of consumption expenditure per capita for groups of countries with similar trends, 2001-2011

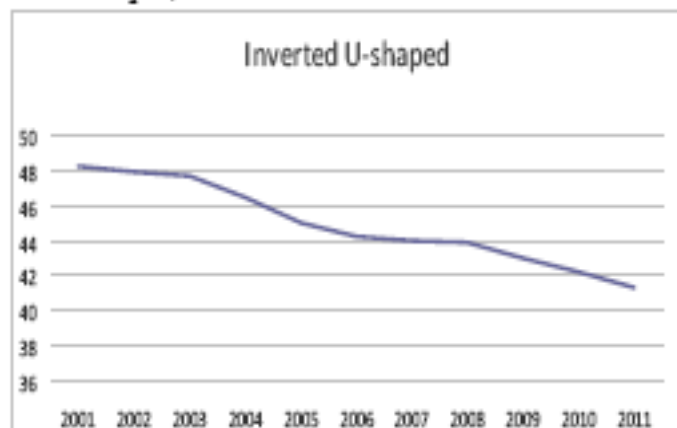
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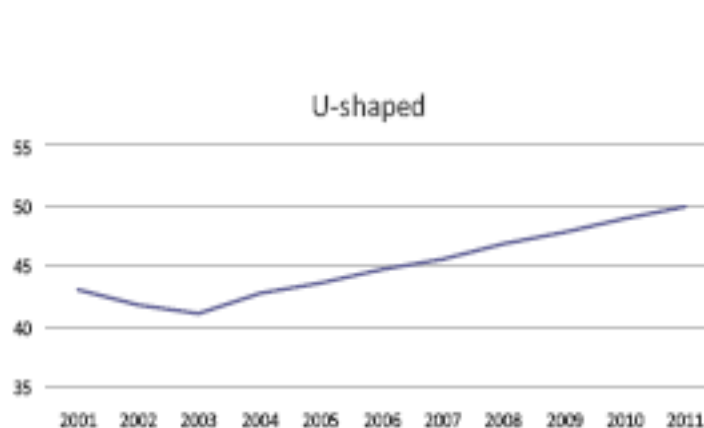
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**4 inverted U-shaped Gini:** *Angola, Mauritania, Mozambique, Rwanda*

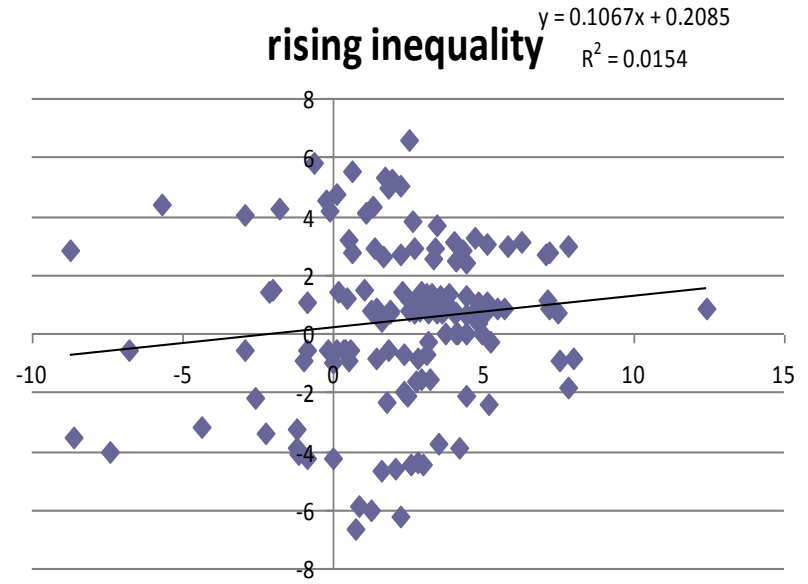
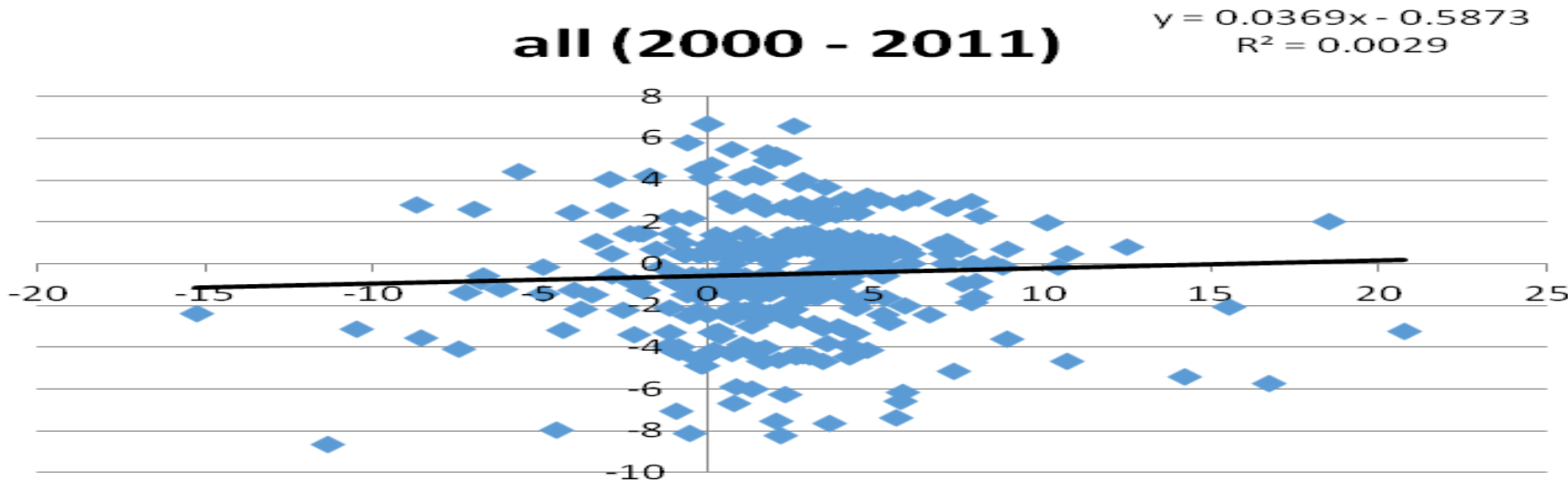


**5 U-shaped Gini:** *CAR, Malawi, Nigeria, Tanzania, Zambia*

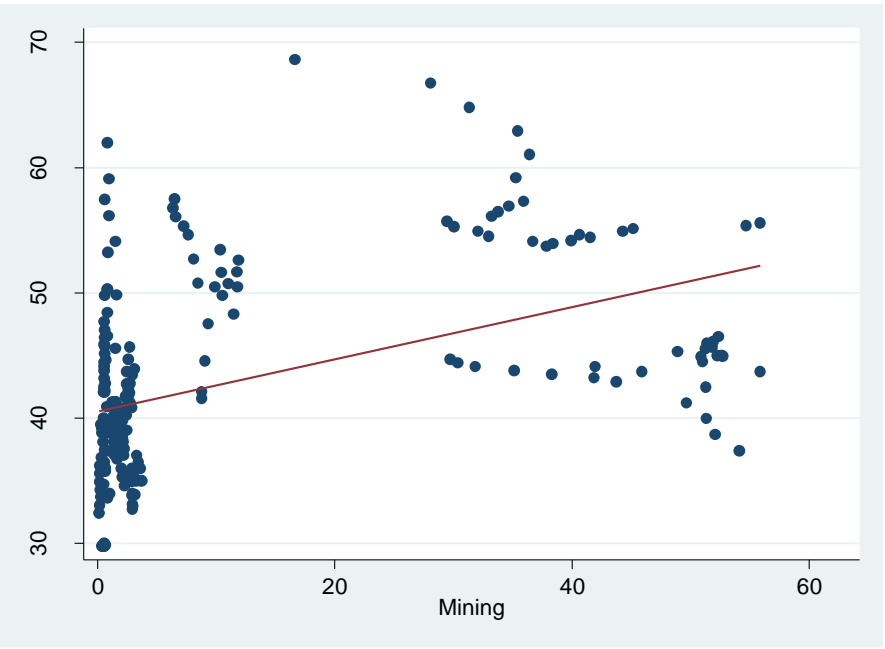
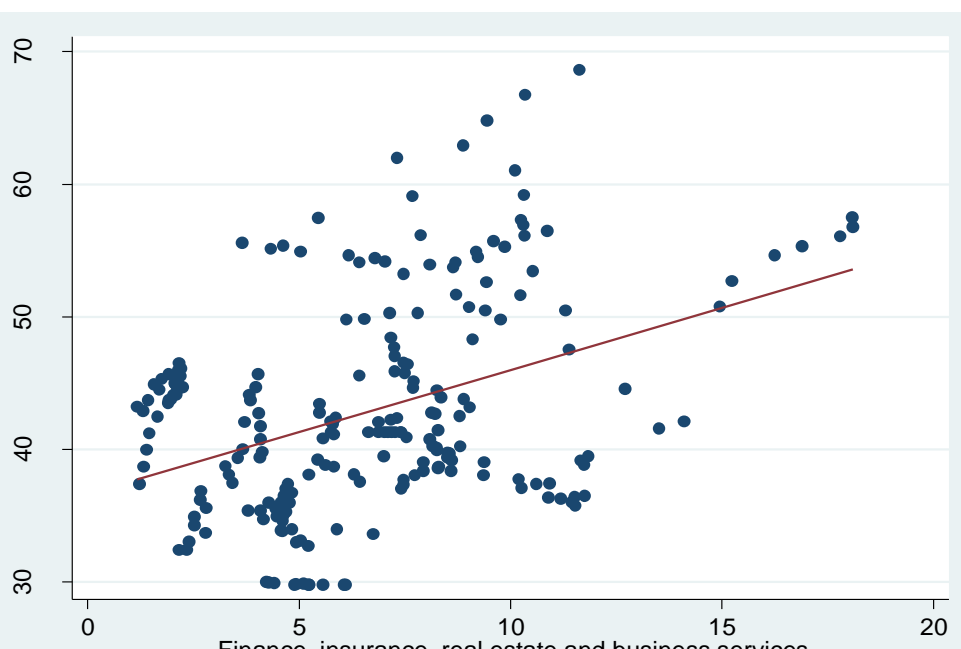
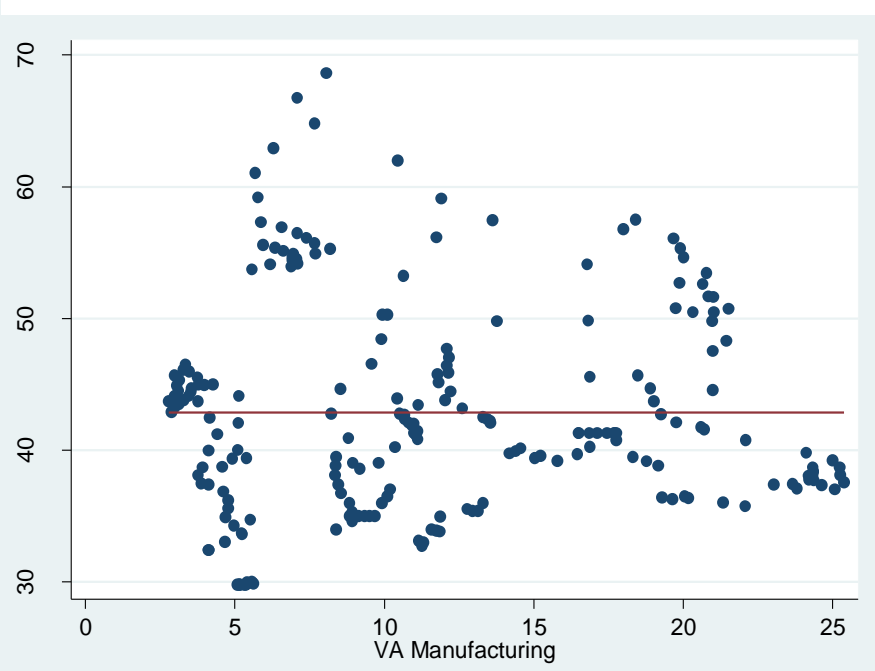
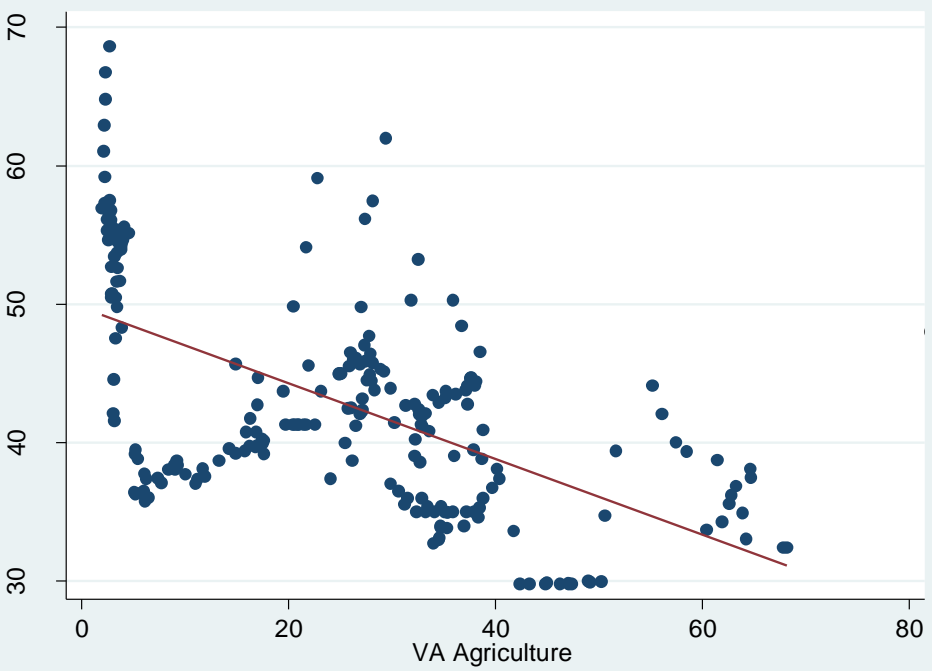


So, in the 2000s 17 countries experience falling inequality and 12 rising inequality in the long term

# Drivers of inequality changes in SSA did GDP growth rate reduce Gini?: NO



# 'growth pattern' equalized in few cases but not always



# Policies' impact

Countercyclical macro policies (tolerable deficits,, HIPC, budget support) helped stabilizing Gini at the margin

- but .... trade liberalization was unequalizing (**Figure**)

- Large illicit capital flights in oil countries– governance problems. More stringent capital controls ?

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Some modest recovery in food production. Food production /c still lower than in 1960s

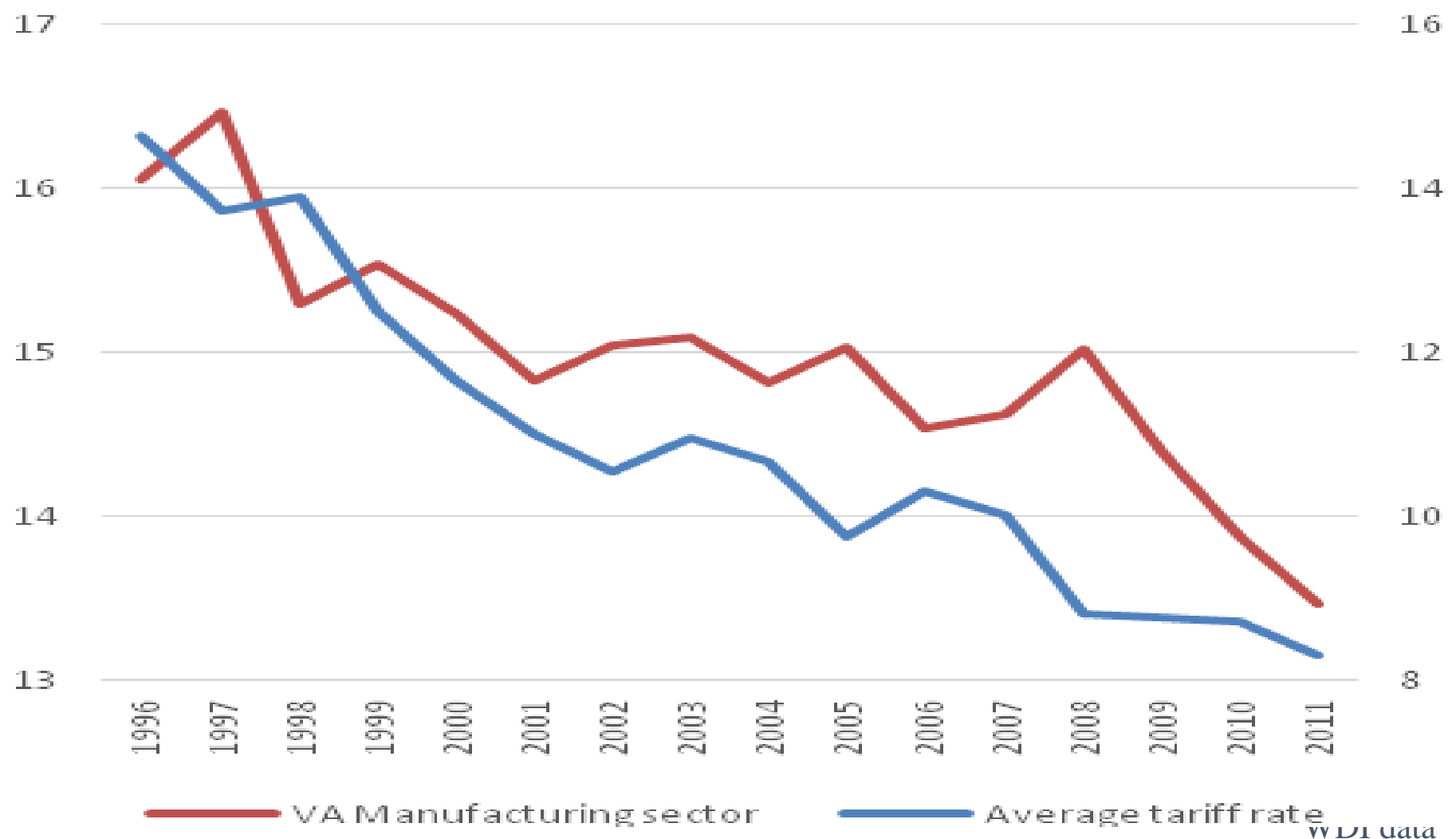
- moderately rising revenue /GDP was equalizing

- except Southern Africa, Ethiopia, etc. social transfers and social expenditure had limited impact

- slow decline in TFR (except Rwanda, Ethiopia, Botswana, etc.) was unequalizing (**figure**)

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regional tariff rate (blue line) & manufacturing v.a. share in total (red line left scale), 29 SSA cties



# Role of external factors

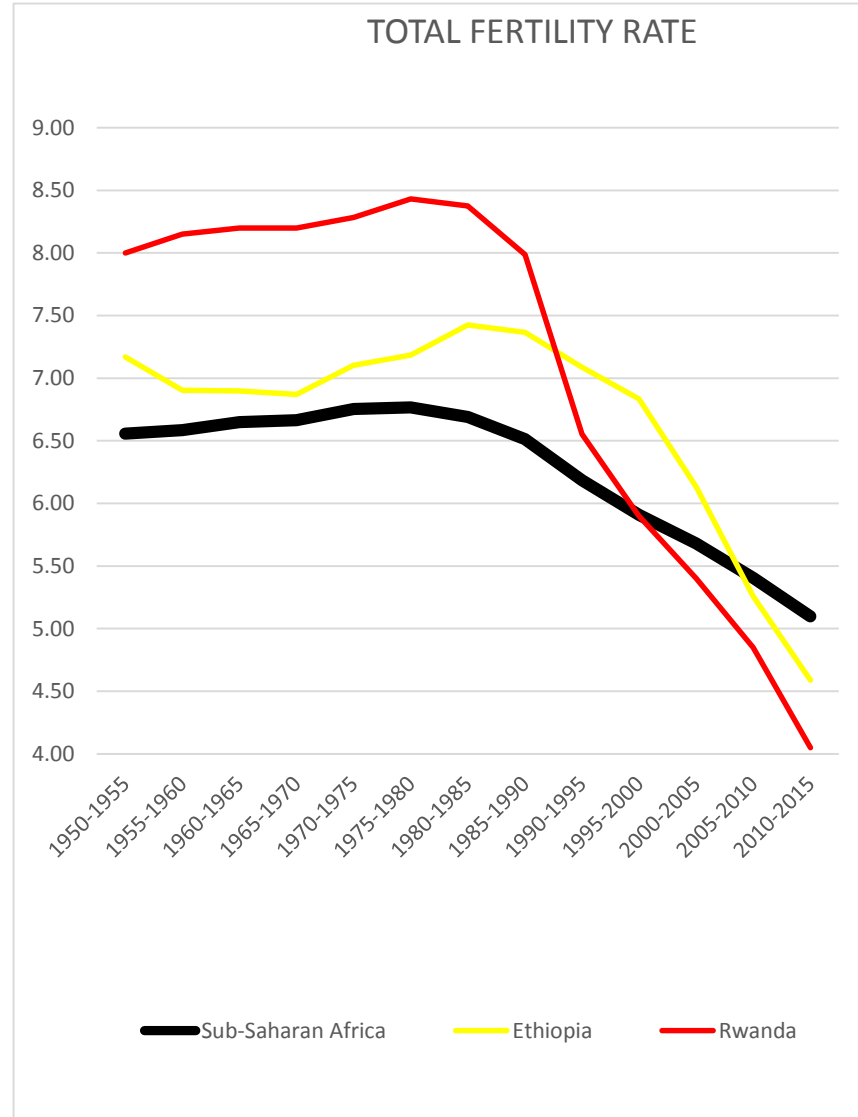
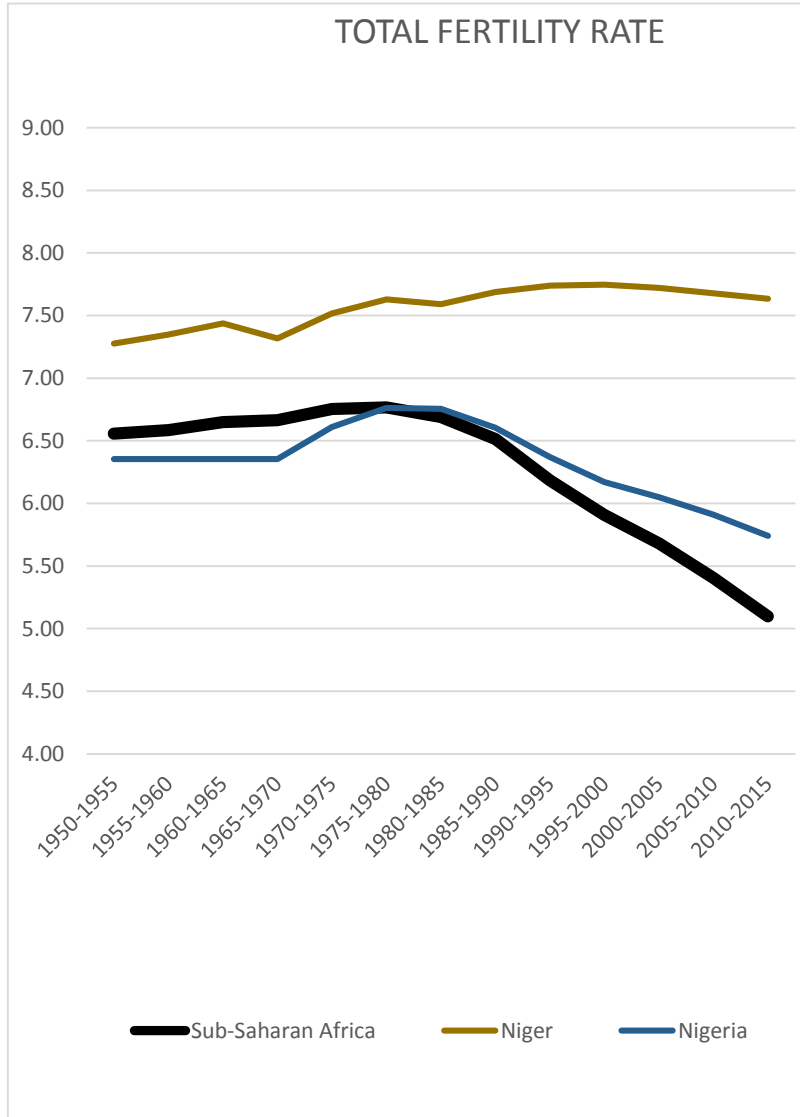
- Equalizing
  - Gains in agricultural terms of trade (labor-intensive, low Gini, few enclaves )
  - Remittances (theory is mixed, but data show it can be equalizing)
  - Debt cancellation (HIPC) VERY equalizing
- Indeterminate
  - Aid flows: literature is divided – very positive in poor/fragile states
- Unequalizing
  - Rising oil and mineral exports (but ...can tax and redistribute rents)
  - FDI in mining sector, potentially equalizing in manufacturing

# policy did little to reduce high TFR

- 39 SSA countries have TFR > 4 (Niger = 7.7), world pop growth 2015-2050 comes from SSA, over 2050-2100 only from SSA
- persistently high TFR in SSA → 'inequality time bomb'
- High TFR raises inequality via:
  - TFR drops first among the 'rich' as 2ary female educ reduces it
  - pressure on land and environmental degradation
  - pressure on public services - lower wages
  - no 'demographic dividend', etc.
- Bangladesh, Ethiopia, Morocco reduced rapidly TFR and TRF/inter-quintile TFR ratio at low GDP/c



# Total fertility rates in SSA vs other regions



**Social inequality.** The data refer to changes in average & the ratio of first (Q1) to top quintile (Q5) over 1995-15. DHS data

Social variable	Latin America		SSA		South Asia	
	Average	Q1/Q5	Average	Q1/Q5	Average	Q1/Q5
<b>Net Primary attendance rate*</b>						
Improvements	13	13	14	13	...	4
No change	0	0	1	7	...	3
Deteriorations	0	0	3	5	...	0
<b>U5MR</b>						
Improvements	6	4	22	9	7	1
No change	1	0	2	6	0	0
Deteriorations	0	3	2	11	0	6
<b>Vaccination rate</b>						
Improvements	5	4	17	14	7	2
No change	1	2	4	4	0	2
Deteriorations	0	0	5	8	0	3
<b>% of women with 2ary/higher educ</b>						
Improvements	4	4	23	6	6	0
No change	2	0	2	3	1	1
Deteriorations	0	2	0	16	0	6

• Net Secondary Attendance Rate for LA

Thank you for your attention

# Comparing causes of inequality changes in LA vs SSA

	L. America 2002- 14	SSA 1991-201
<b>A. immediate determinants of inequality changes</b>		
<b>1. Change in skill premium (skilled/unskilled wage)</b>	Its fall was highly equalizing (high supply skilled workers)	Its rise was unequalizing in urban areas, Irrelevant in rural ones
<b>2. Fall in r-u income gap</b>	Irrelevant but for Central America	Rose in several countries, but for nations with Green Revol.
<b>3. Spatial inequality</b>	Irrelevant	Rose (Ghana, Nigeria, etc)
<b>4. Social transfers</b>	Its rise was highly equalizing	Irrelevant Equalizing only in Southern Africa
<b>5. Migrant remittances</b>	some unexpect. equalizing,	Equalizing
<b>B. Growth</b>		
<b>6. GDP growth rate</b>	Irrelevant	Irrelevant
<b>7. GDP growth pattern</b>	Irrelevant, but for 6 metal/oil exporters	Very relevant: - Agriculture, manufacturing - construction - Oil mining, FIRE, Pub servic

## c. External factors

8. Terms of trade	Unequalizing for oil /metal exp – but equalizing after taxing rents	Equalizing for agric exporters Unequalizing for oil/metal exp
9. FDI (mostly in 1ary sector)	Unequalizing	Unequalizing
10. Foreign aid	Irrelevant	Important but unclear

## d. Semi exogenous shocks

11. TFR changes	Equalizing	Strongly unequalizing
12. cell phones diffusion	Irrelevant	Unclear
13. Change in HIV/AIDS &	Irrelevant	Unequalizing then equalizing
14. Conflicts	Irrelevant	Their decline was equalizing

## E. Policies

<b>15. Macro policies</b> - Low deficit - Low debt - low inflation	To avoid unequalizing crises Yes Yes yes	To avoid unequalizing crises Yes Yes Yes
<b>16. Trade liberalization</b>	Unequalizing	Unequalizing
<b>17. Public exp.on 2ary educ</b>	Highly equalizing	Irrelevant - limited
<b>18. Taxation</b> - rising tax/GDP - more progressive taxation	Equalizing (+3.5 pts) Equalizing	Equalizing (+3.5 pts) Equalizing
<b>19. Labour market policies</b> - formalize employment - collective bargaining - minimum wages	60% labor in formal sector Equalizing Equalizing Equalizing	Highly informal job market Irrelevant Irrelevant irrelevant
<b>20. Social assistance</b>	Highly equalizing	Irrelevant but in Southern Afr
<b>21. Agricultural policies</b>	Mostly irrelevant but in C.A.	Very important - inputs support- land grabs

## F. Changes in democracy and political orientation

22. Return to democracy	Equalizing	Limited
23. Shift of political orientation	Equalizing	ethnicity still prevails

# Summing up

Different extent-drivers of inequality change due to different structures:

Of 23 factors analyzed only 7.5 had same positive (+) or neg. (-) effect :

- Immediate inequality determinants differed for 3.5 variables out of 5
- Impact of GDP growth and growth pattern is relatively similar
- External factors differed for 1.5 factors out of 3
- Exogenous shocks totally different, i.e. in 4 out of 4 cases
- Policies relevance differed in 4 cases out of 7
- Democracy and political orientation differed totally

Similar impact for: Remittances (+), GDP growth (irrelevant), GDP growth pattern (+, -), macro policies (+), tax/GDP increase (+), rise tot metals/oil (-), FDI in resource sector (-)