

Trends in global income inequality and their political implications

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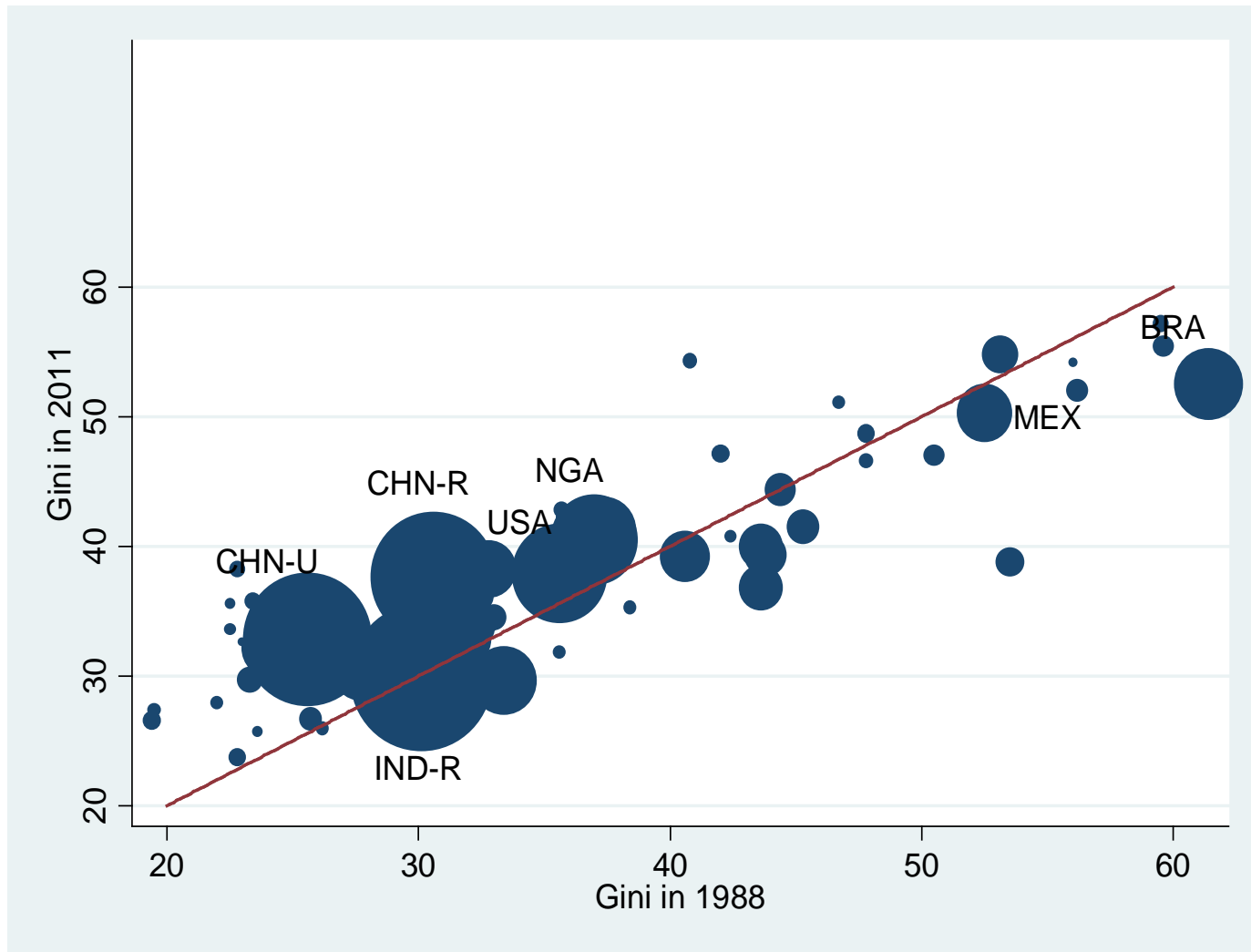
A. Within-national inequalities

Ginis in the late 1980s and around now

	~1988	~2011	Change
Average Gini	35.9	38.4	+2.5
Pop-weighted Gini	33.7	36.5	+2.8
GDP-weighted Gini	32.2	36.4	+4.2
Countries with Gini increases (41)	30.6	36.0	+5.4
Countries with Gini decreases (22)	45.0	41.4	-3.6

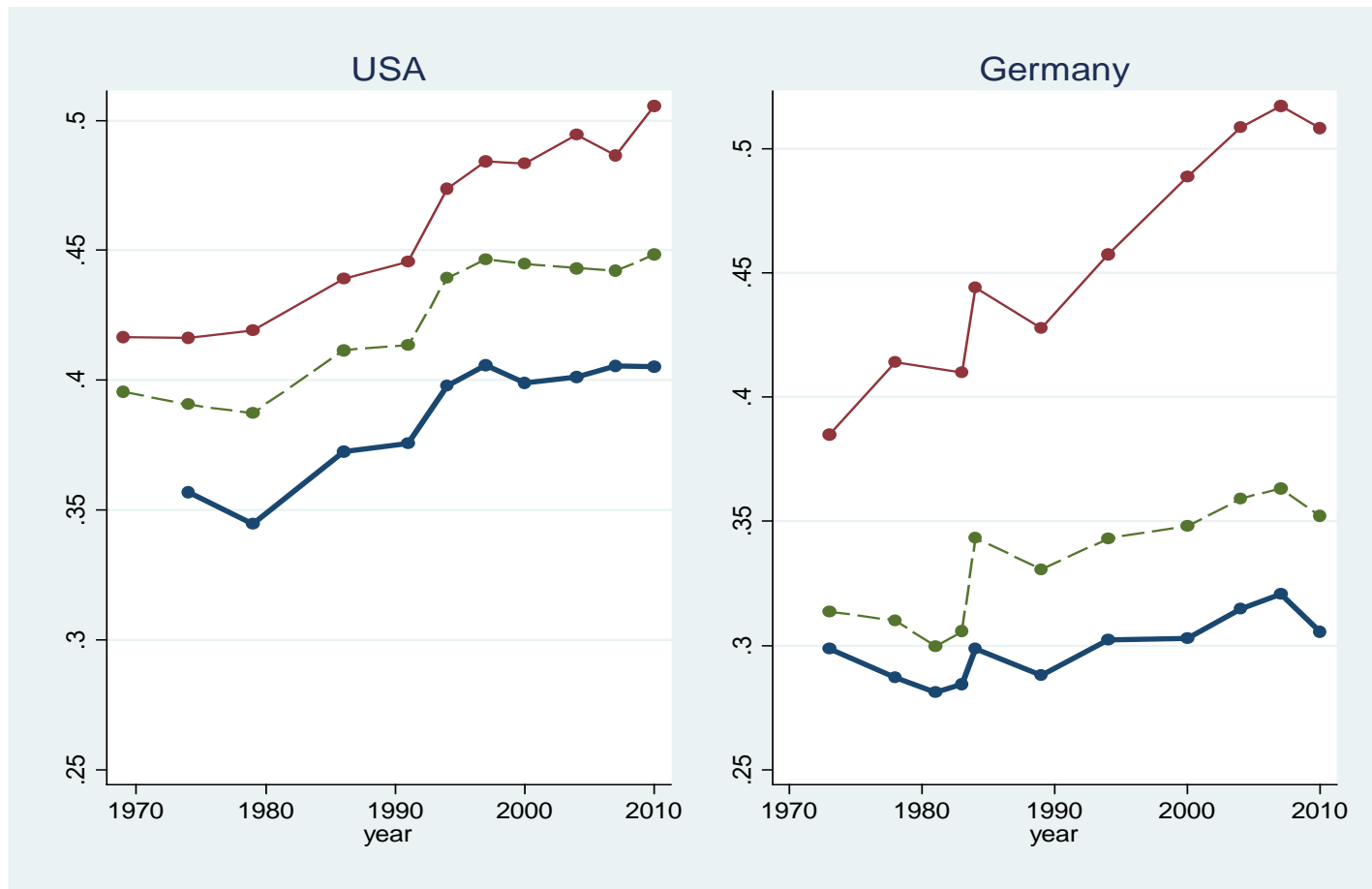
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Ginis in 1988 and 2011 (population-weighted countries)



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twoway (scatter gini gini_88 if bin_year==2011 & keep==1 & mysample==1 & group==1 [w=totpop], text(50 55 "MEX") text(57 60 "BRA") text(42  
34 "USA") text(23 30 "IND-R") text(46 36 "NGA") text(39 24 "CHN-U") text(45 30 "CHN-R") ylabel(20(10)60)) (function y=x, range(20 60))  
legend(off) ylabel(Gini in 2011) xlabel(Gini in 1988)  
Using final11\combine88_11.dta
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Market, gross and disposable income Ginis in the US and Germany

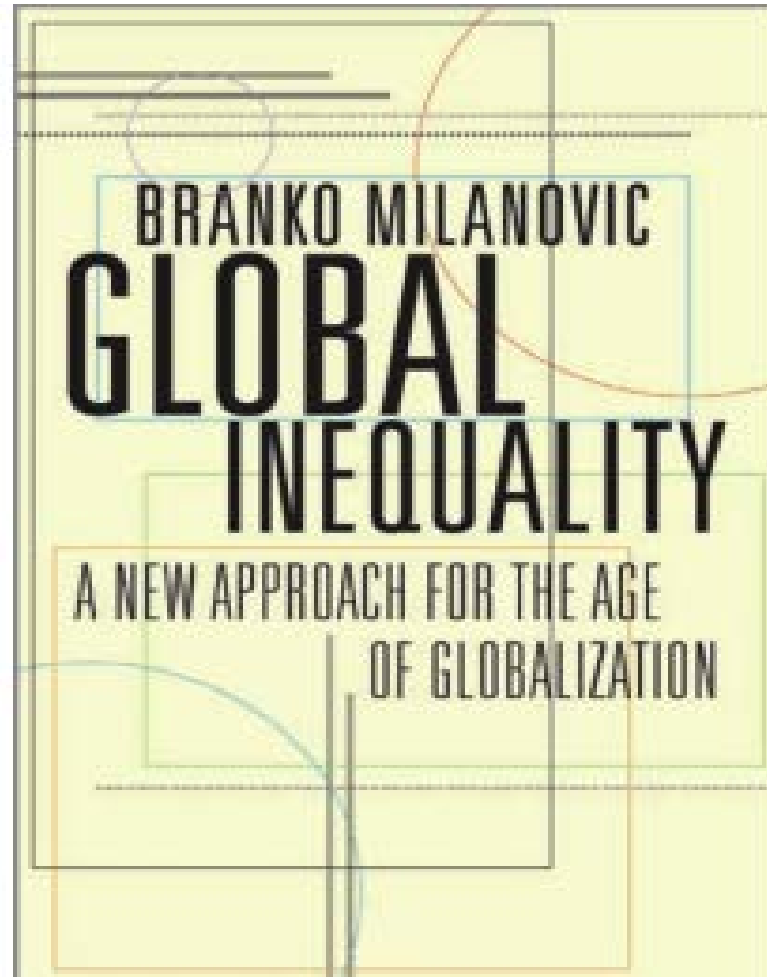


Issues raised by growing national inequalities

- Social separatism of the rich
- Hollowing out of the middle classes
- Inequality as one of the causes of the global financial crisis
- **Perception** of inequality outstrips real increase because of globalization, role of social media and political (crony) capitalism (example of Egypt)
- Hidden assets of the rich

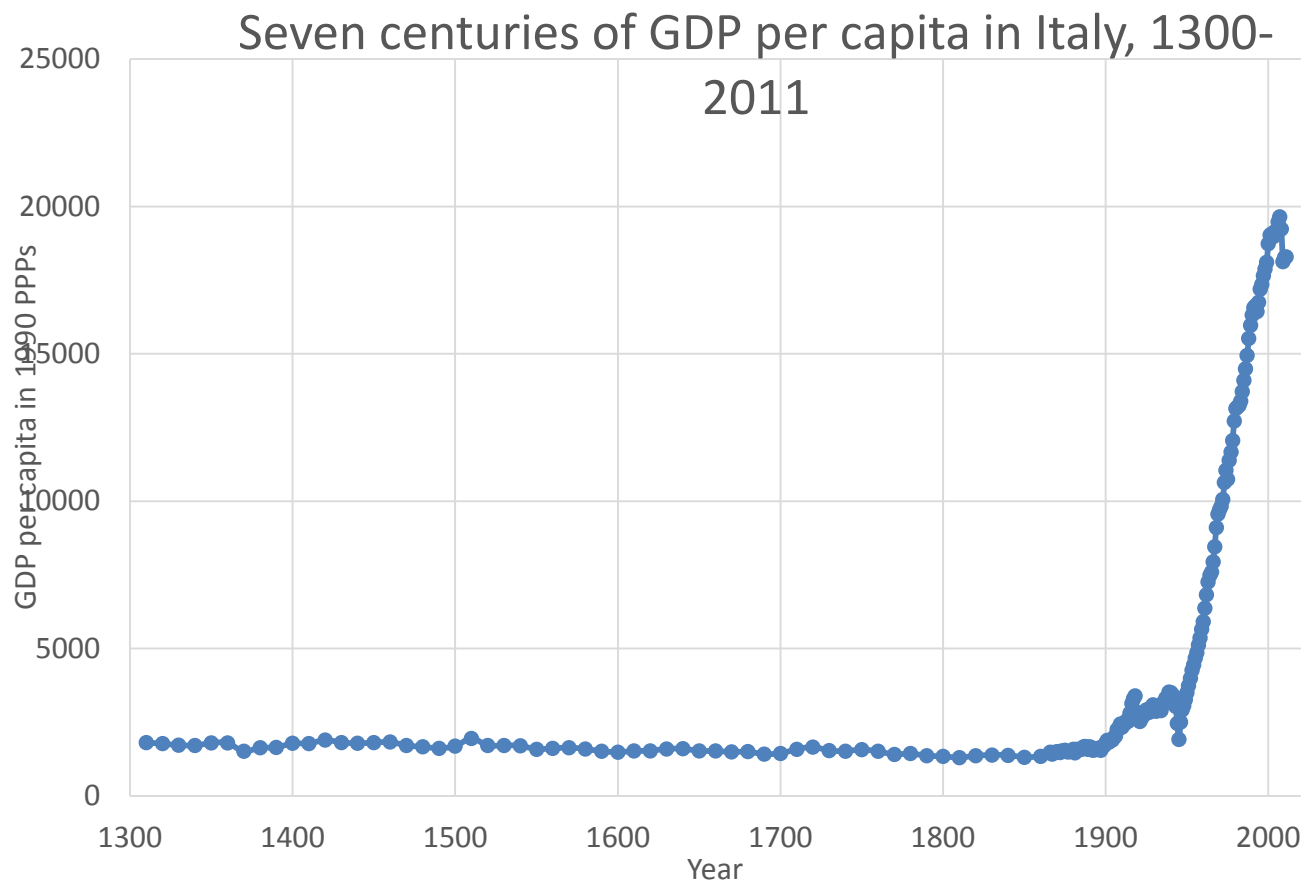
How to think of within-national inequalities: Introducing the Kuznets waves

The second chapter of my
forthcoming book (April 2016)

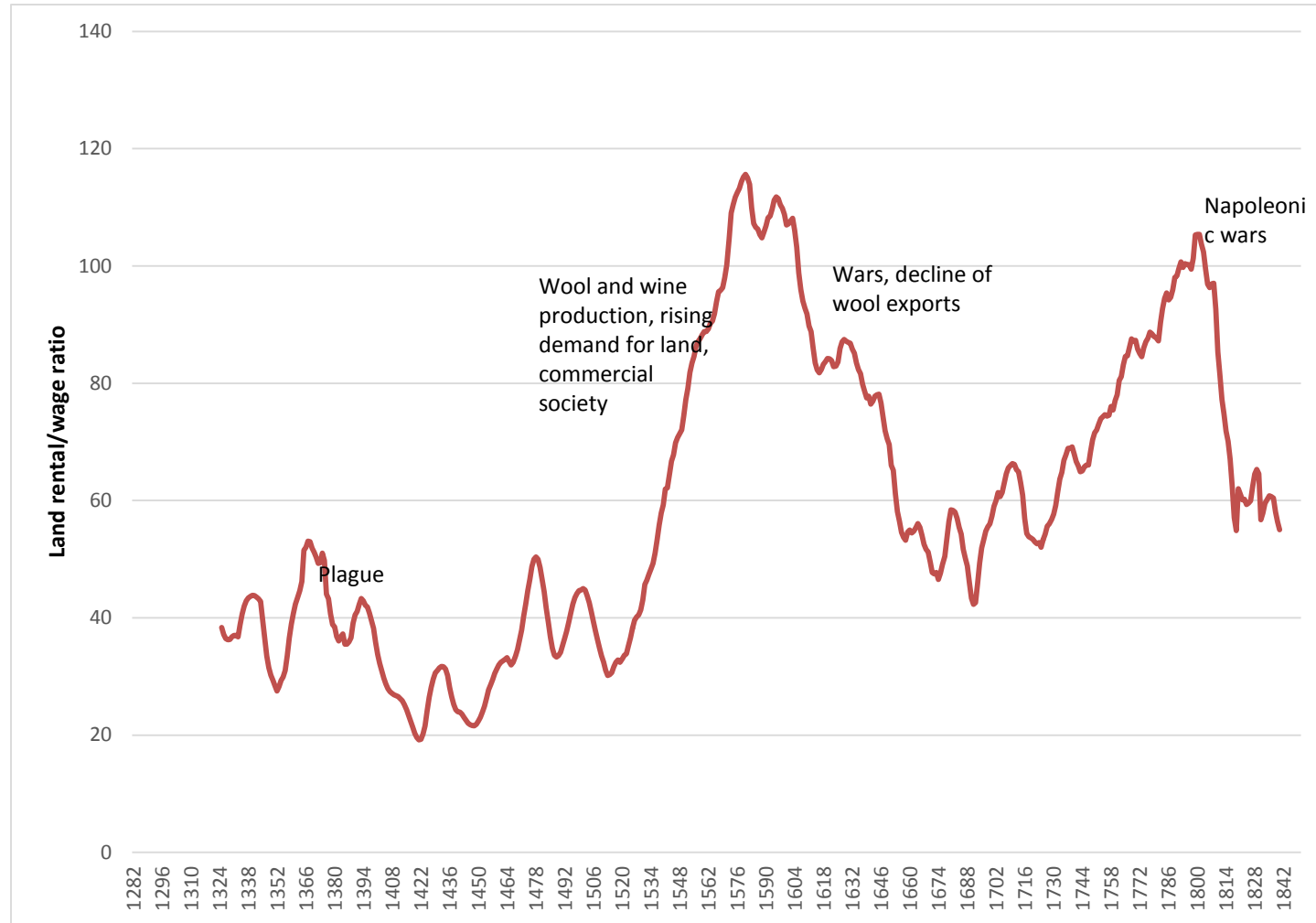


A1. Kuznets' cycles in societies with a stagnant mean income

How do societies with stagnant mean income look like?

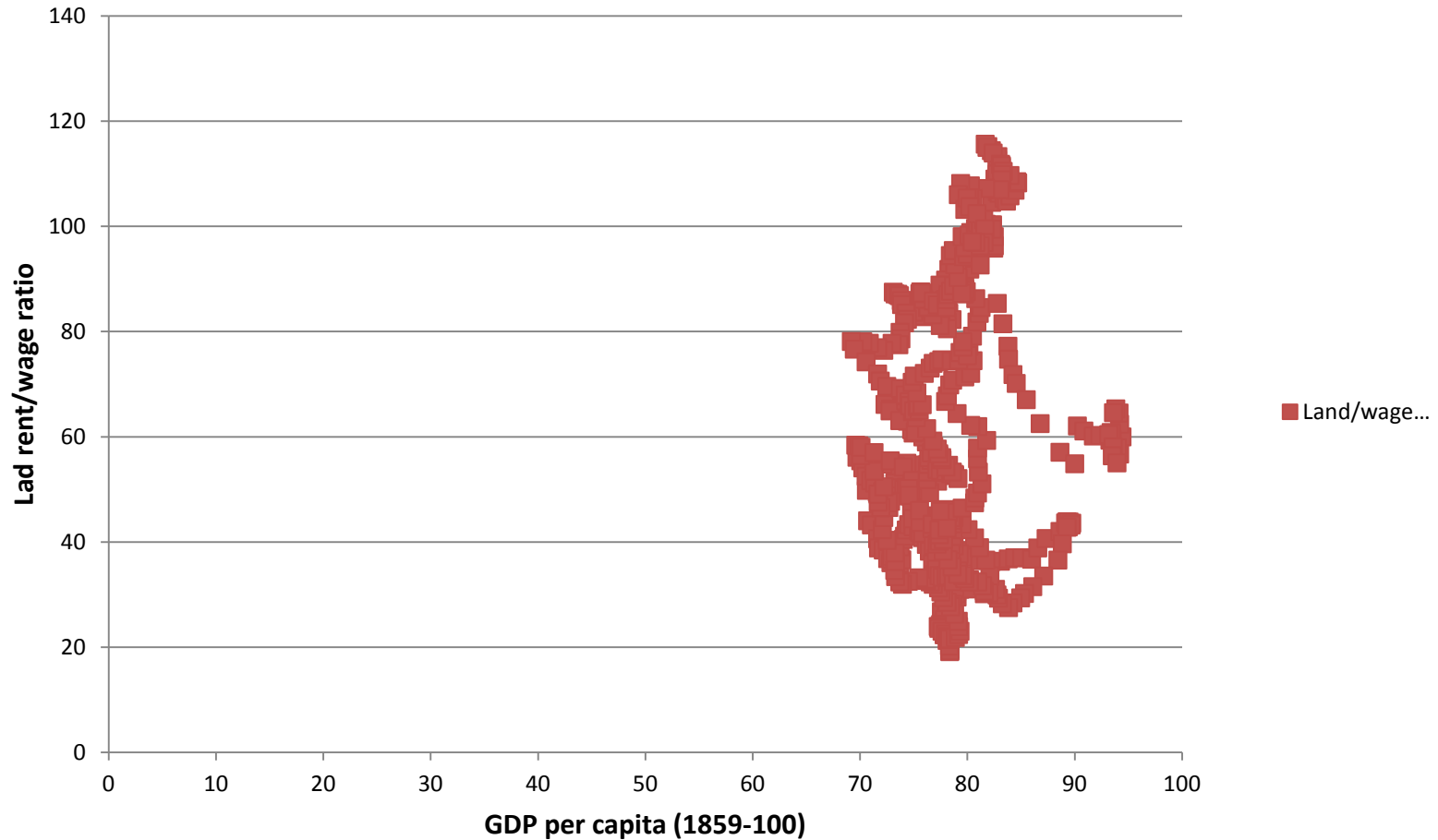


Cyclical nature of the Kuznets curve: Land rental/wage ratio over the long-term in Spain, 1282-1842



Kuznets curve here? No.

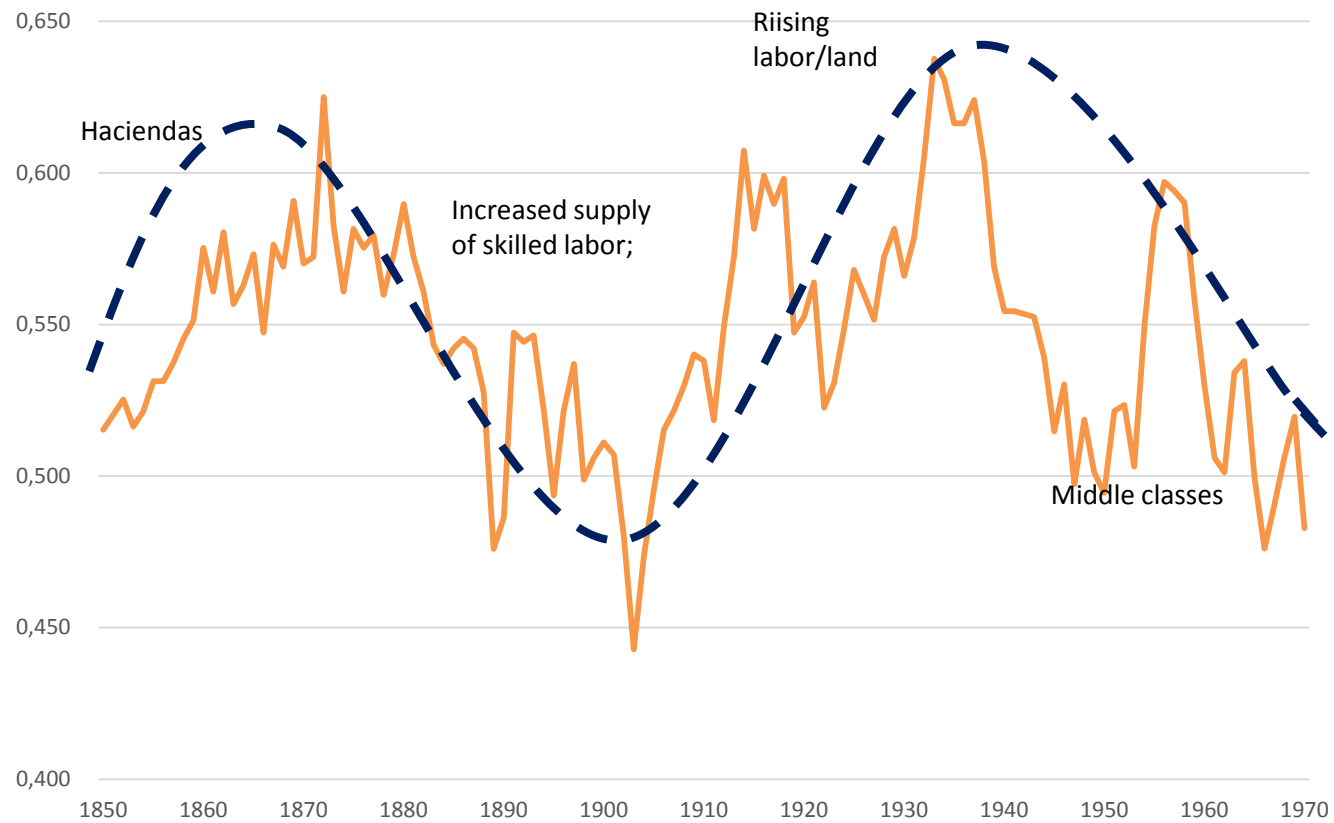
GDP per capita and rent-wage ratio: Spain 1325-1840



Key idea & key difference between pre-industrial and industrial societies

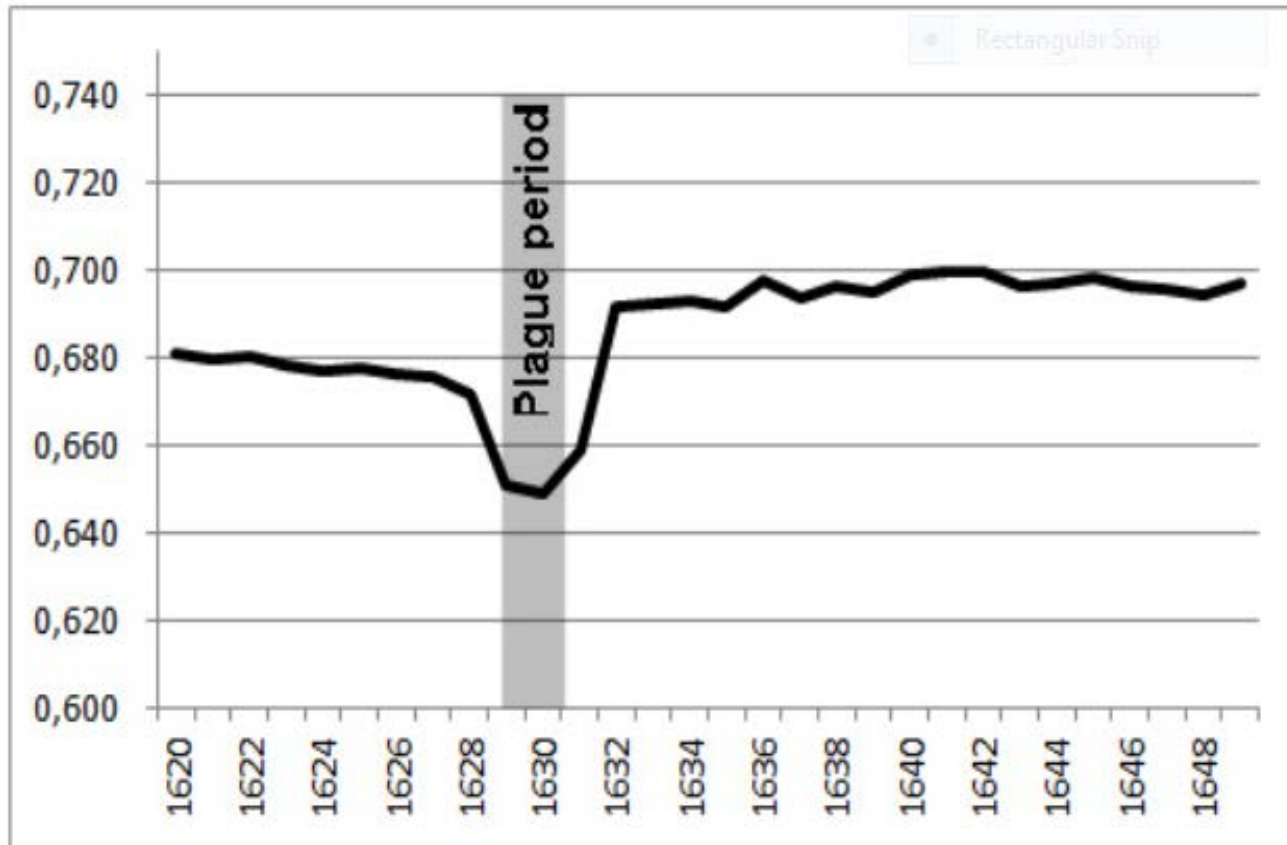
- Kuznets cycles in pre-industrial societies are visible only over time (since income is quasi fixed). They are mostly ***driven by non-economic changes***: conquests, wars, epidemics.
- Link between Kuznets and Malthusian cycles in pre-industrial societies; but Kuznets cycles are broader because they are not necessarily driven by demographic changes
- ***Little room for large increases in inequality*** because the average income level was very low (recall the inequality extraction ratio: inequality is limited by the level of average income)

Gini coefficient in Chile 1850-1970: based on dynamic social tables



Source: Javier Rodriguez Weber (2014).

Northern Italy: wealth inequality in Ivrea, 1520-1649



A2. Kuznets' cycles in societies with a rising mean income

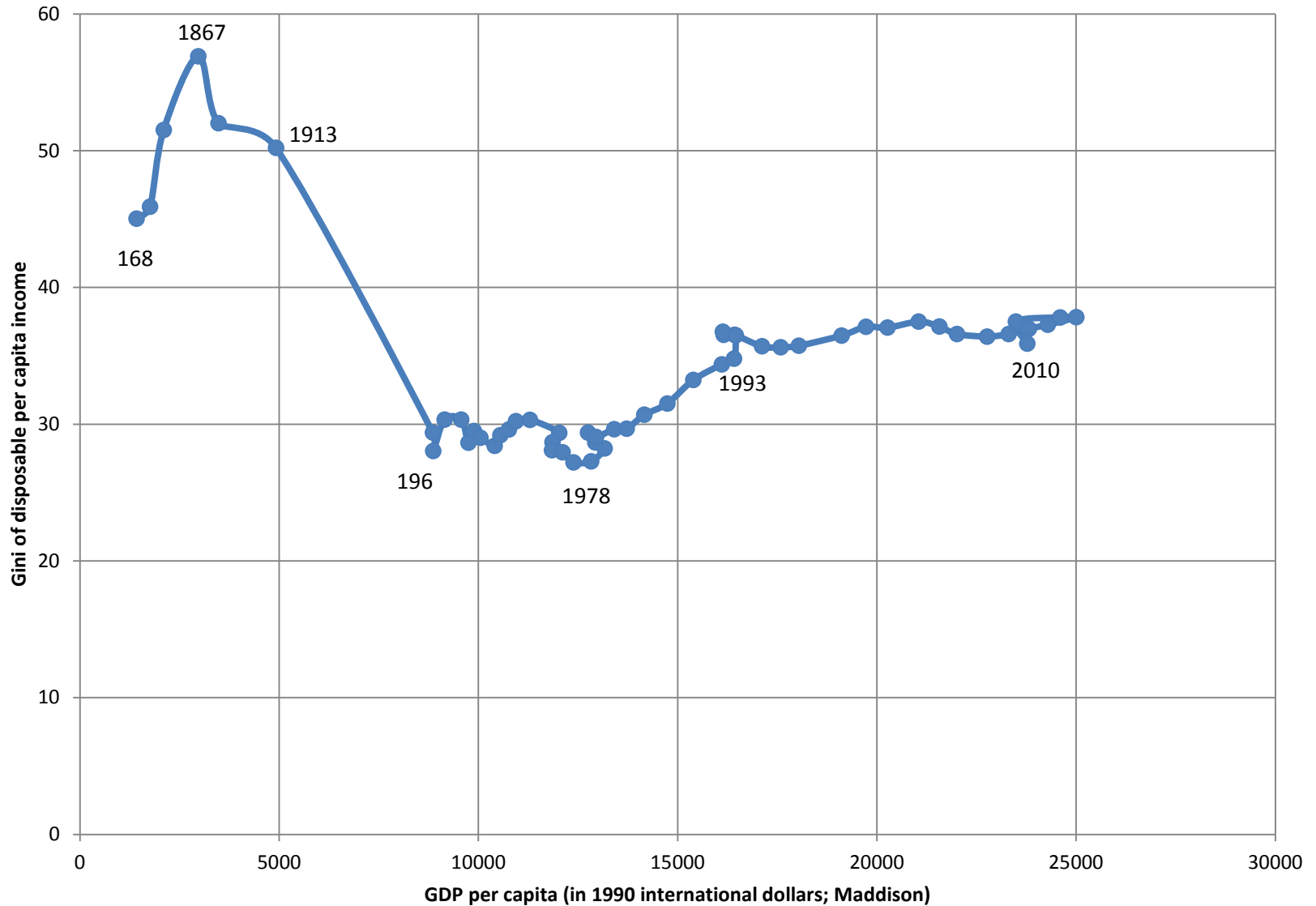
Kuznets cycles defined

- Kuznets cycles in industrial societies are visible when plotted against income per capita. Inequality driven by technological developments (two technological revolutions), globalization and policies. Also wars.
- They reflect predominantly economic forces of technological innovation and structural transformation. But also wars and policy changes.
- Cyclical movement of inequality: long Kuznets cycles.
- Kuznets saw just one curve. We now know there may be many more.

Malign and benign forces reducing inequality (downward portion of the Kuznets wave)

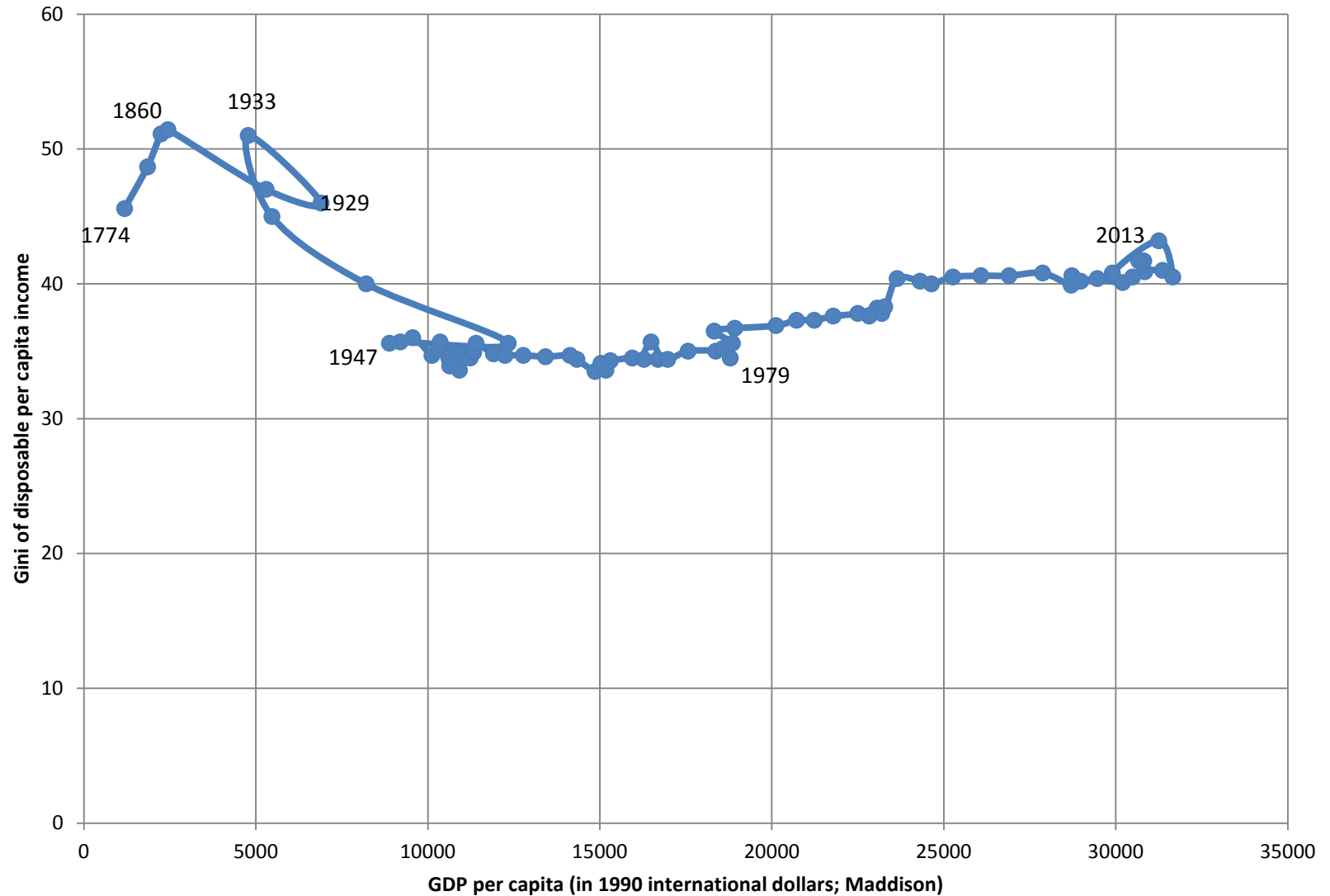
	Malign	Benign
Societies with stagnant mean income	Idiosyncratic events: wars (though destruction), epidemics, civil conflict	Cultural and ideological (e.g. Christianity?)
Societies with a rising mean income	Wars (through destruction and higher taxation: <i>War and Welfare</i>), civil conflict	<ul style="list-style-type: none"> • Widespread education (reflecting changing returns) • Social pressure through politics (socialism, trade unions) • Aging (demand for social protection) • Low-skill biased TC • Cultural and ideological (pay norms?)

Kuznets relationship for the UK, 1688-2010



Source: Ginis: for 1688, 1759, 1801, and 1867 from social tables for England/UK (as reported in Milanovic, Lindert and Williamson); for 1880 and 1913, from Lindert and Williamson (1983, Table 2); from 1961 to 2010, official UK data (disposable income per capita) kindly calculated by Jonathan Cribb, Institute for Fiscal Studies. GDP per capita from Maddison project 2014 version.

Kuznets relationship for the United States, 1774-2013



Source: Gini: 1774 and 1860 from social tables created by Lindert and Williamson (2013). 1929. Radner and Hinricks (1974); 1931 and 1933: Smolemsky and Plotnick (1992). GDP per capita from Maddison project 2014 version. From 1935 to 1950 from Goldsmith et al (1954); from US Census Bureau, Income, poverty and health insurance coverage in the United States (various issues); gross income data adjusted to reflect disposable income.

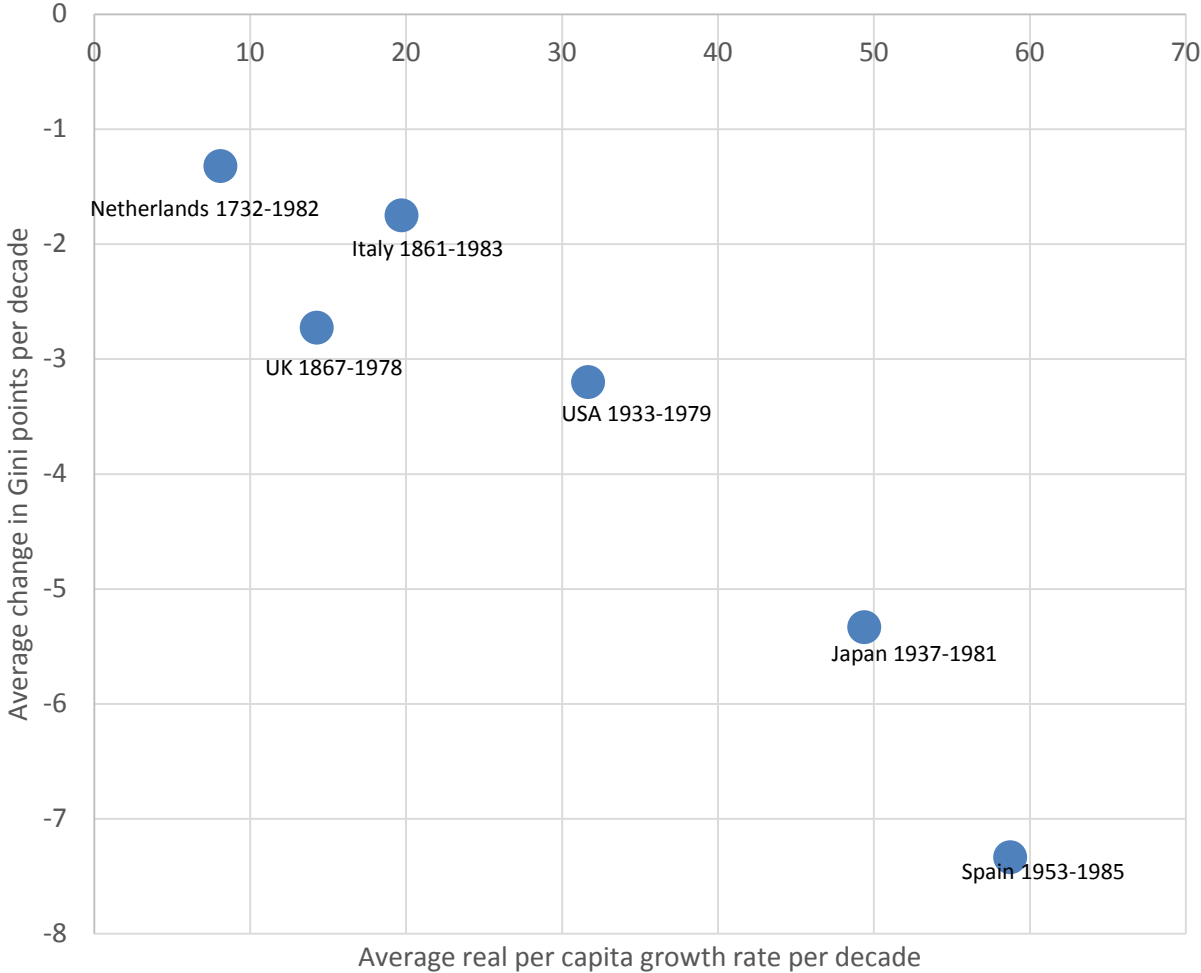
What drives 1st Kuznets cycle down and 2nd Kuznets cycle up?

Downward portion of Kuznets 1 ~1900 to 1980	Upward portion of Kuznets 2 1980-?
<ul style="list-style-type: none">• Wars• Hyperinflation (against creditors)	
<ul style="list-style-type: none">• Social pressure through politics (socialism, trade unions)• High taxation• Widespread education• Aging (demand for social protection)	<ul style="list-style-type: none">• Movement of labor from manufacturing into heterogeneous services• Rents from tech innovations• Globalization• Free global movement of capital• Policy changes (endogenous)• TOP impossible to disentangle

Downswing of Kuznets first cycle and upswing of the second Kuznets cycle

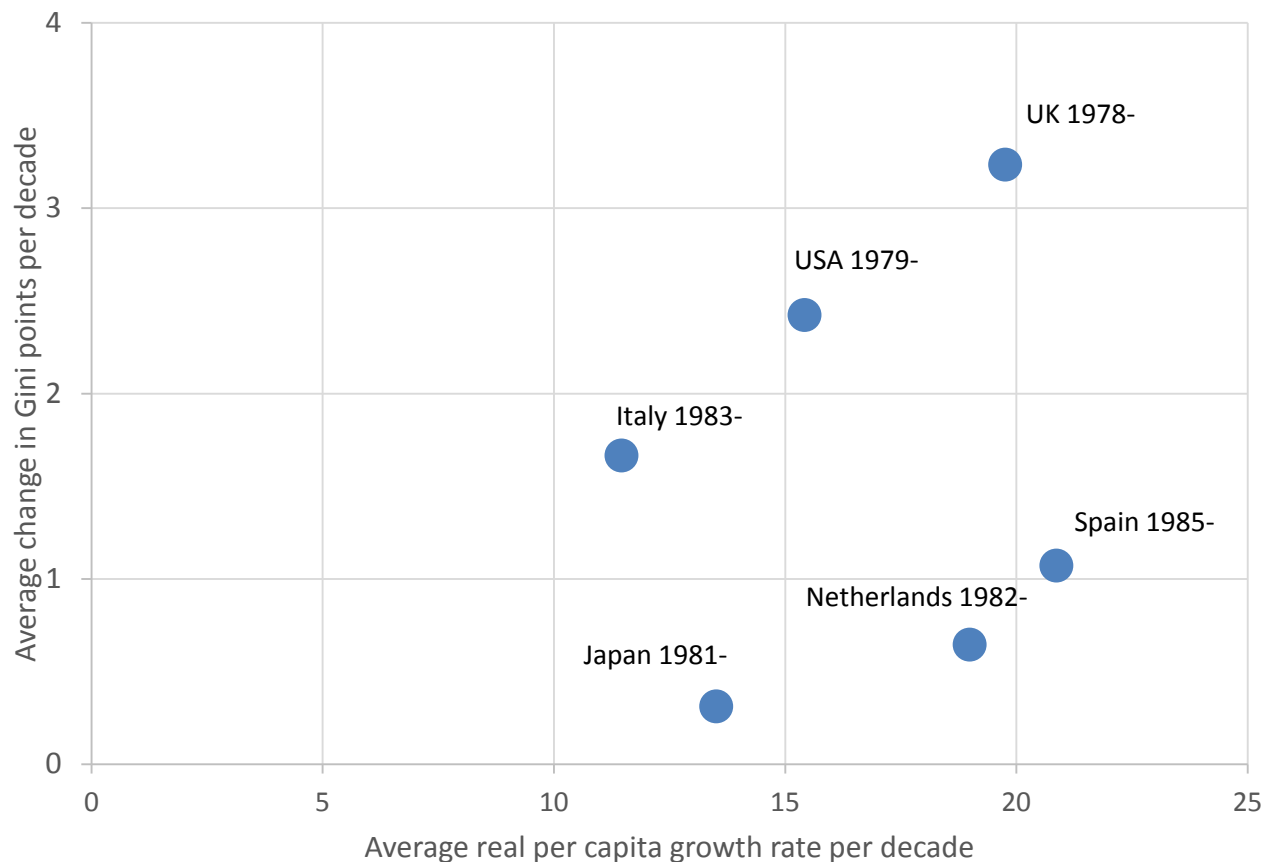
	Level of maximum inequality (peak of Wave 1) Gini points (year)	Level of minimum inequality (trough of Wave 1) (year)	Approximate number of years of downswing of the Kuznets wave	Reduction in inequality (Gini points)	GDP increased (how many times) during the downswing	The second Kuznets wave (increase in Gini points)
United States	51 (1933)	35 (1979)	50	16	4	Strong (+8)
UK	57 (1867)	27 (1978)	110	30	>4	Strong (+11)
Spain	53 (1918)	31 (1985)	70	22	<5	Modest (+3)
Italy	51 (1851)	30 (1983)	120	21	<9	Strong (+5)
Japan	55 (1937)	31 (1981)	45	24	6	Modest (+1)
Netherlands	61 (1732)	21 (1982)	250	35	7	Modest(+2)

Average per decade real per capita growth and Gini change during the downward portion of the first Kuznets wave (the Great Levelling)

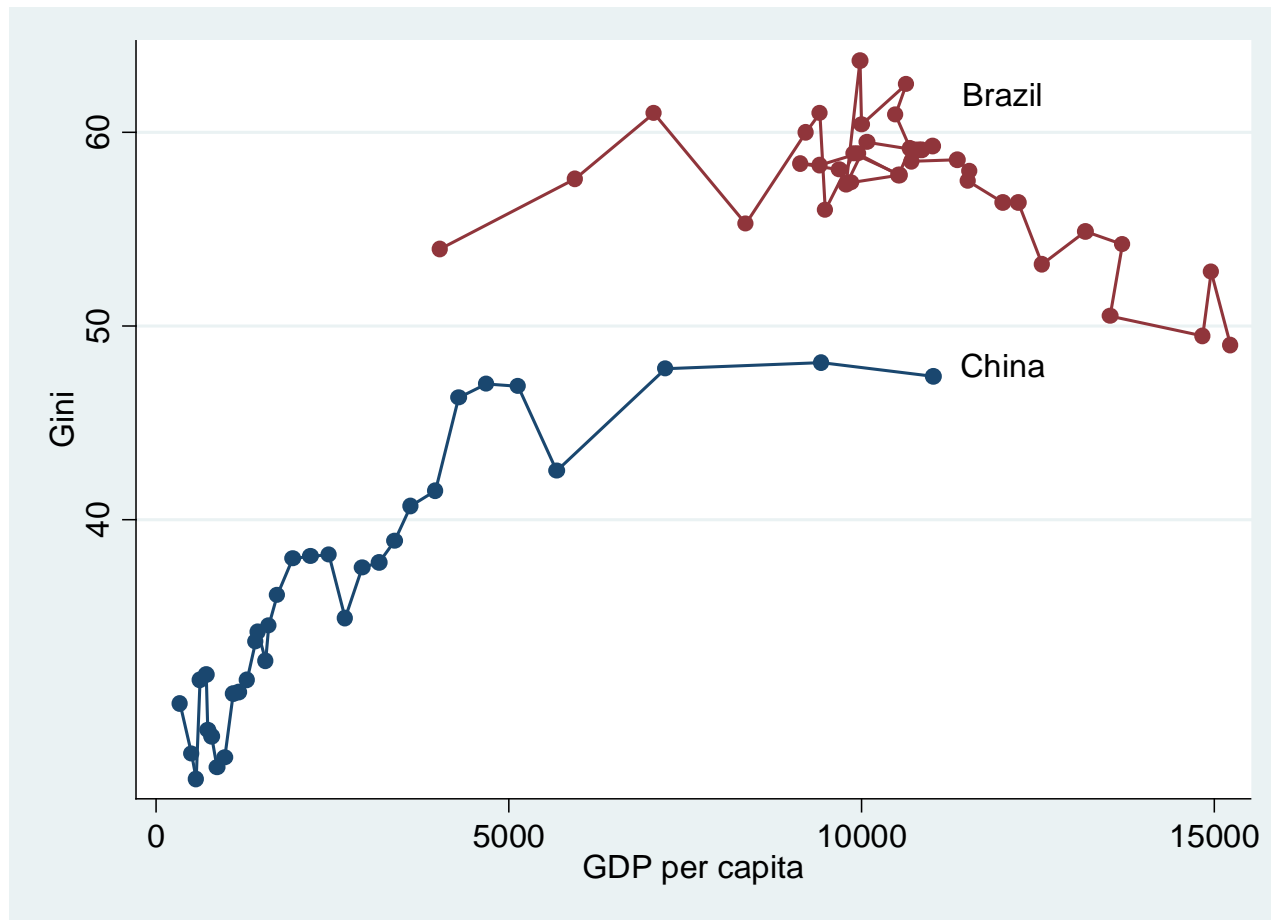


Average per decade real per capita growth and Gini change during the upward portion of the second Kuznets wave (the Great Divergence)

Average decadal real per capita growth rate and decadal Gini change during the upward portion of the Kuznets curve

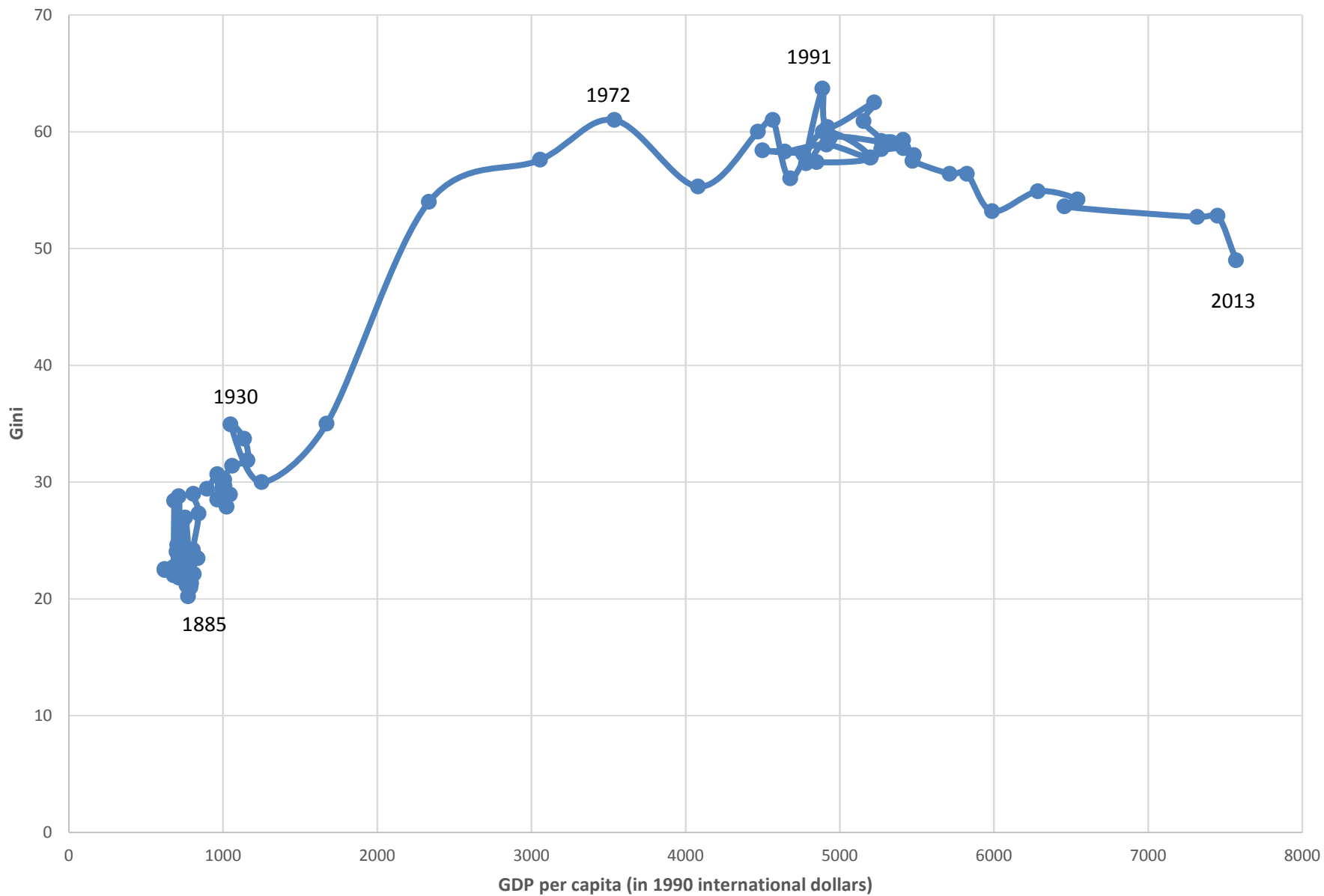


Brazil, China's inequality in the Kuznets framework



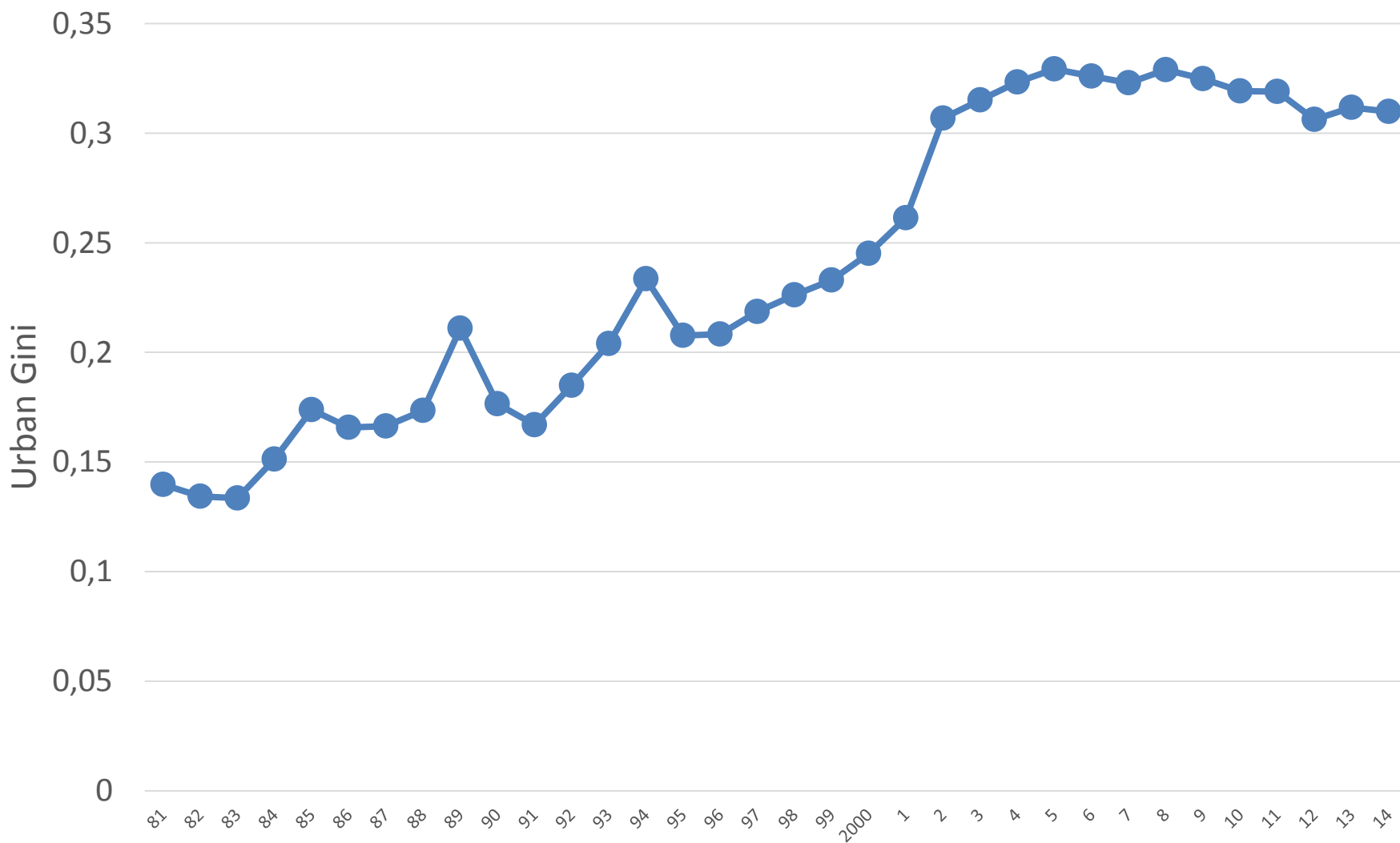
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twoway (scatter Giniall gdp PPP if contcod=="CHN" & year>1960, connect(l) ylabel(40(10)60) xtitle(2000 6000 12000) ytitle(Gini) xtitle(year)) (scatter Giniall gdp PPP if contcod=="BRA", connect(l) text(62 12000 "Brazil") text(48 12000 "China")) legend(off)  
Using gdp PPP reg5.dta
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The Kuznets relationship for Brazil, 1839-2013

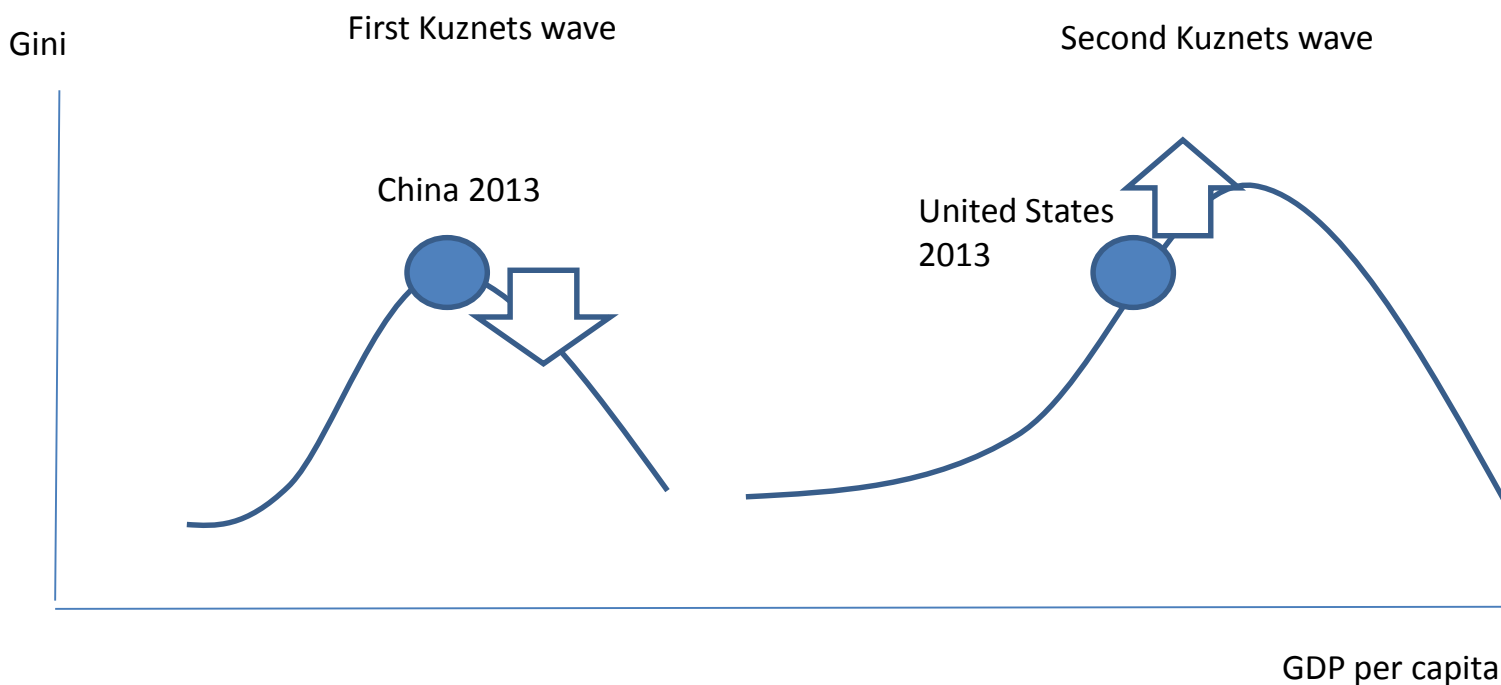


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Urban Gini in China: 1981-2014 (based on official household surveys)

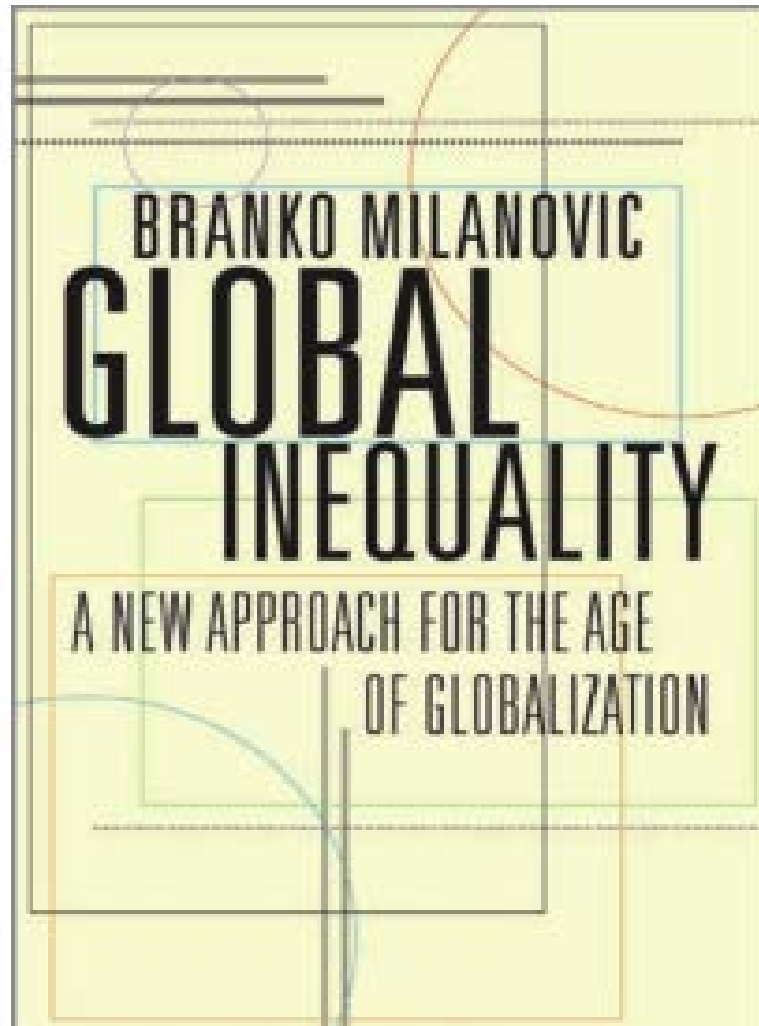


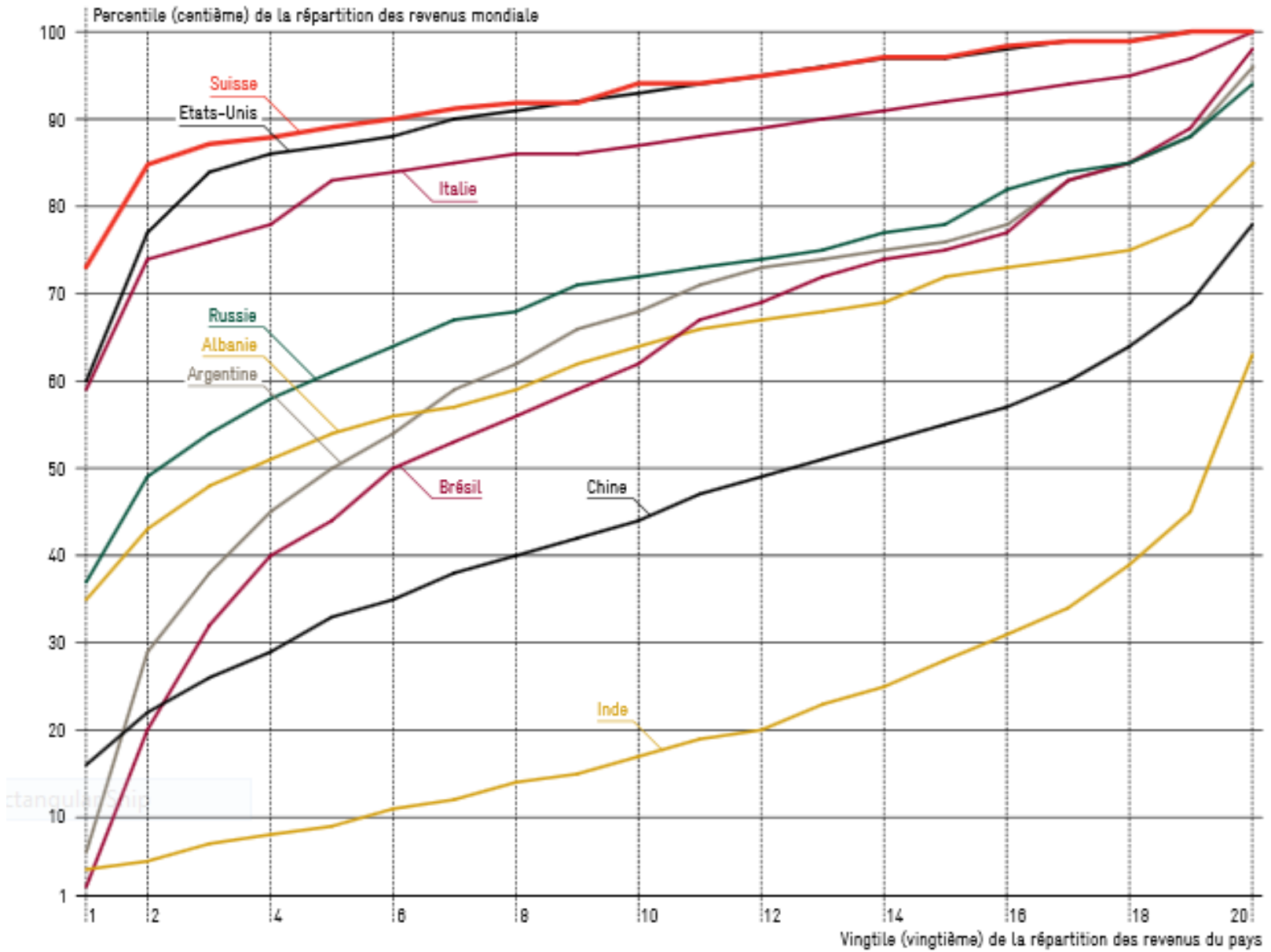
Where are now China and the US?



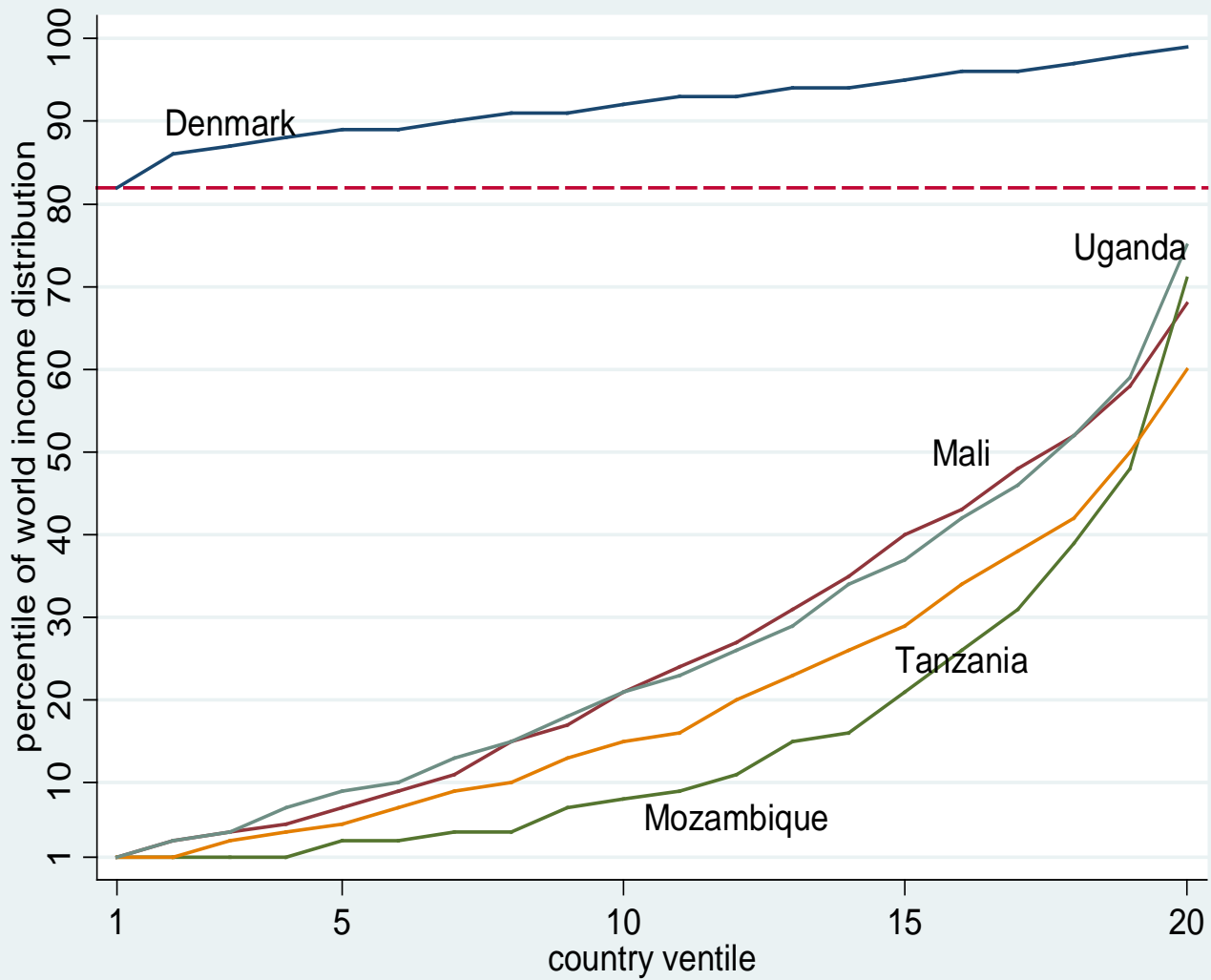
B. Between national inequalities

The third chapter of my forthcoming
book (April 2016)

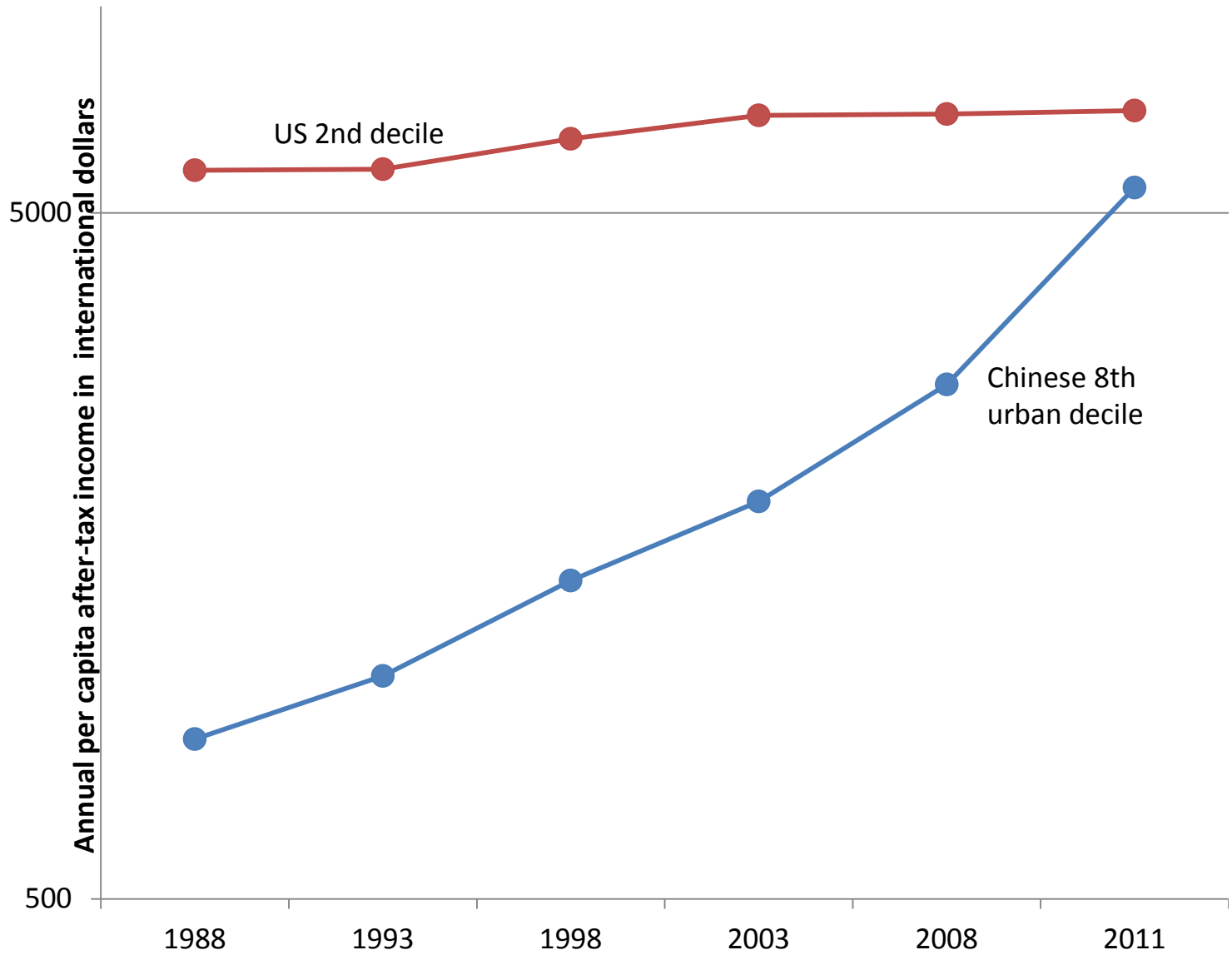




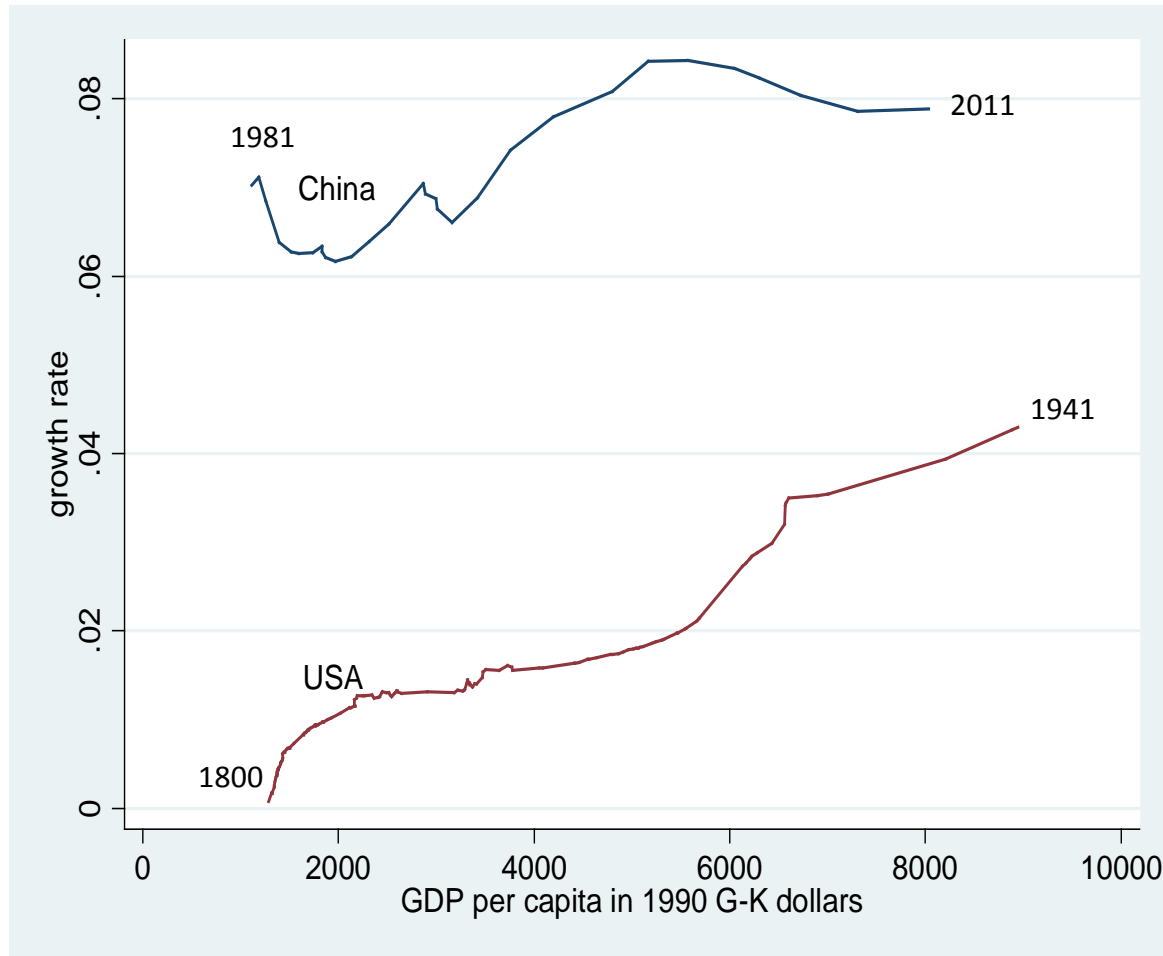
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How to think of between-national inequalities: Convergence economics



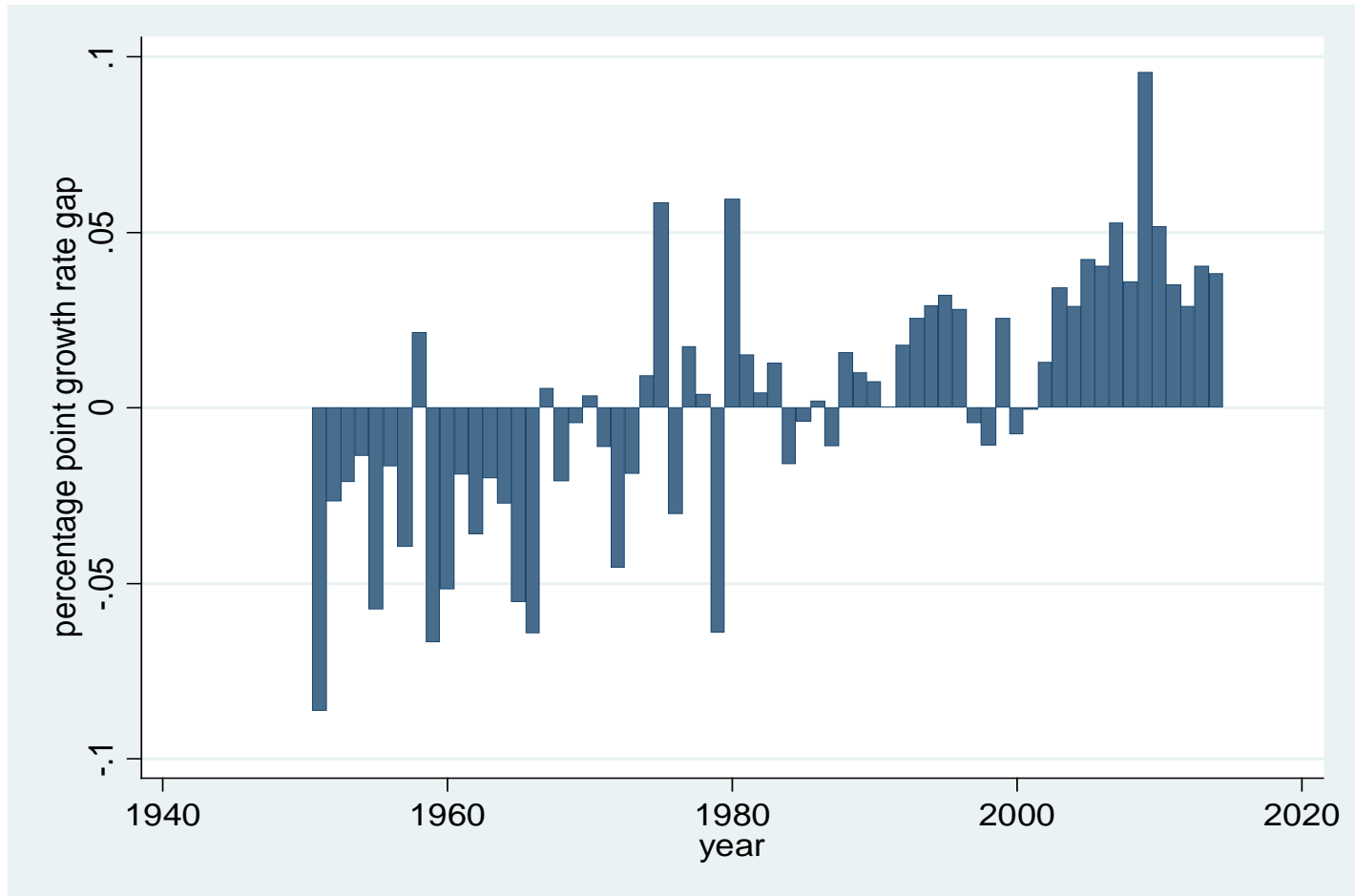
US and China's growth at the same income level (GDPpc in Maddison's 1990 \$PPP)



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twoway (lowess growth gdpppp if contcod=="CHN" & year>1980) (lowess growth gdpppp if contcod=="USA" & gdpppp<9000, text(0.07 1980 "China")  
text(0.015 1950 "USA")) legend(off) xtitle(GDP per capita in 1990 G-K dollars) ytitle(growth rate)
```

Using Polity_Maddison_2013.dta

Difference in the combined (population-weighted) growth rates of the large emerging economies (excluding China) and rich countries, 1951-2014



Large emerging economies are India, South Africa, Brazil, Indonesia and Vietnam.

Large gaps in mean country incomes raise two important issues

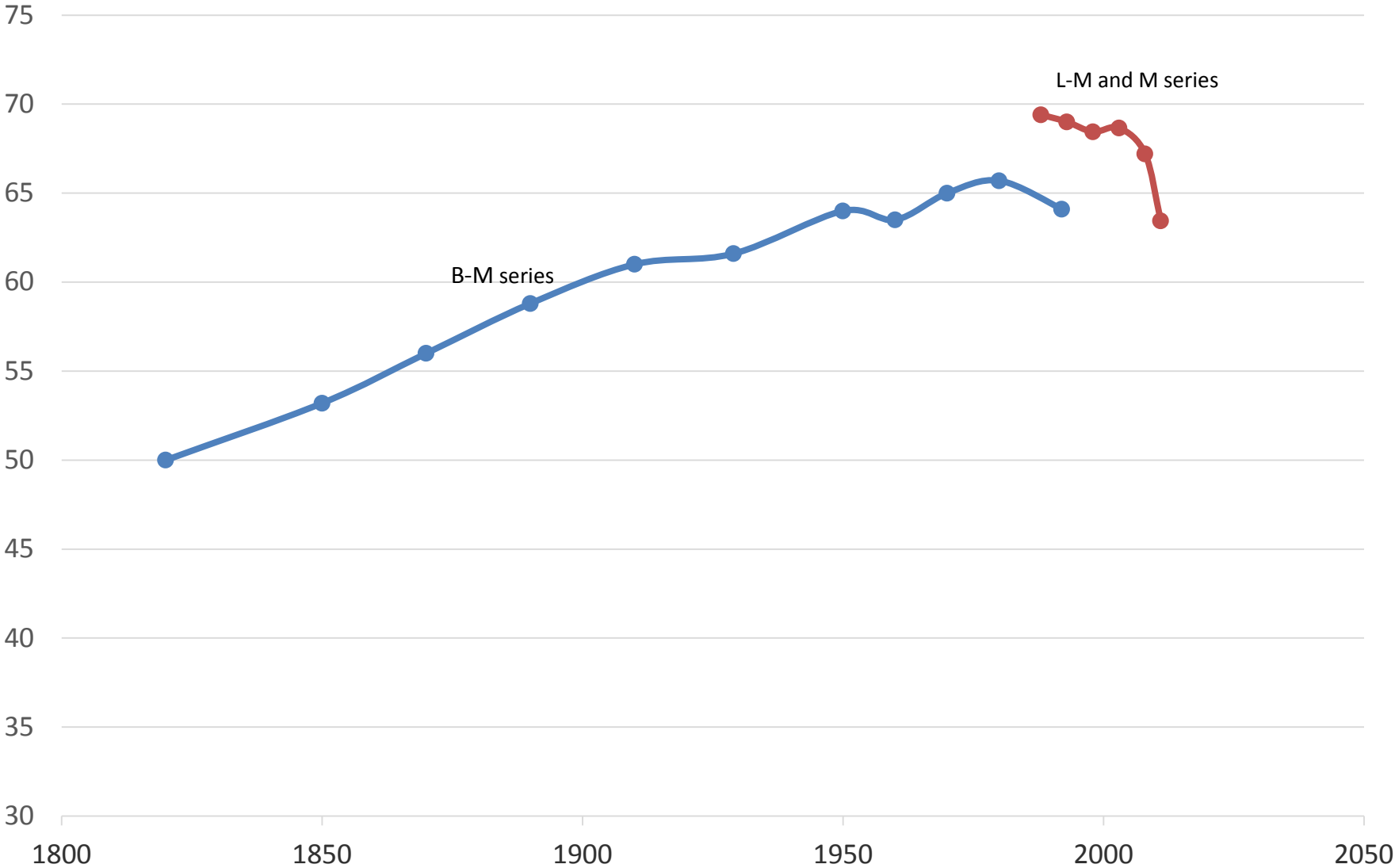
- Political philosophy: is the “citizenship rent” morally acceptable? Does global equality of opportunity matter?
- Global and national politics: Migration and national welfare state
- (will address both at the end)

C. Global inequality

Essentially, global inequality is determined by three forces

- What happens to within-country income distributions?
- Is there a catching up of poor countries?
- Are mean incomes of populous & large countries (China, India) growing faster or slower than the rich world?

Global Gini 1820-2011

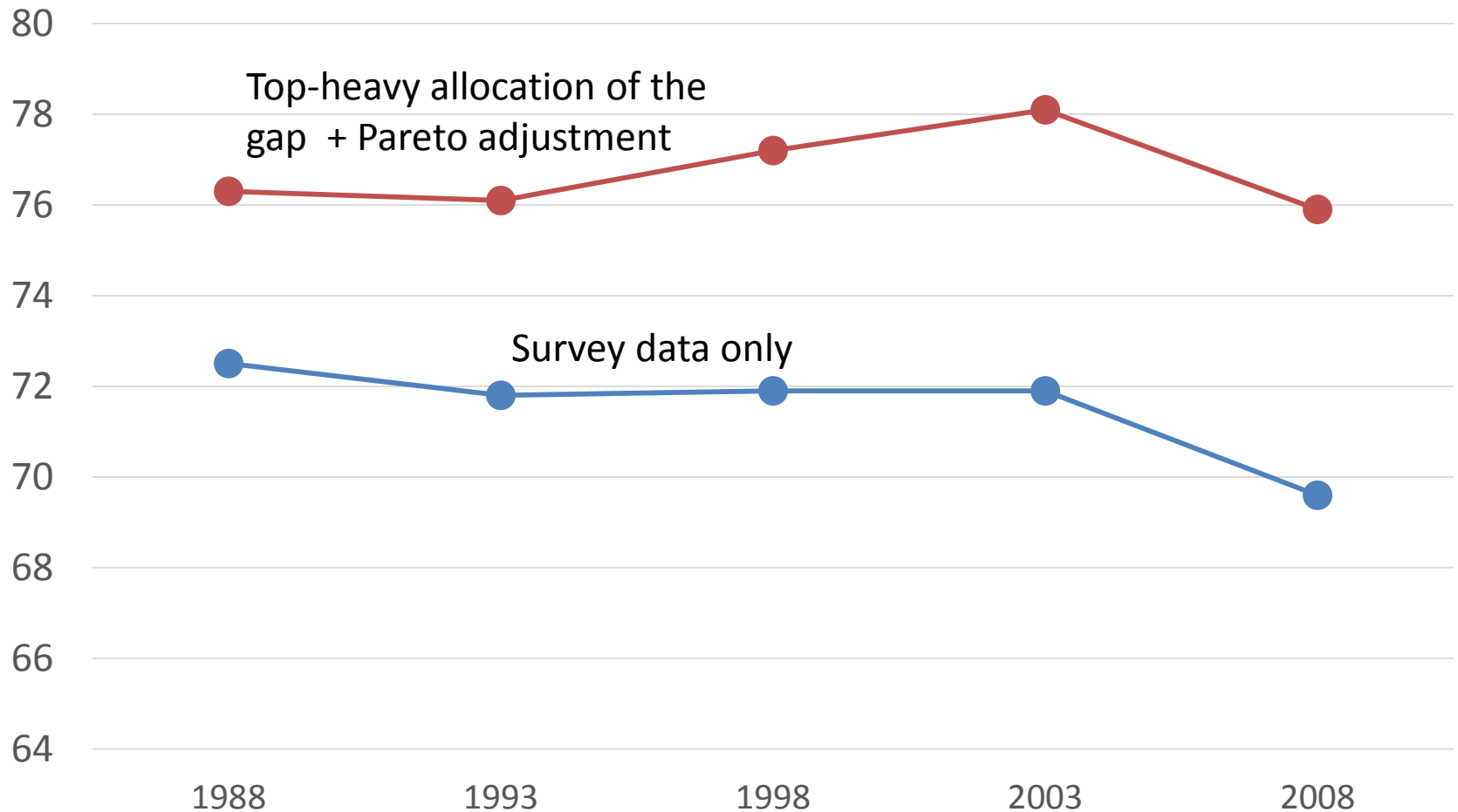


C1. Technical issues in the measurement of global inequality

Three important technical issues in the measurement of global inequality

- The ever-changing PPPs in particular for populous countries like China and India
- The increasing discrepancy between GDP per capita and HS means, or more importantly consumption per capita and HS means
- Inadequate coverage of top 1% (related also to the previous point)

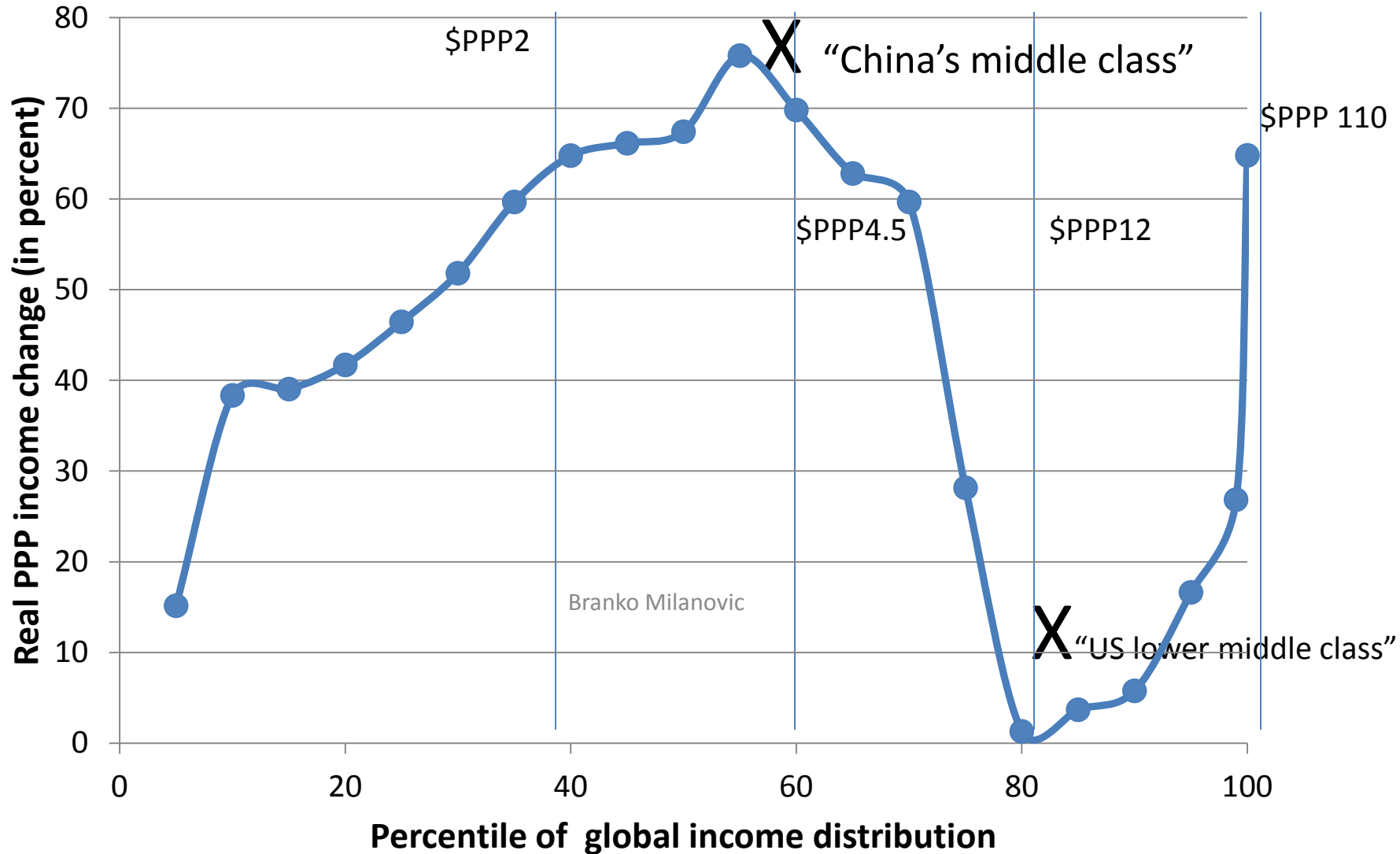
With full adjustment (allocation to the top 10% + Pareto) Gini decline **almost vanishes**



How to think of global inequality: Interaction of Kuznets waves and mean-income convergence

C2. How has the world changed
between the fall of the Berlin Wall and
the Great Recession
[based on joint work with Christoph Lakner]

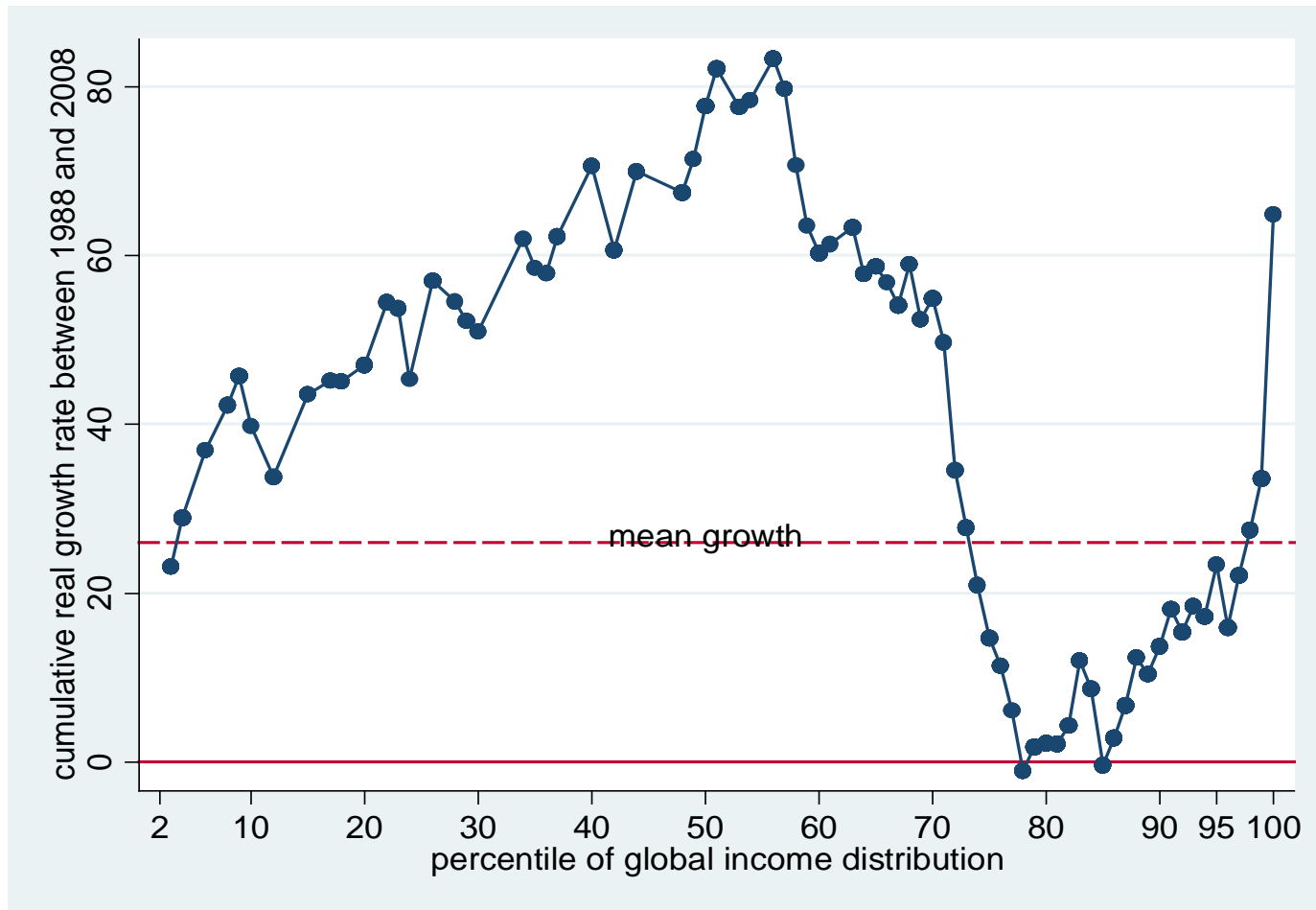
Real income growth at various percentiles of global income distribution, 1988-2008 (in 2005 PPPs)



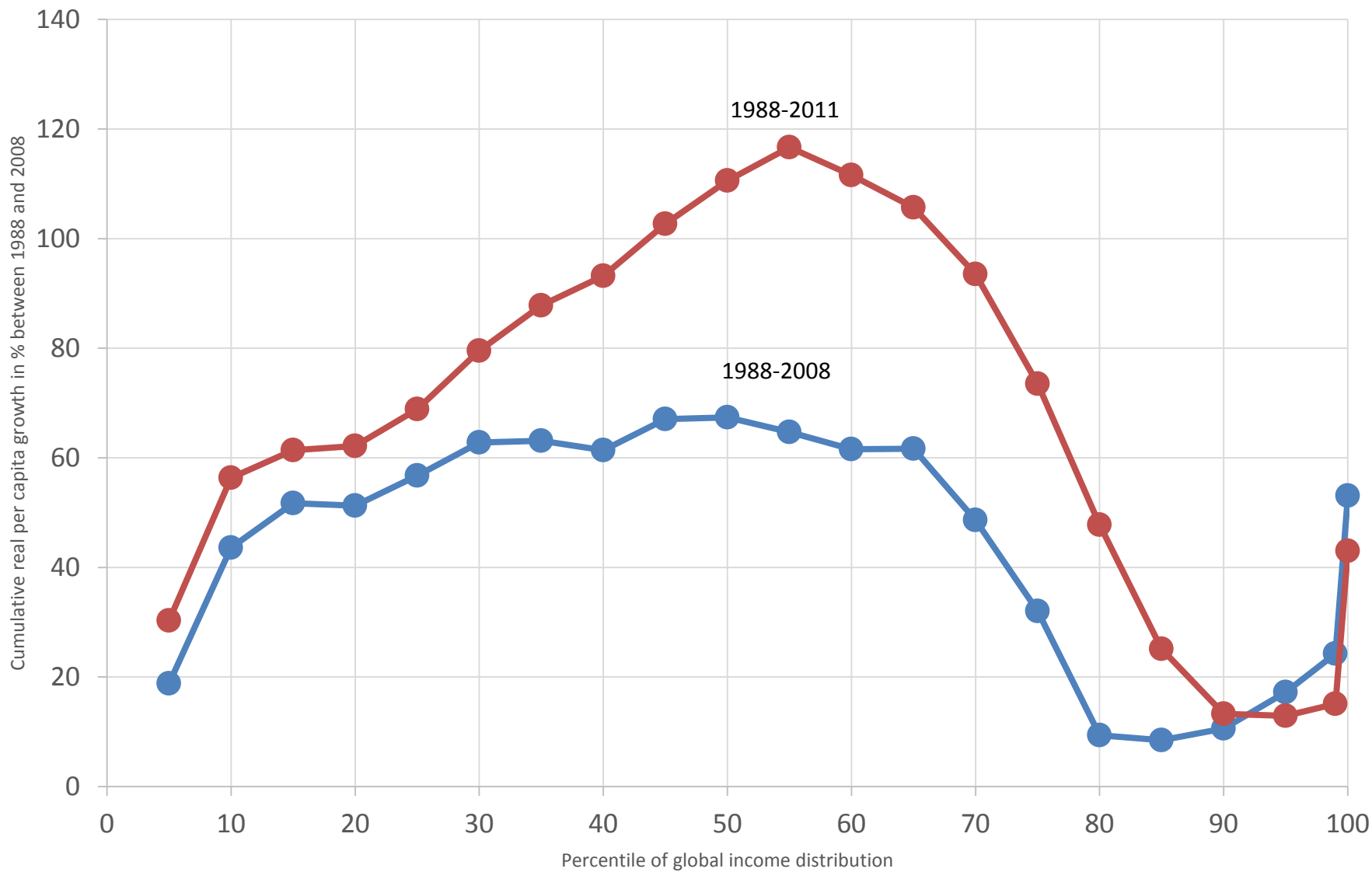
Why we do it? Political implications

- The objective of the work on global inequality is not just a description of the changes but drawing lessons on their political implications
- Point A raises the issue of future political inclusion of the Chinese middle class
- Point B, of rich countries' democracy in condition of income stagnation among many relatively poorer groups
- Point C, of global plutocracy

Global growth incidence curve, 1988-2008 (by percentile)

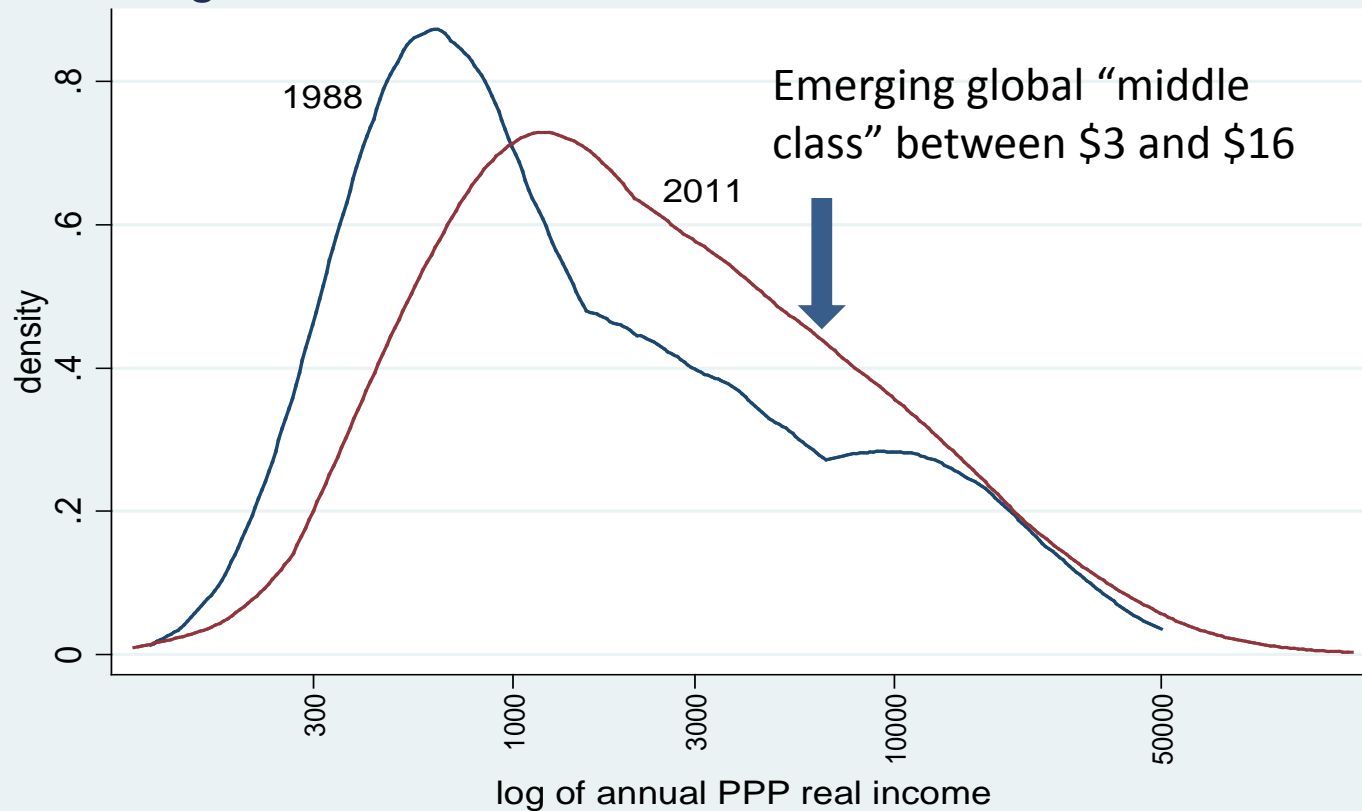


Real income growth over 1988-2008 and 1988-2011 (based on 2011 PPPs)



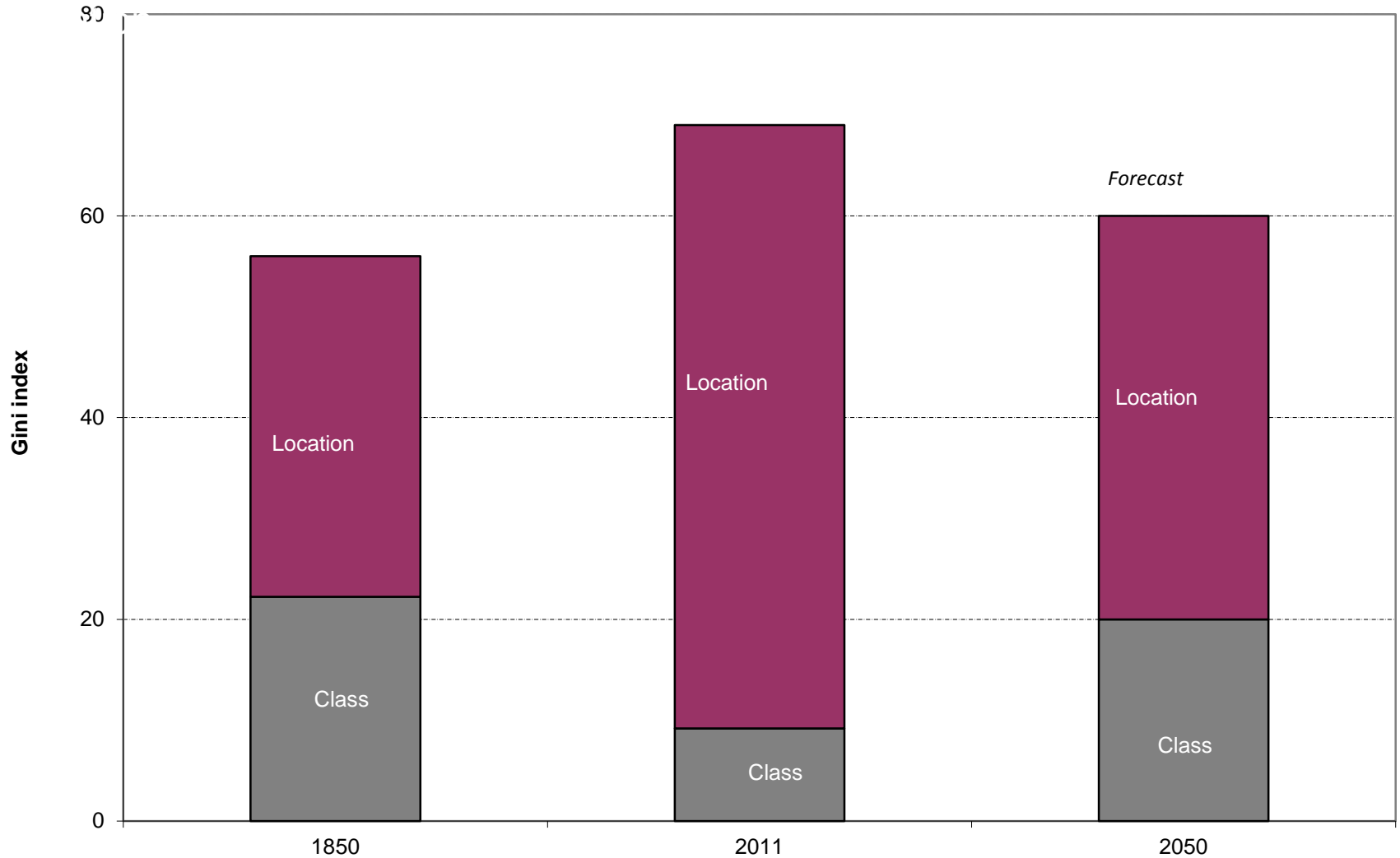
Global income distributions in 1988 and 2011

Figure 3. Global income distribution in 1988 and 2011



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twoway (kdensity loginc_11_11 [w=popu] if loginc_11_11>2 & year==1988, bwidth(0.14) title("Figure 3. Global income dstrbution in 1988 and 2011")) (kdensity loginc_11_11 [w=popu] if loginc_11_11>2 & year==2011, bwidth(0.2)) , legend(off) xtitle(log of annual PPP real income) ytitle(density) text(0.78 2.5 "1988") text(0.65 3.5 "2011") xlabel(2.477"300" 3"1000" 3.477"3000" 4"10000" 4.699"50000", labsize(small) angle(90)) Using Branko\Income_inequality\final11\combine88_08_11_new.dta
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La longue durée: From Karl Marx to Frantz Fanon and back to Marx?



D. Issues of justice and politics

1. Citizenship rent
2. Migration and national welfare state
3. Hollowing out of the rich countries' middle classes

Global inequality of opportunity

- Regressing (log) average incomes of 118 countries' percentiles (11,800 data points) against country dummies “explains” 77% of variability of income percentiles
- Where you live is the most important determinant of your income; for 97% of people in the world: birth=citizenship.
- Citizenship rent.

Is citizenship a rent?

- If most of our income is determined by citizenship, then there is little equality of opportunity *globally* and citizenship is a rent (unrelated to individual desert, effort)
- ***Key issue:*** *Is global equality of opportunity something that we ought to be concerned or not?*
- Does national self-determination dispenses with the need to worry about GEO?

The logic of the argument

- Citizenship is a morally-arbitrary circumstance, independent of individual effort
- It can be regarded as a rent (shared by all members of a community)
- Are citizenship rents globally acceptable or not?
- Political philosophy arguments *pro* (social contract; statist theory; self-determination) and *contra* (cosmopolitan approach)

Rawls' views on inter-generational transmission of wealth

Group	Inter-generational transmission of collectively acquired wealth	Argument	Policy
Family	Not acceptable Or at least to be limited	Threatens equality of citizens	Moderate to very high inheritance tax
Nation	Acceptable	Affirms national self-determination (moral hazard)	International aid

The Rawlsian world

- For Rawls, global optimum distribution of income is simply a sum of national optimal income distributions
- Why Rawlsian world will remain unequal?

Global inequality in Real World, Rawlsian World, Convergence World...and Shangri-La World (Theil 0; year 2008)

Mean country incomes	All equal	Different (as now)
Individual incomes within country	0	68 (all country Theils=0; all mean incomes as now)
Different (as now)	30 (all mean incomes equalized; all country Ginis as now)	98

Conclusion

- Working on equalization of within-national inequalities will not be sufficient to significantly reduce global inequality
- Faster growth of poorer countries is key and also...

Migration....

Migration: a different way to reduce global inequality and citizenship rent

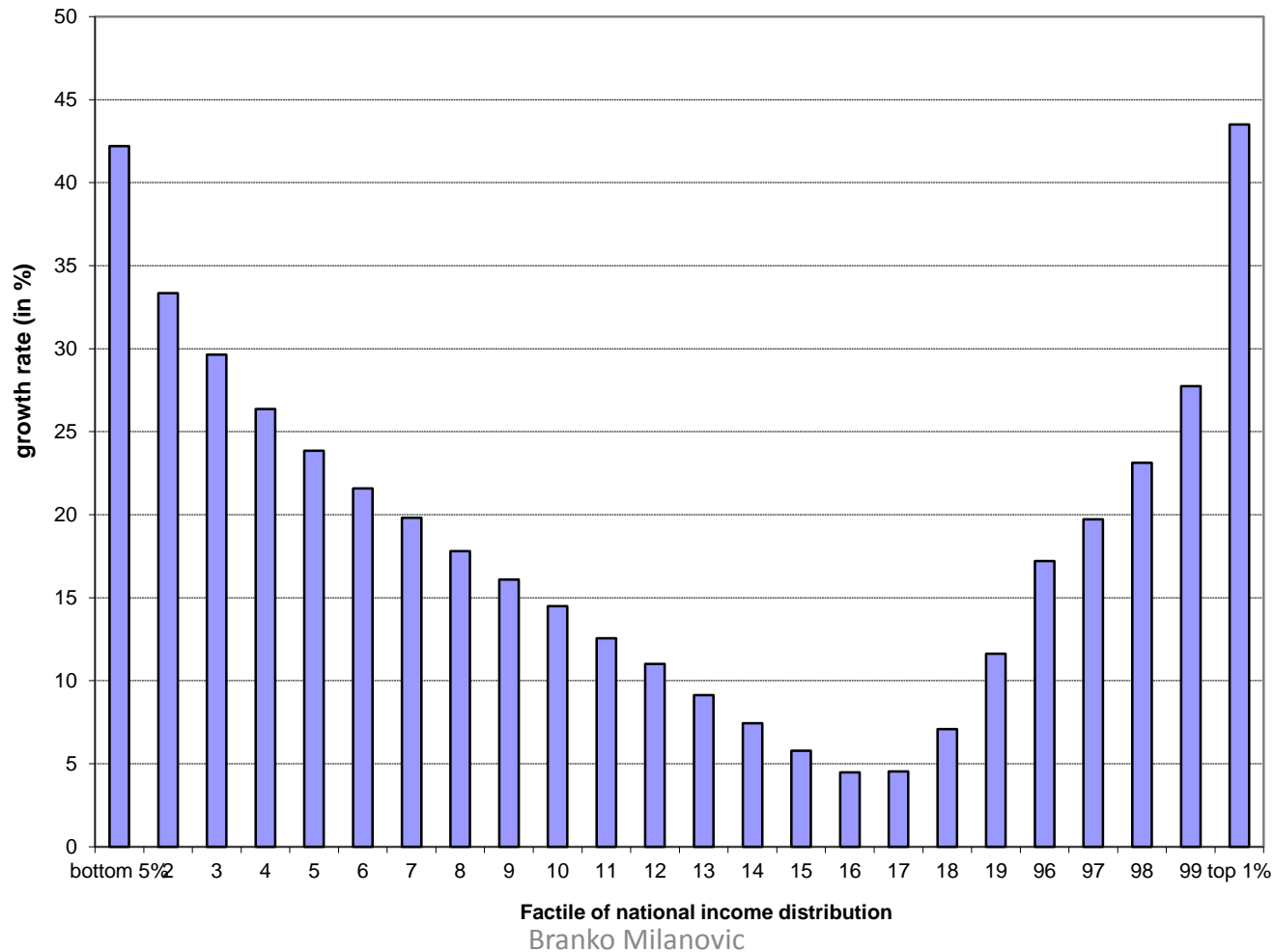
- How to view development: Development is increased income for poor people regardless of where they are, in their countries of birth or elsewhere
- Migration and LDC growth thus become the two equivalent instruments for development

Growing inter-country income differences and migration: Key seven borders today



Migration and implication for the welfare state:

Distribution-neutral growth rate needed to make people from a given income fractile indifferent between growth and favorable distributional change (= mean +1 standard deviation)



Distribution of migrants across income deciles of the receiving country

Figure 6a. Percentage of immigrants in each income decile. Spain, 2004

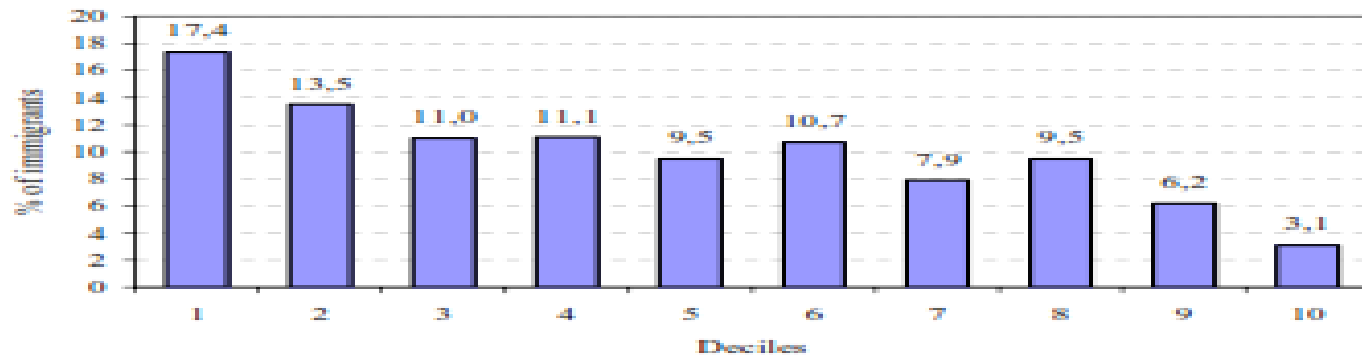
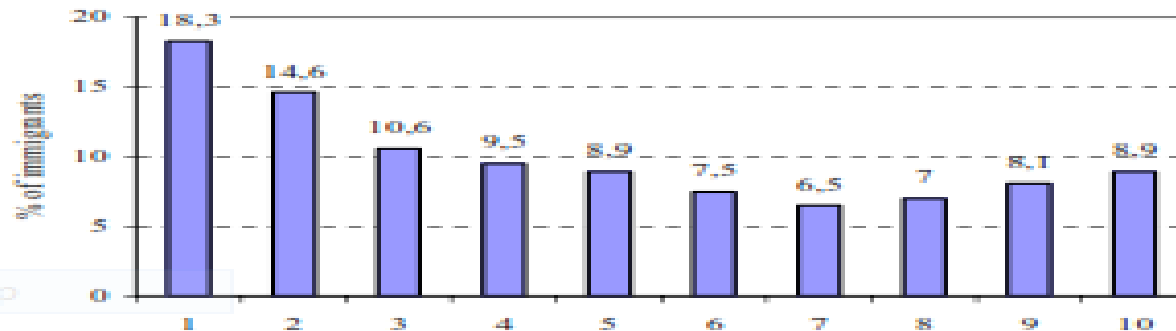


Figure 6b. Percentage of immigrants in each income decile. US, 1990



Source: Muñoz de Bustillo and Antón (2006b), and Borjas (2003)

Political issue: Global vs. national level

- Our income and employment is increasingly determined by global forces
- But political decision-making still takes place at the level of the nation-state
- If stagnation of income of rich countries' middle classes continues, will they continue to support globalization?
- Two dangers: populism and plutocracy
- To avert both, need for within-national redistributions: those who lose have to be helped

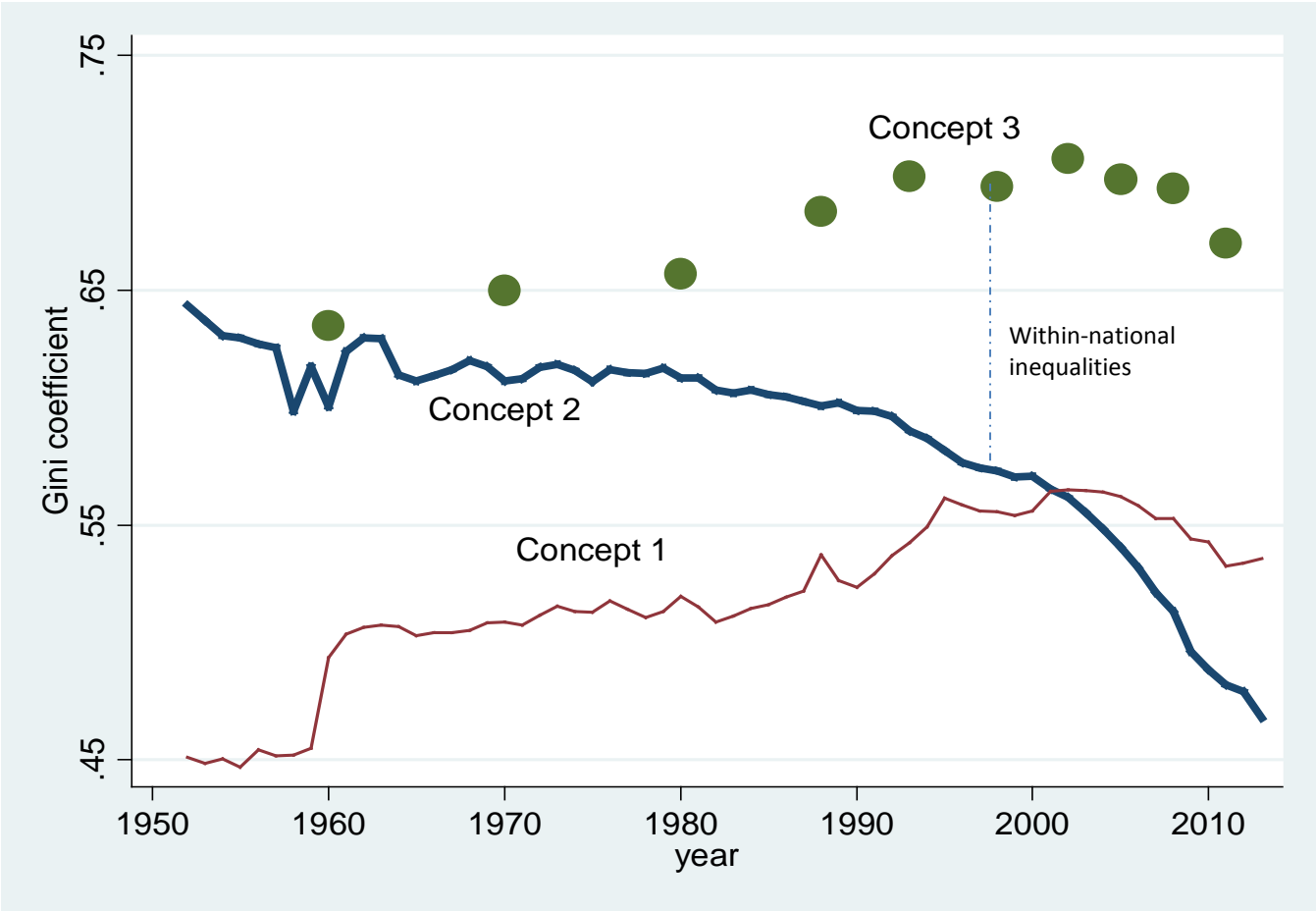
Final conclusion

- To reduce global inequality: fast growth of poor countries + migration
- To preserve good aspects of globalization: redistribution within rich countries

Additional slides

E. Global inequality over the long-run of history

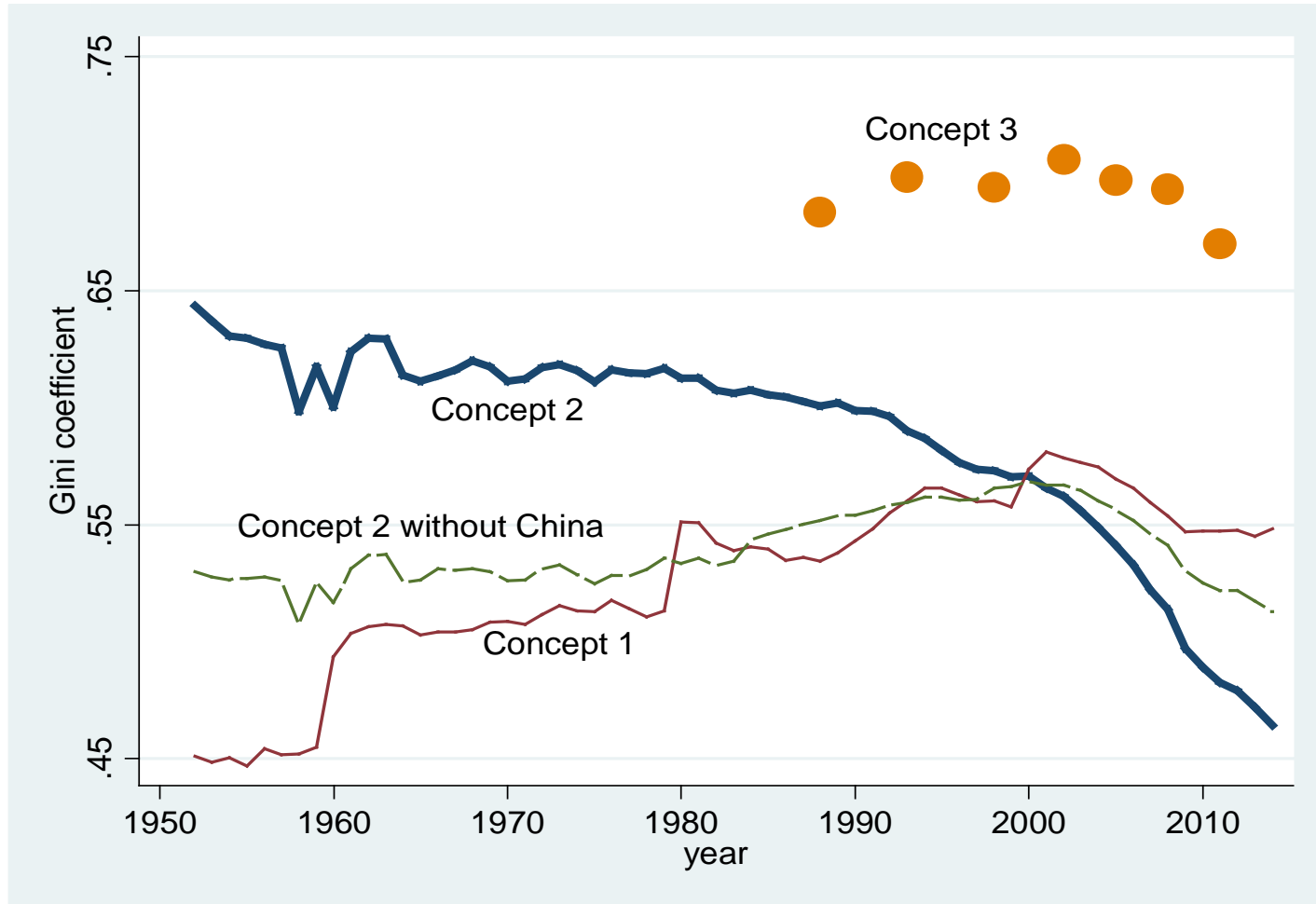
Global and international inequality after World War II



Concept2: 1960-1980 from Bourguignon & Morrisson

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Global and inter-national inequality 1952-2014



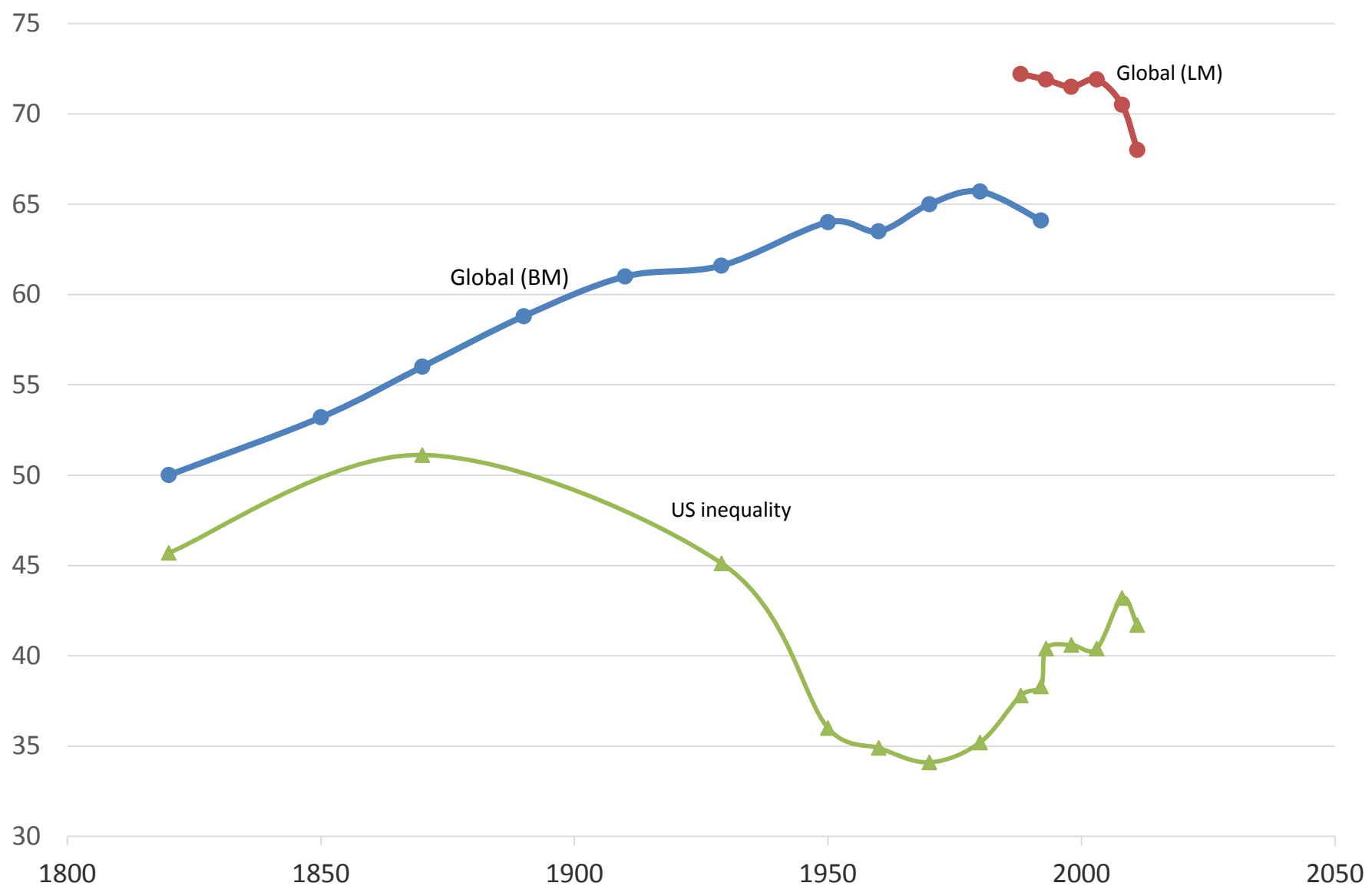
Population coverage

	1988	1993	1998	2002	2005	2008	2011
Africa	48	76	67	77	78	78	70
Asia	93	95	94	96	94	98	96
E.Europe	99	95	100	97	93	92	87
LAC	87	92	93	96	96	97	97
WENAO	92	95	97	99	99	97	96
World	87	92	92	94	93	94	92

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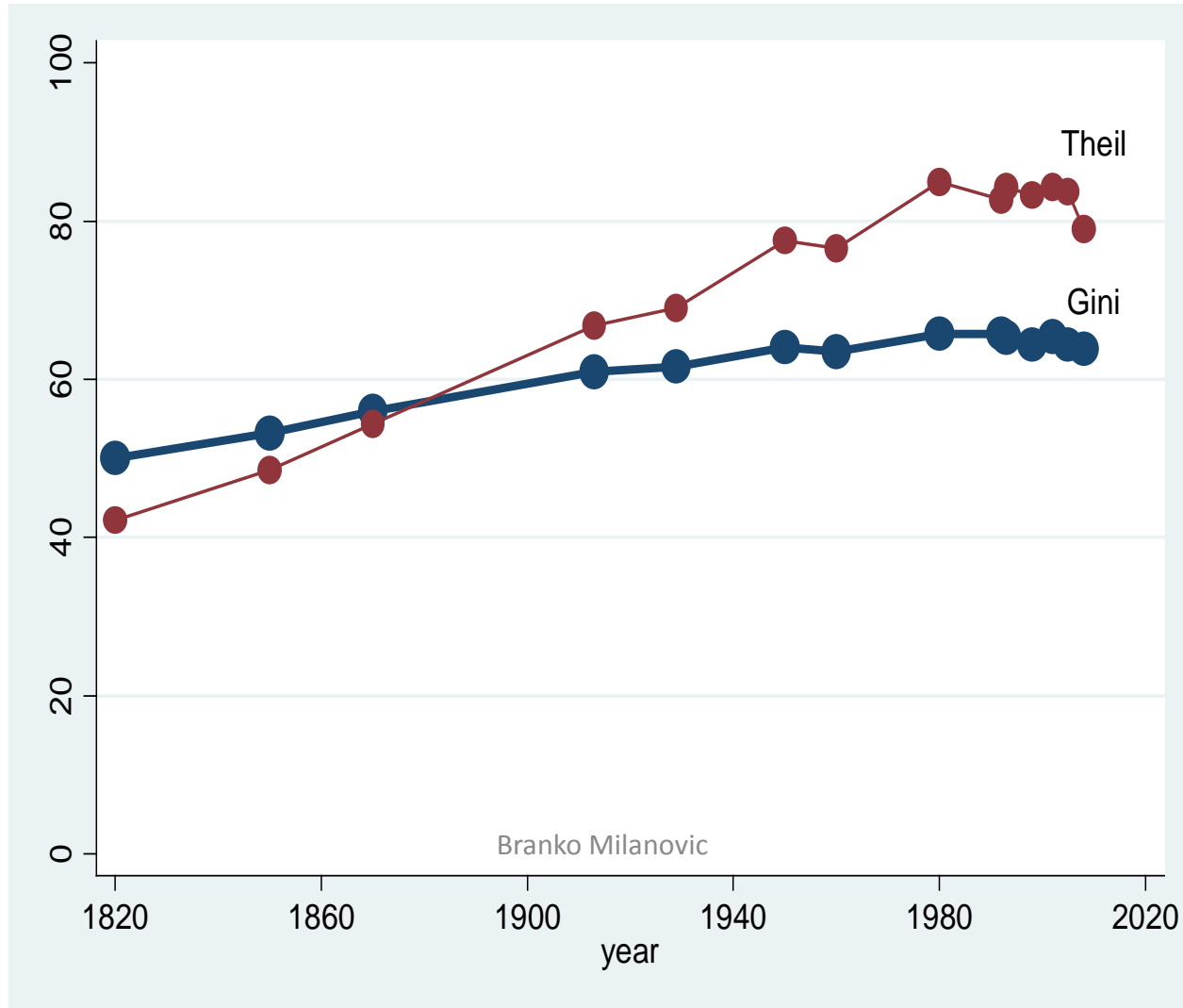
Non-triviality of the omitted countries (Maddison vs. WDI)

Global and US Gini over two centuries



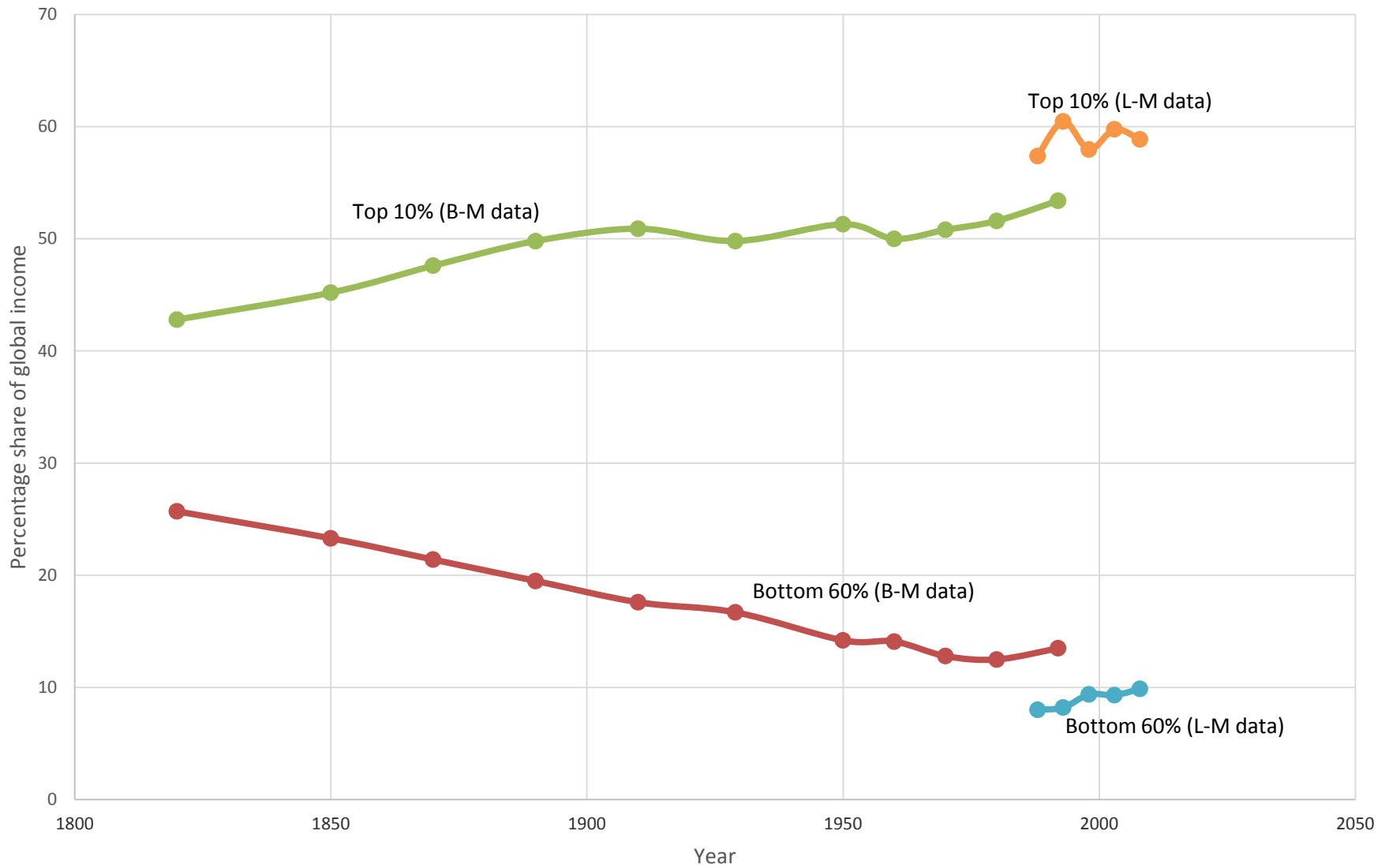
Global income inequality, 1820-2008

(Source: Bourguignon-Morrisson and Milanovic; 1990 PPPs)



twoway (scatter Gini year, c(l) xlabel(1820(40)2020) ylabel(0(20)100) msize(vlarge) clwidth(thick)) (scatter Theil year, c(l) msize(large)
legend(off) text(90 2010 "Theil") text(70 2010 "Gini"))

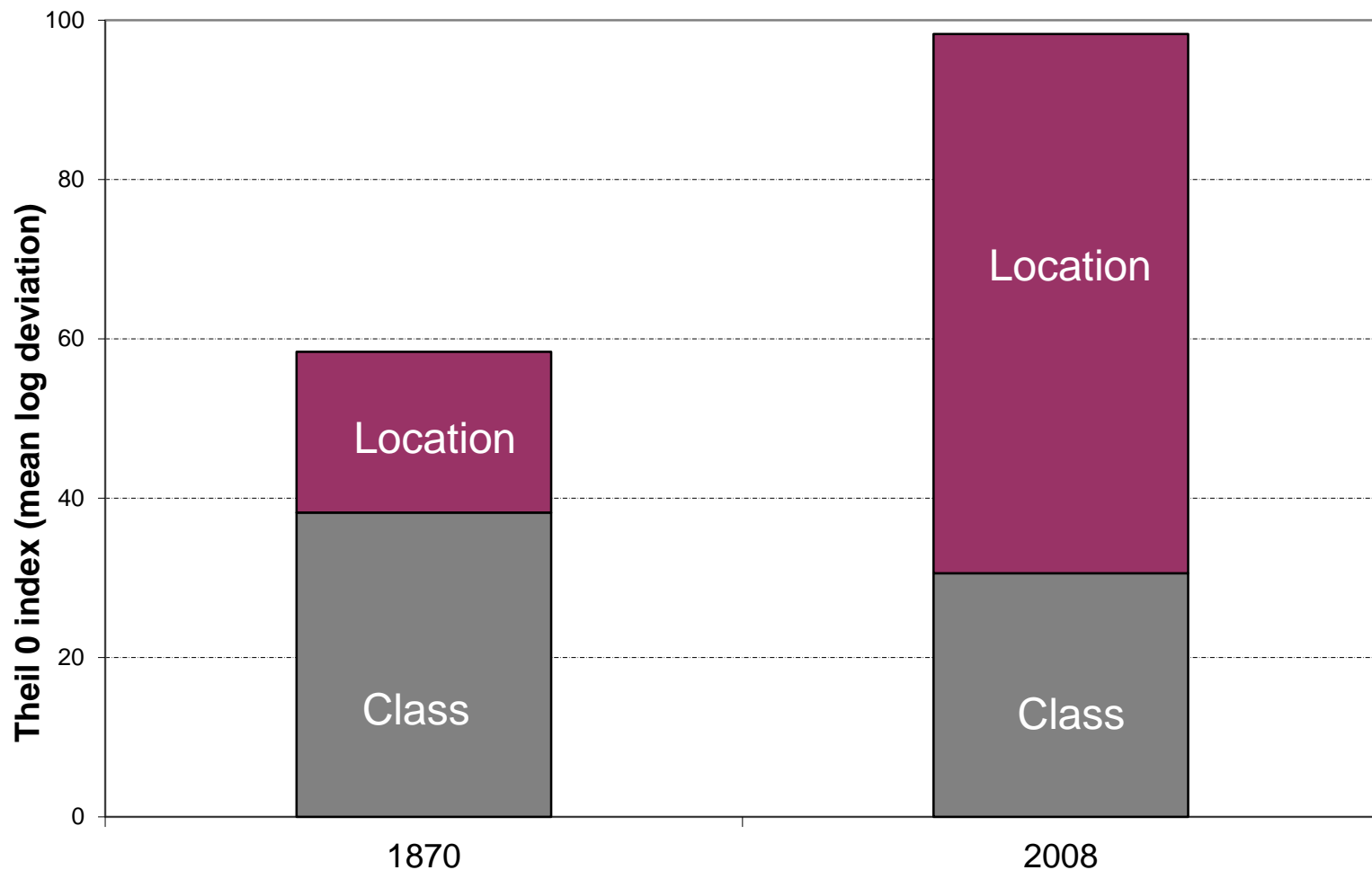
Shares of global income received by top 10% and bottom 60% of world population



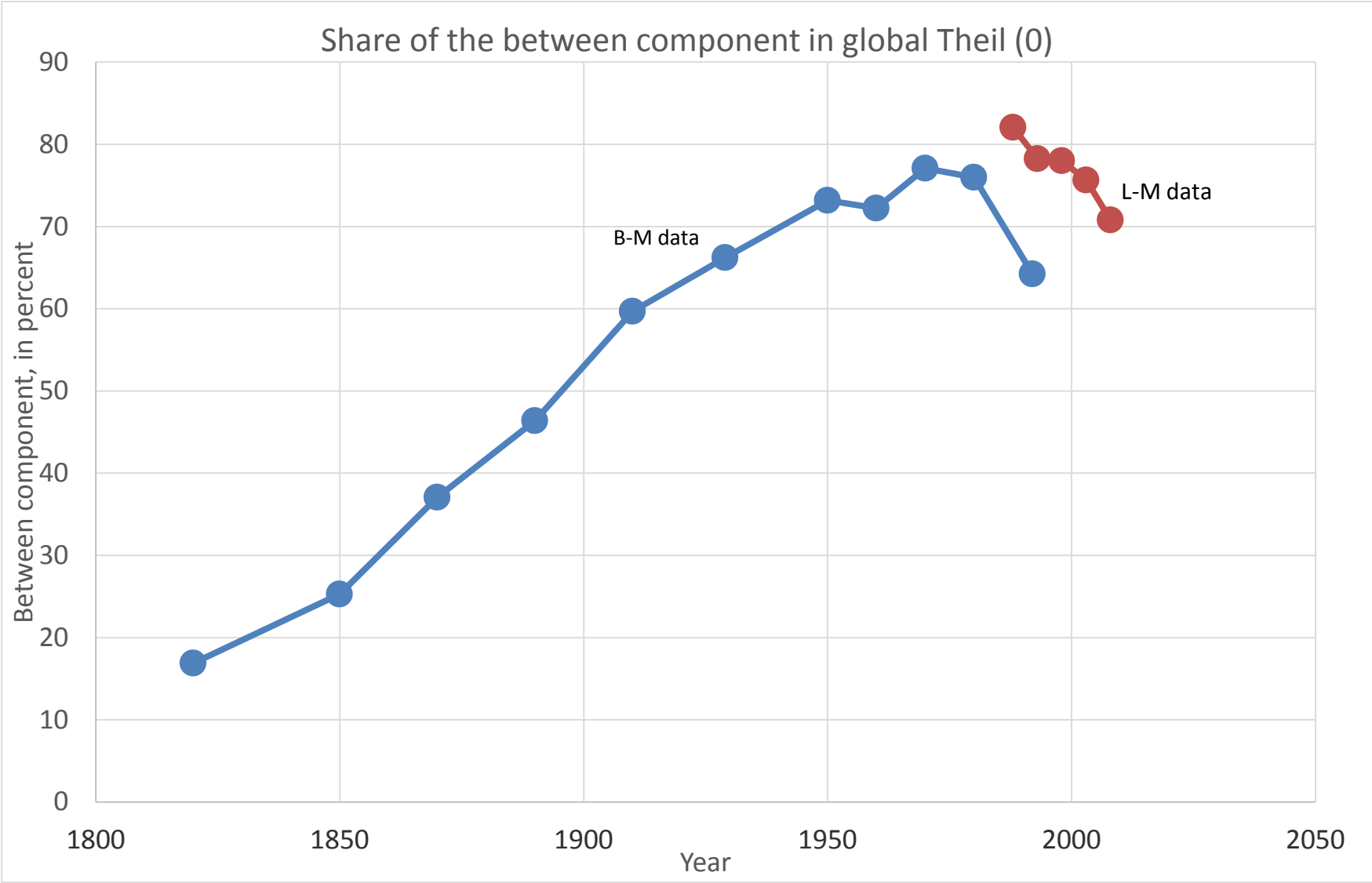
A non-Marxist world

- Over the long run, decreasing importance of within-country inequalities despite some reversal in the last quarter century
- Increasing importance of between-country inequalities (but with some hopeful signs in the last five years, before the current crisis),
- Global division between countries more than between classes

Composition of global inequality changed: from being mostly due to “class” (within-national), today it is mostly due to “location” (where people live)



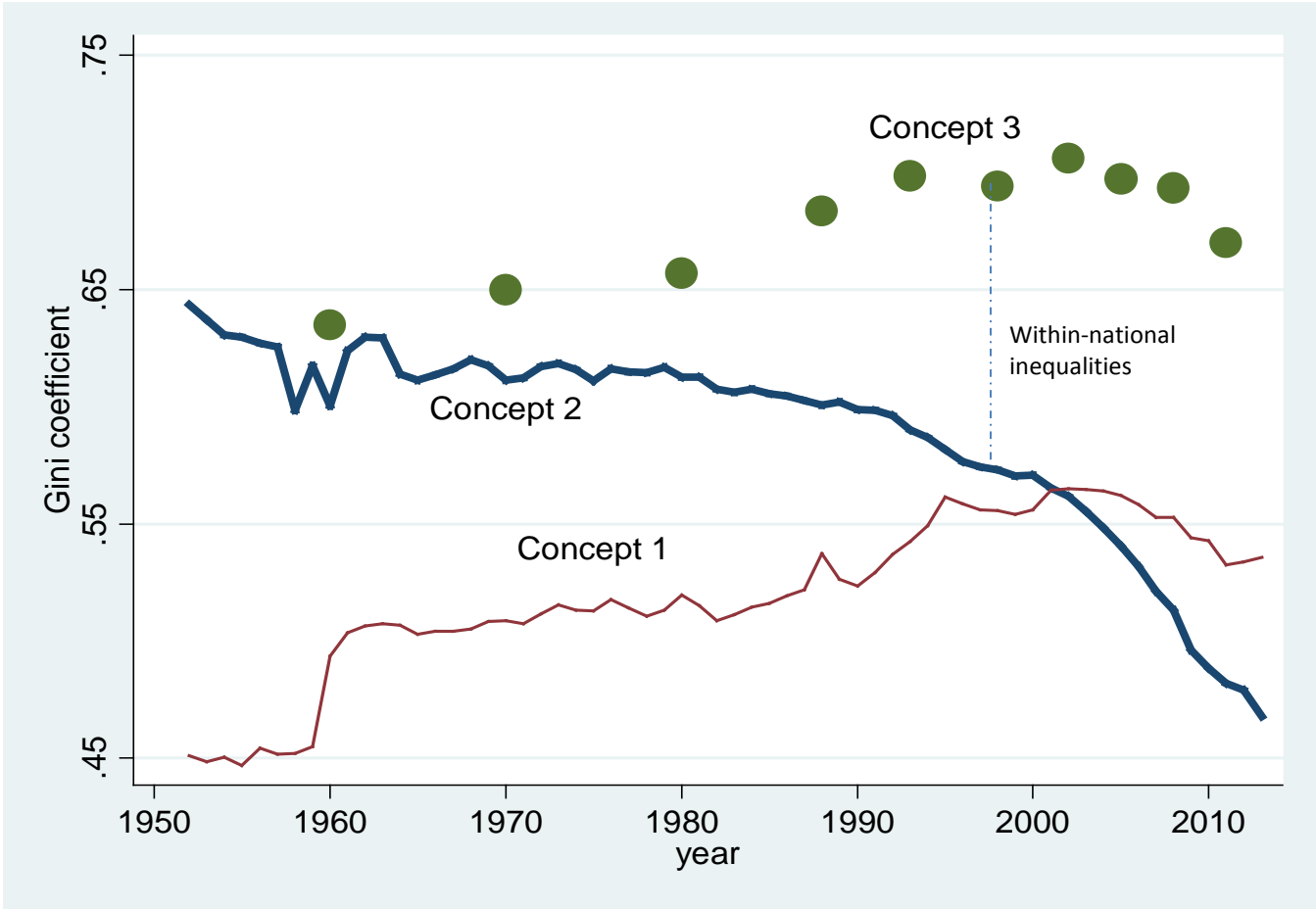
Very high but decreasing importance of location in global inequality



Extra for Michigan

La longue durée

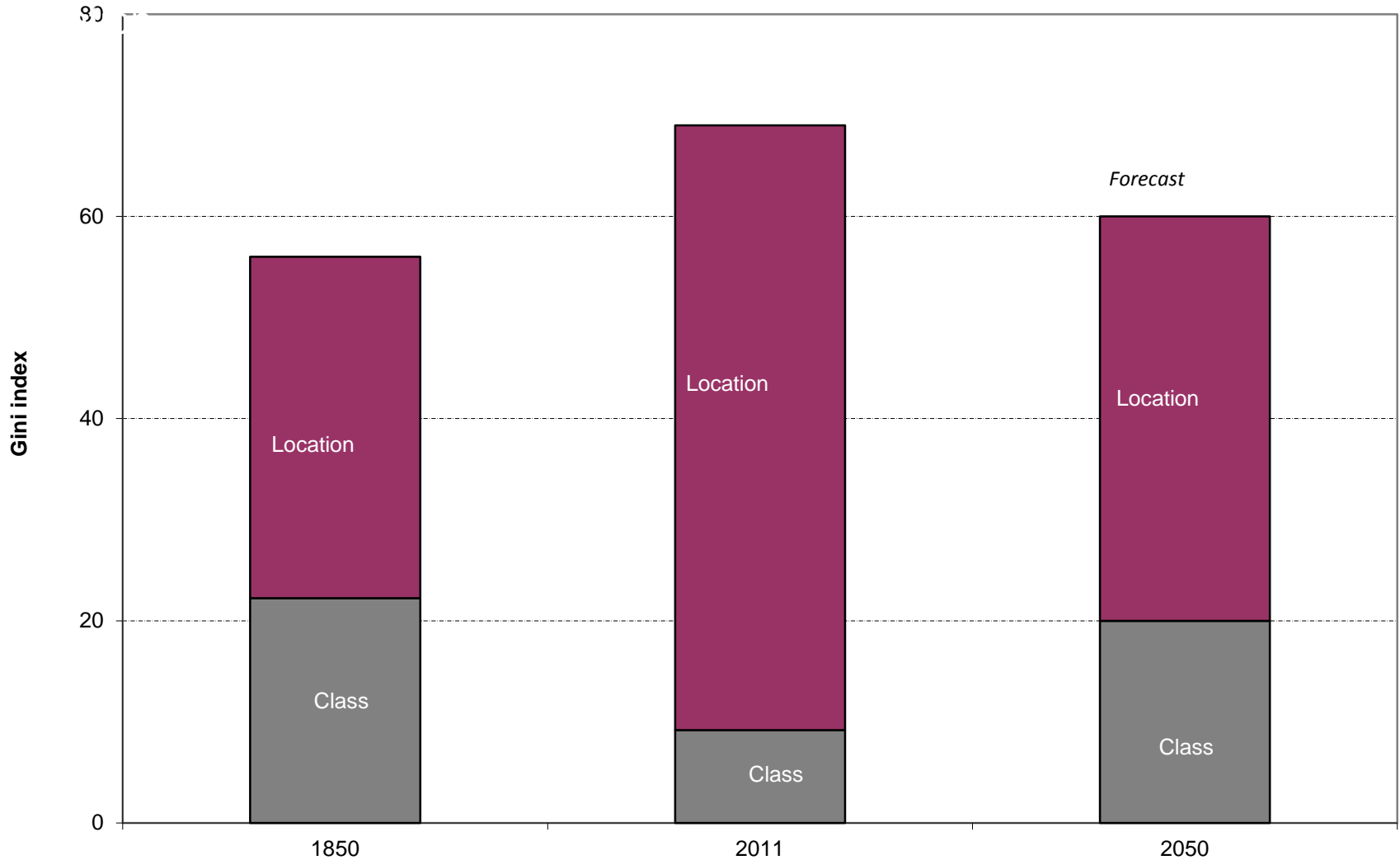
Global and international inequality after World War II



Concept2: 1960-1980 from Bourguignon & Morrisson

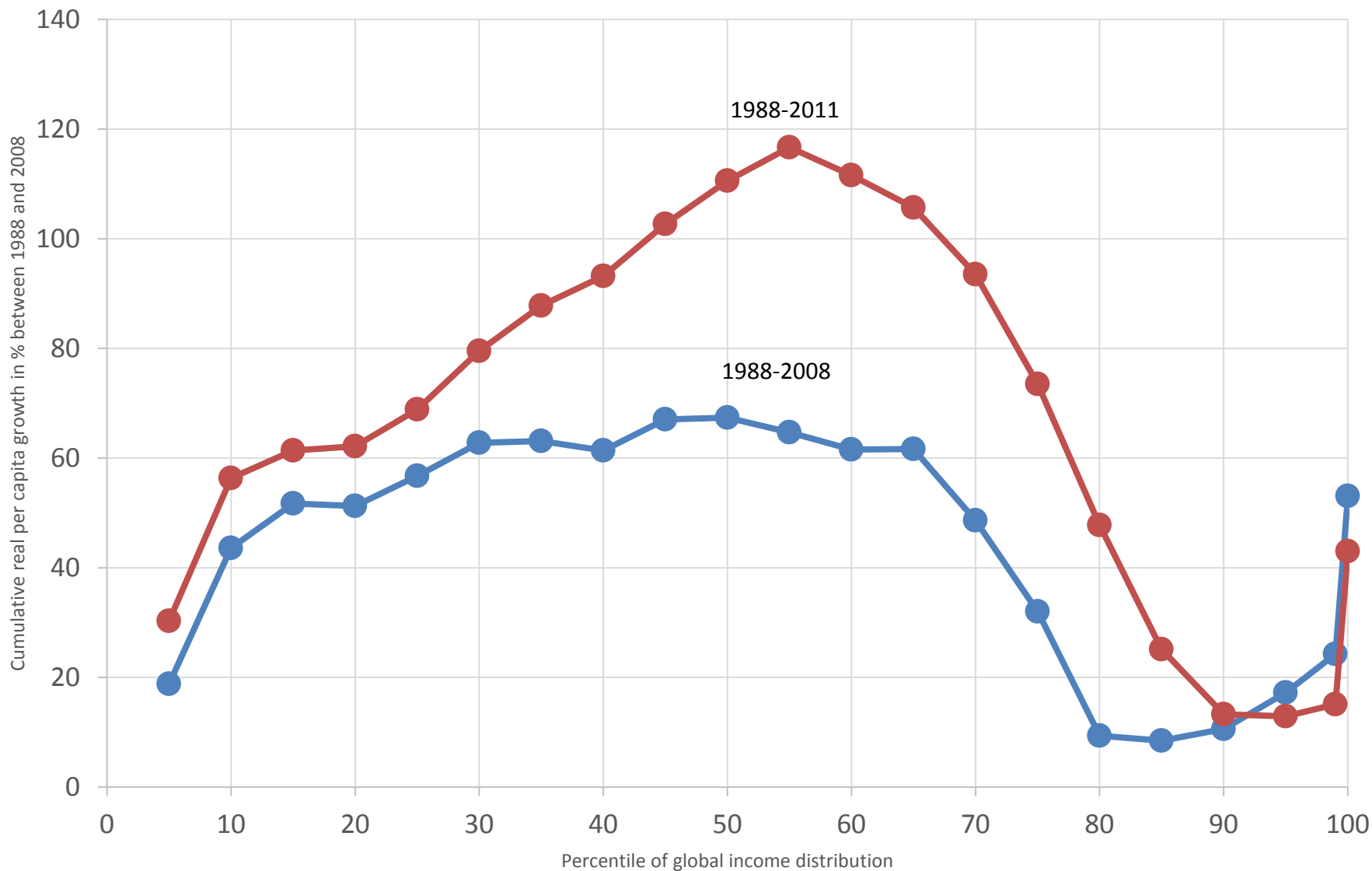
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From Karl Marx to Frantz Fanon and back to Marx?



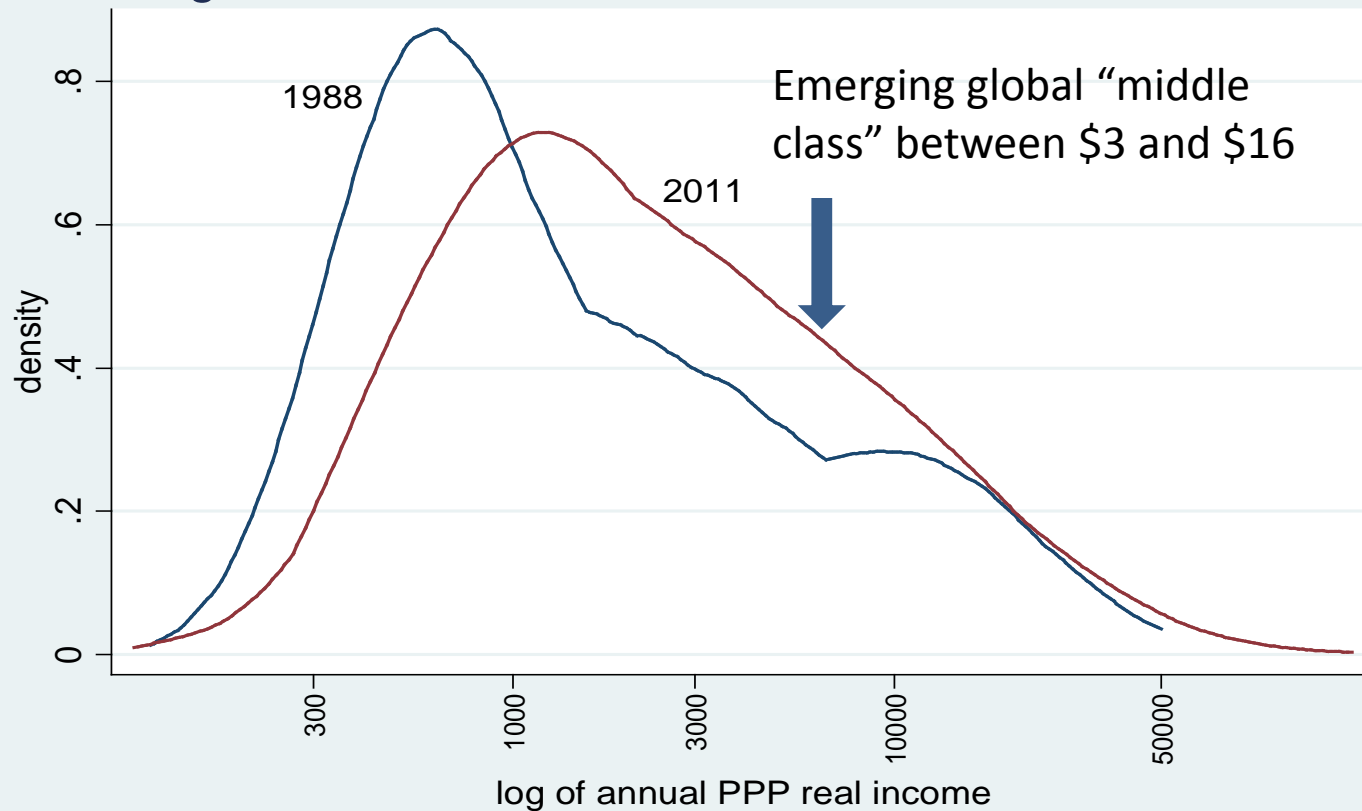
La moyenne durée

Real income growth over 1988-2008 and 1988-2011 (based on 2011 PPPs)



Global income distributions in 1988 and 2011

Figure 3. Global income distribution in 1988 and 2011



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twoway (kdensity loginc_11_11 [w=popu] if loginc_11_11>2 & year==1988, bwidth(0.14) title("Figure 3. Global income dstrbution in 1988 and 2011")) (kdensity loginc_11_11 [w=popu] if loginc_11_11>2 & year==2011, bwidth(0.2)) , legend(off) xtitle(log of annual PPP real income) ytitle(density) text(0.78 2.5 "1988") text(0.65 3.5 "2011") xlabel(2.477"300" 3"1000" 3.477"3000" 4"10000" 4.699"50000", labsize(small) angle(90)) Using Branko\Income_inequality\final11\combine88_08_11_new.dta
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Implications for global theories

- End of neo-Marxist theories focused on center-periphery and structural impediments to growth in the periphery (Prebisch, structuralism, dependency, AG Frank, Amin)
- Formerly peripheral capitalism appears more successful with the “core” growing slower or not at all.
- Complete worldwide dominance of capitalism as socio-economic formation

Implications for global theories

- Even pre-capitalist formation seem to be disappearing; less of “disarticulation” and “dualism” within states
- But disarticulation appears in the North
- Global nature of capitalism: multinationals, supply chains, transfer pricing
- Even in daily life greater commercialization of hitherto non-pecuniary relations
- Yet no grand theories explaining how it hangs together & where it leads

Implications for global theories

- Leaving aside theories of collapse due to environmental limits (climate change) or some vague return to “localism”. Both unrealistic.
- Or nostrums of “inclusiveness” (AR: Fukuyama + Washington consensus); at odds with reality
- But important Qs:
 - 1) Are peripheral and core capitalism the same?
 - 2) Are there contradictions between them or not? (Property rights are not the same; working rules (trade unions) are not the same)

Implications for global theories

- 3) Will capitalism become more technocratic (China, EU) or plutocratic (US)?
- 4) What are the objectives of the global elite? How are they shaped?
- 5) Coincidence of interest between the global elite and the poor, when it comes to migration (a new coalition of forces): Davos and under \$1 per day
- 6) What is the meaning of a *global* middle class?
- 6) Issue of under-consumptionism at national level, monopolies (patent rights)
- 7) Last time when we had a similar (but not nearly as complete) rule of capitalism, things ended with a World War. Now?