

# World Data

The Global Consumption and Income  
Project

Welcome

# Acknowledgments

What?

- The GCIP creates a publicly accessible portrait of consumption and income of persons over time, within and across countries, around the world, and to employ these to understand a variety of questions



Aims

Provide a superior resource for answering questions concerning material living standards of populations described and compared in various ways

Be open, transparent and flexible, so as to facilitate replication, updating, and modification in light of alternative assumptions and purposes, by third parties as well as the project team



History

# Topics

# Level of Living Standards

Poverty

Inequality

# Inclusivity of Growth and Development

# Explanatory analysis of causes and consequences

# Forecasting



Logic

Time-Space System: To present a picture of a population aggregated over space requires filling in data that is missing in time.

Compare like with like:

Consumption and Income, Per Capita data

Identify possibly erroneous data

# Outlier Detection

# Role of Judgment

Method

# Union Approach



Step 1:

Collect data on relative distributions. Retain it all to make possible alternative assumptions, but specialize to per-capita surveys.



Step 2 : 'Standardize' the distributions by converting consumption into 'equivalent' income distributions or vice versa

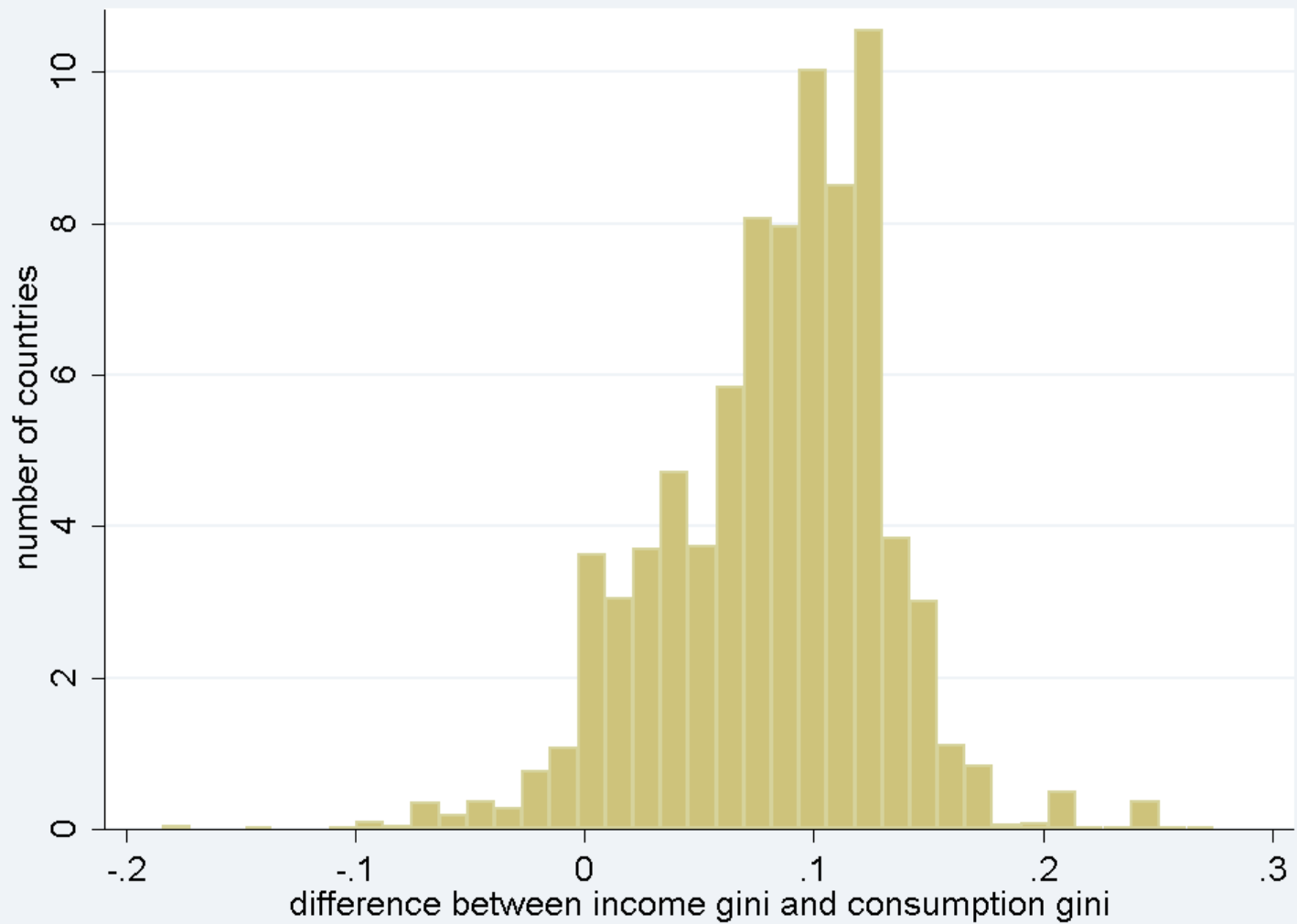
# Income to Consumption, Brazil

## Consumption Shares

	<b>Original Income Share</b>	<b>Estimated from Regression</b>	<b>Adjusted for Adding- up Constraint</b>	<b>Difference between Income and Estimated Consumption Shares</b>
<b>Q1</b>	<b>2.5</b>	<b>4.67</b>	<b>4.67</b>	<b>2.17</b>
<b>Q2</b>	<b>5.8</b>	<b>8.04</b>	<b>8.04</b>	<b>2.24</b>
<b>Q3</b>	<b>10.1</b>	<b>12.18</b>	<b>12.19</b>	<b>2.09</b>
<b>Q4</b>	<b>18.2</b>	<b>18.98</b>	<b>18.99</b>	<b>.80</b>
<b>Q5</b>	<b>63.4</b>	<b>56.07</b>	<b>56.10</b>	<b>-7.30</b>
<b>Total</b>		<b>99.95</b>	<b>100</b>	
<b>Gini Coeff.</b>	<b>57.7</b>		<b>48.7</b>	

For India estimated income Gini coefficient for 2005 is 0.51 and from IHDS survey (not included in GCIP) is 0.48

# Impact of Standardization



Step 3: Obtain mean levels from surveys or in very rare cases estimate from national accounts, and convert to common units

Step 4: Arrive at consumption/income profiles for non-survey years, using interpolation and extrapolation, and generate complete Lorenz curves for all years using (parametric) estimation. Create synthetic populations.

# Outcome

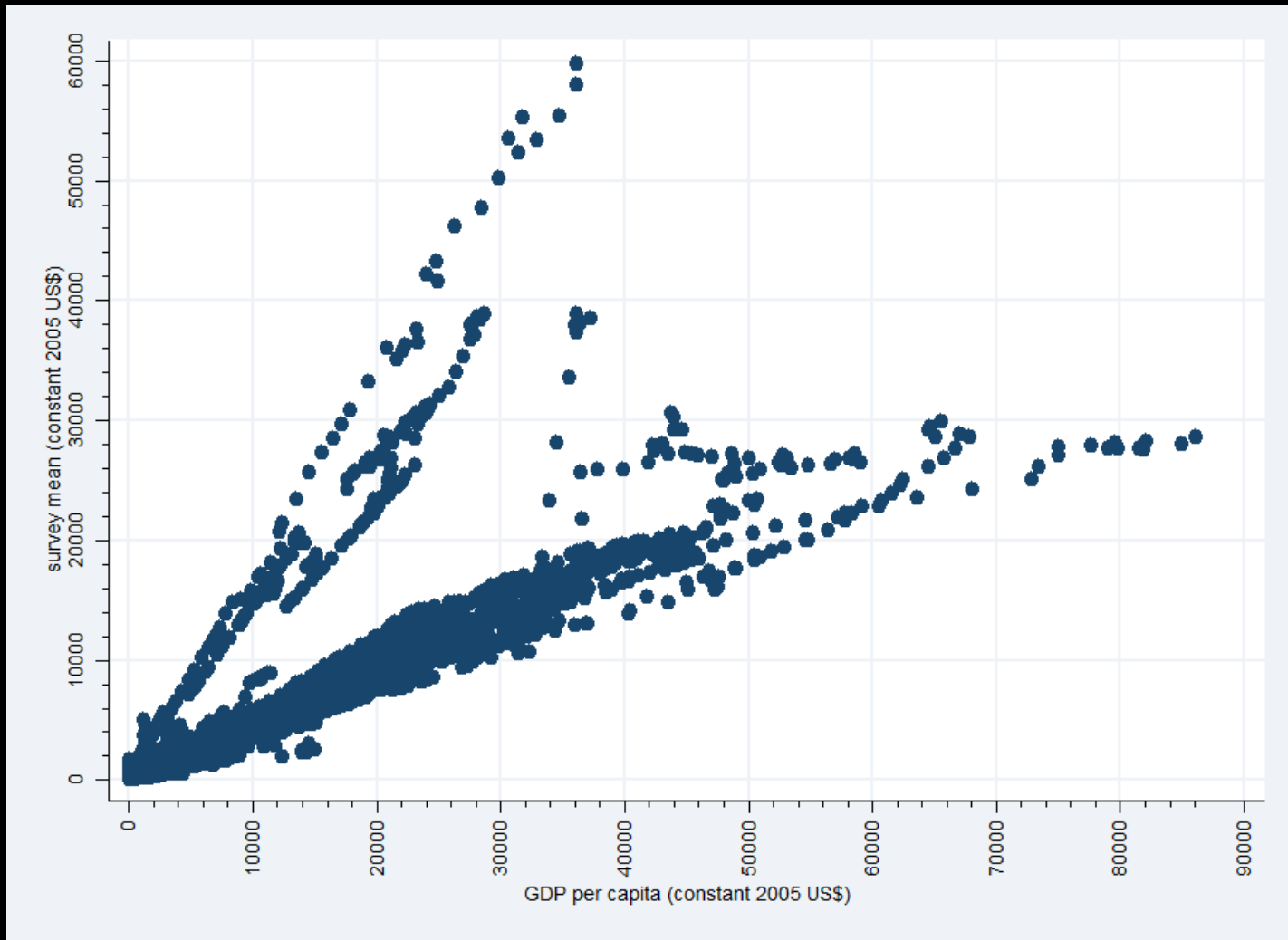
A continuously evolving portrait of the world that draws on all available sources and extends over regions and years



	1960-69	1970-79	1980-89	1990-99	2000-09	2010-13	Total
<b>Number of Surveys</b>	79	82	288	496	716	285	1946
<b>Number of Countries</b>	44	44	98	133	151	111	161
<b>% Consumption Surveys</b>	14	12	24	48	54	41	43
<b>% Surveys Covering all Areas in the Country</b>	95	94	93	96	98	98	96
<b>% Surveys with Mean Levels Information</b>	41	49	65	90	96	100	86
<b>Source of Surveys (%)</b>							
EU-SILC	0	0	0	0	0	10	1
LIS	3	15	13	13	13	18	13
Povcalnet	0	0	15	35	61	59	42
Direct from Statistical Offices	0	0	0	0	0.4	0	0.1
SEDLAC	0	1	6	15	17	11	13
WYD	0	0	1	2	1	0	1
WIID	97	84	65	34	8	3	29
<b>Regions (%)</b>							
East Asia & Pacific	5	13	12	10	9	8	10
Europe & Central Asia	38	44	53	40	52	57	49
Latin America & Caribbean	23	20	19	28	22	20	23
Middle East & North Africa	5	6	3	4	3	2	3
North America	0	5	1	1	1	1	1
South Asia	19	7	4	3	3	2	4
Sub-Saharan Africa	10	5	8	14	11	9	11
<b>Income Group (%)</b>							
Low income	9	5	4	8	15	13	8
Lower middle income	31	16	23	23	13	7	22
Upper middle income	39	44	44	36	37	53	40
High income	21	34	28	33	35	27	30

# Making Sense of the Data

# Survey Means vs. National Account Means

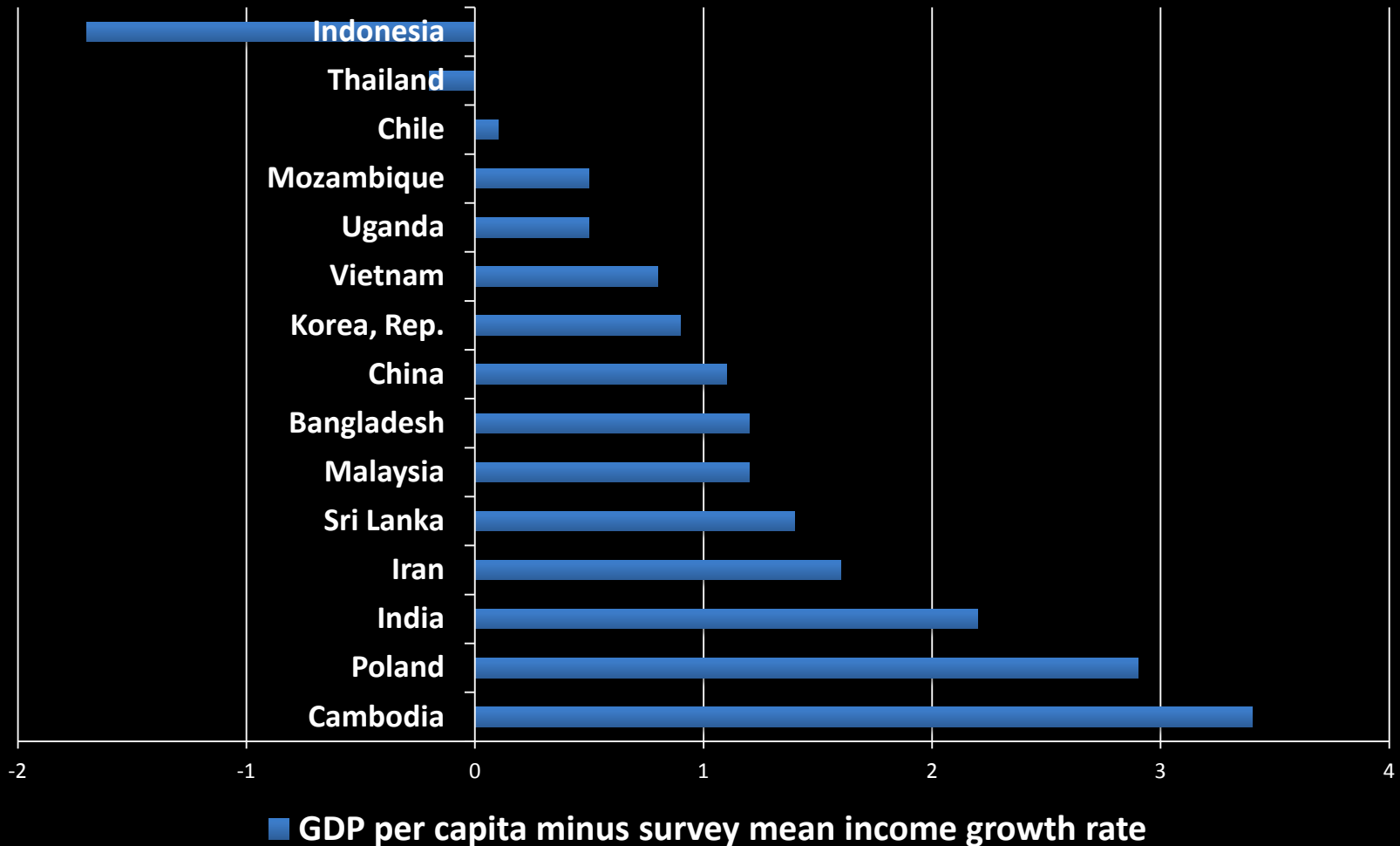


# Comparison of Survey Means and GDP-per-capita over time

Ratio of GDP-per-capita to annual survey means			
Decade	N	Mean	Median
1960	46	1.72	1.48
1970	53	1.83	1.83
1980	156	1.85	1.71
1990	378	1.96	1.94
2000	517	2.06	2.04
<b>Overall</b>	<b>1150</b>	<b>1.97</b>	<b>1.94</b>

# Growth Rate Comparisons

(15 Fastest Growing Large Countries 1990-2010)



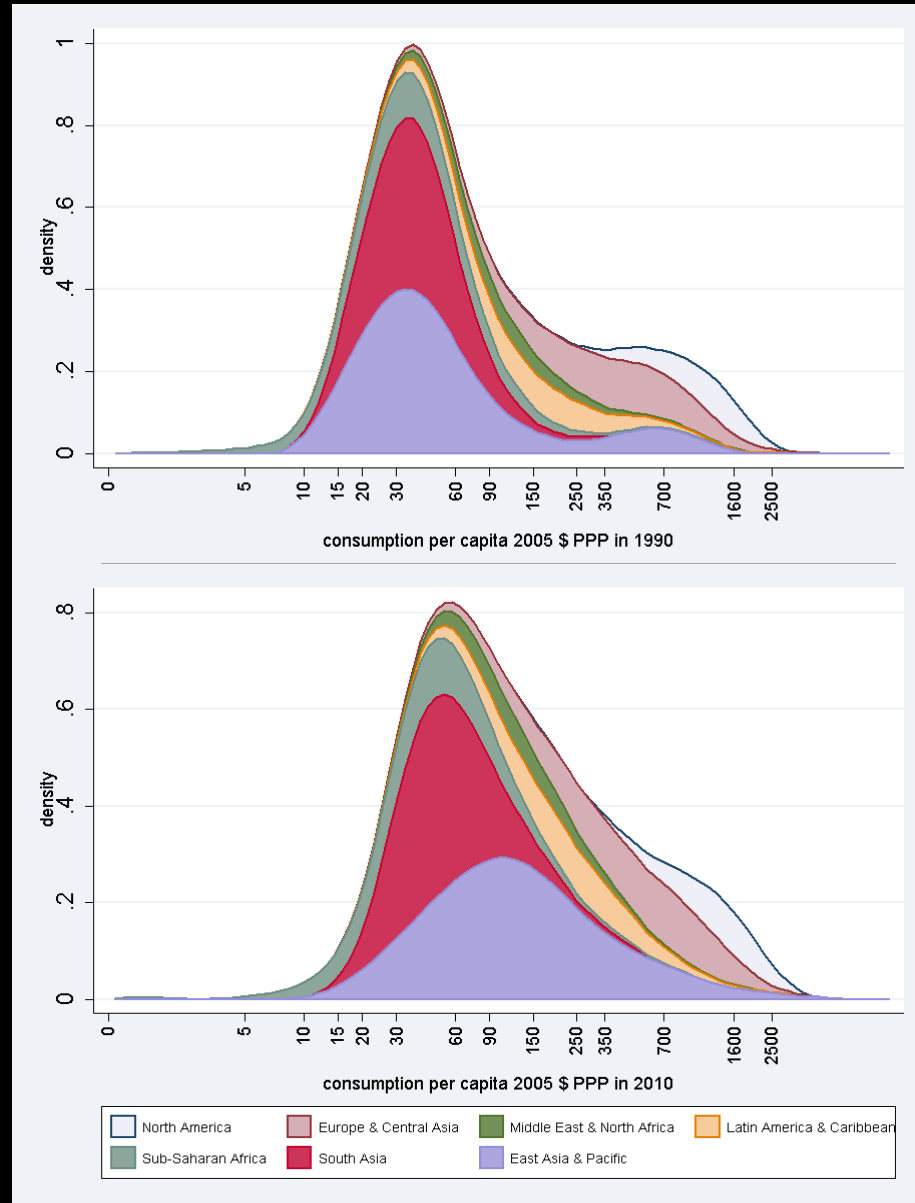
# Exchange Rates

(Between Country Inequality - 2010)

	2005 PPP	2011 PPP	2005 Market Exchange Rate
<b>MLD (GE(0))</b>	0.53	0.42	1.56
<b>Theil-T (GE(1))</b>	0.52	0.42	1.83
<b>Gini</b>	0.54	0.49	0.76

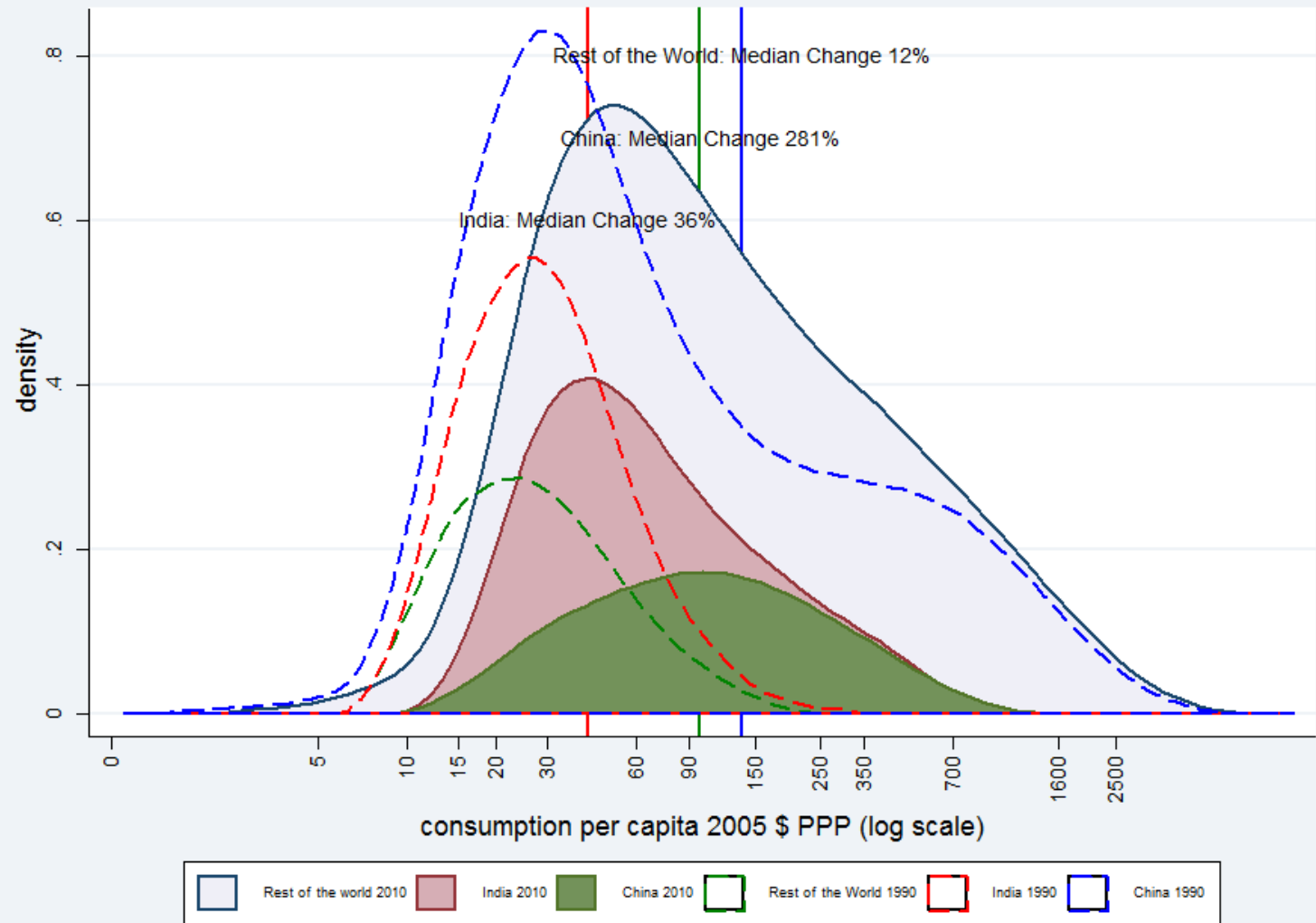
# Sample Results

# Global Consumption Distribution

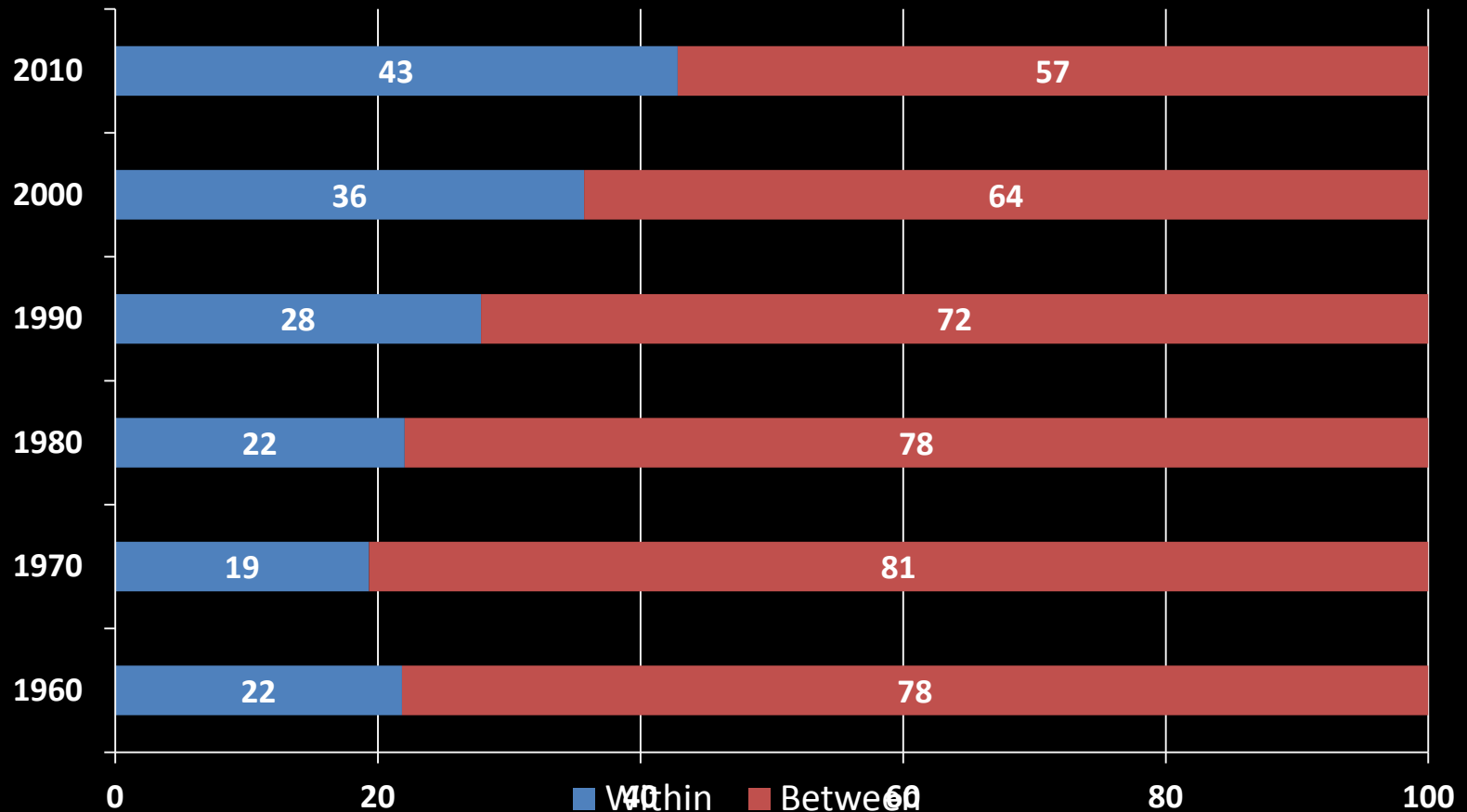




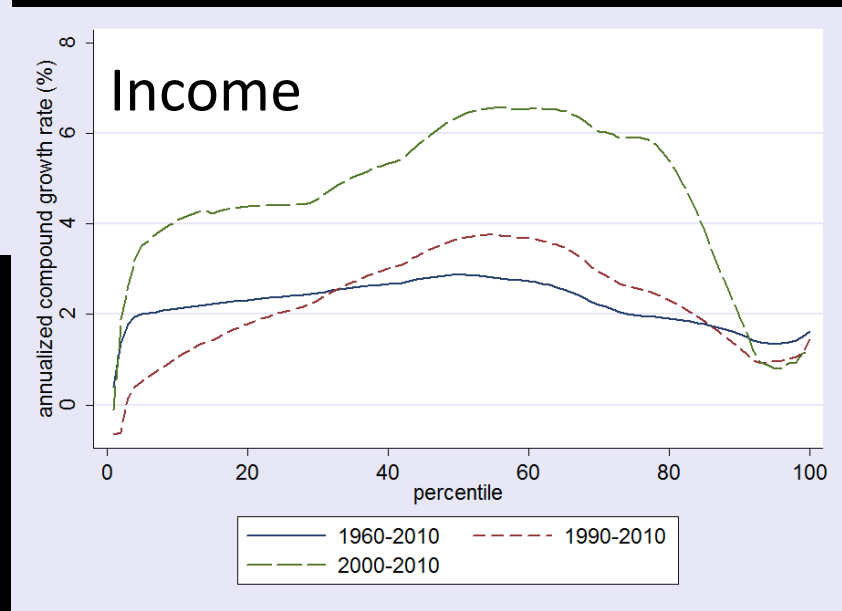
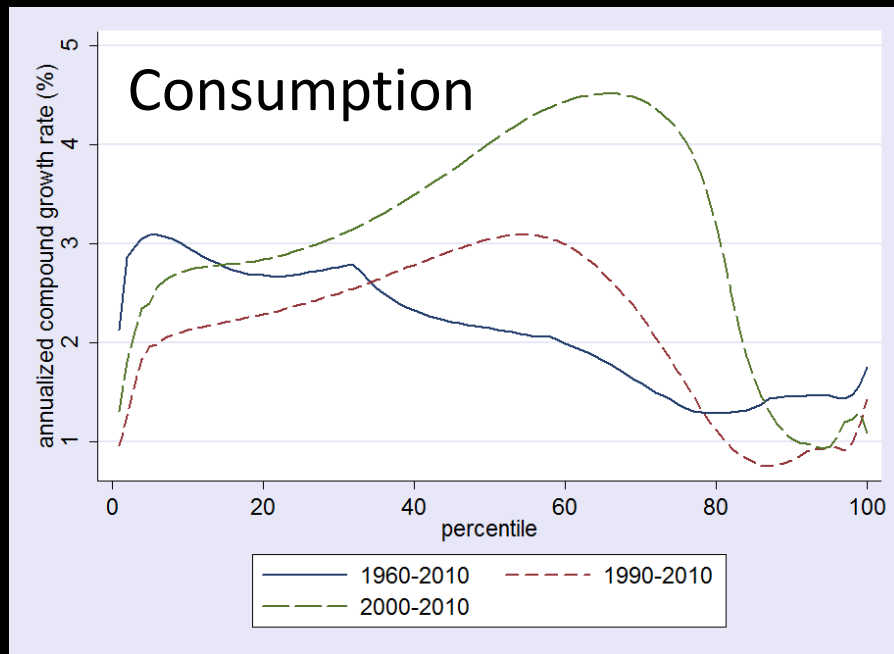
# Impact of China in Global Distribution



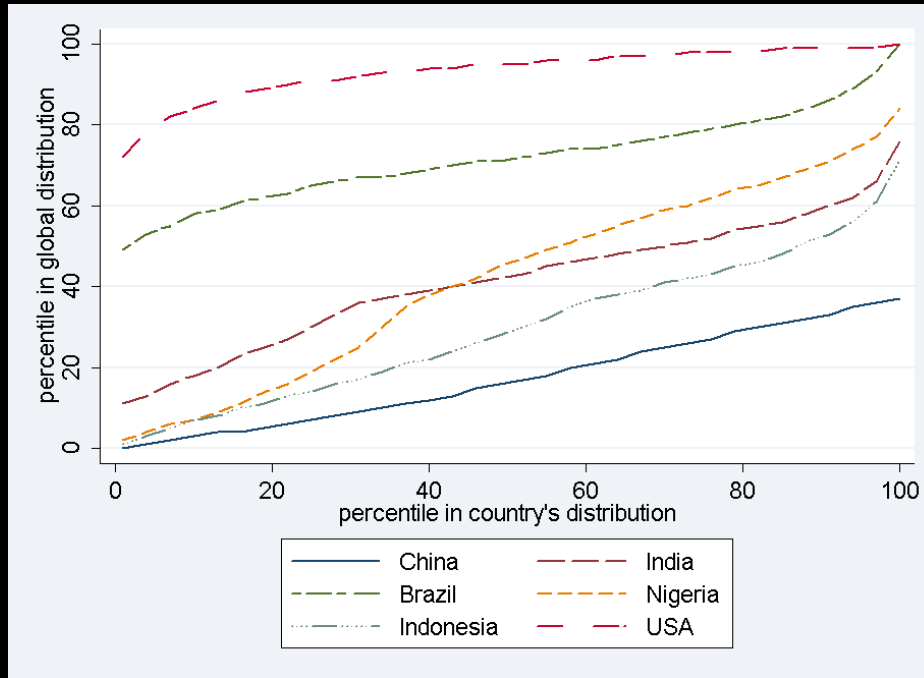
# Decomposition of Global Income Inequality



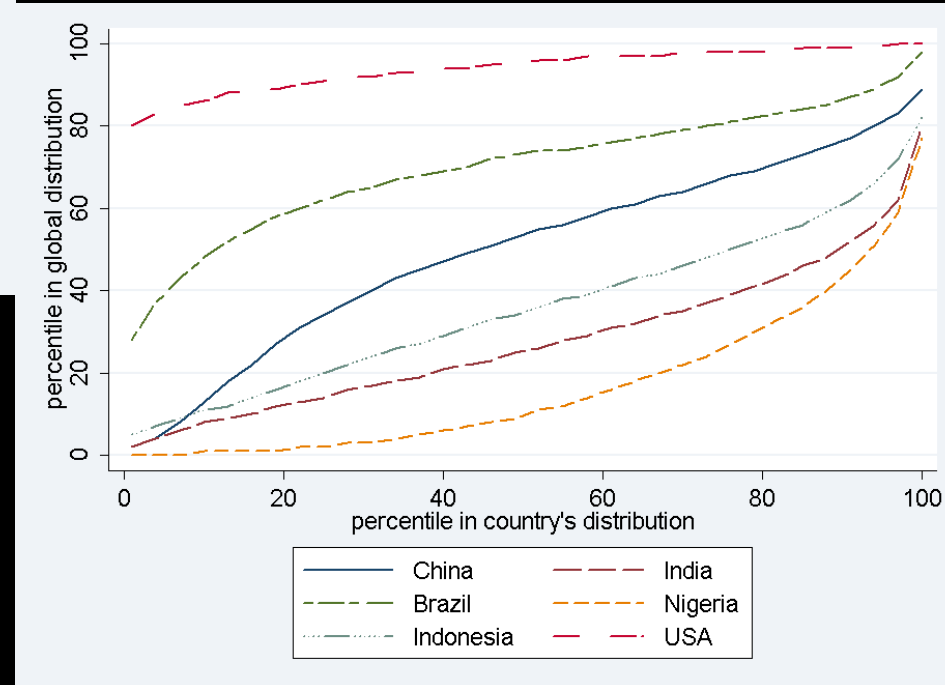
# Global Relative Growth Incidence Curve



# Relative Position of Countries



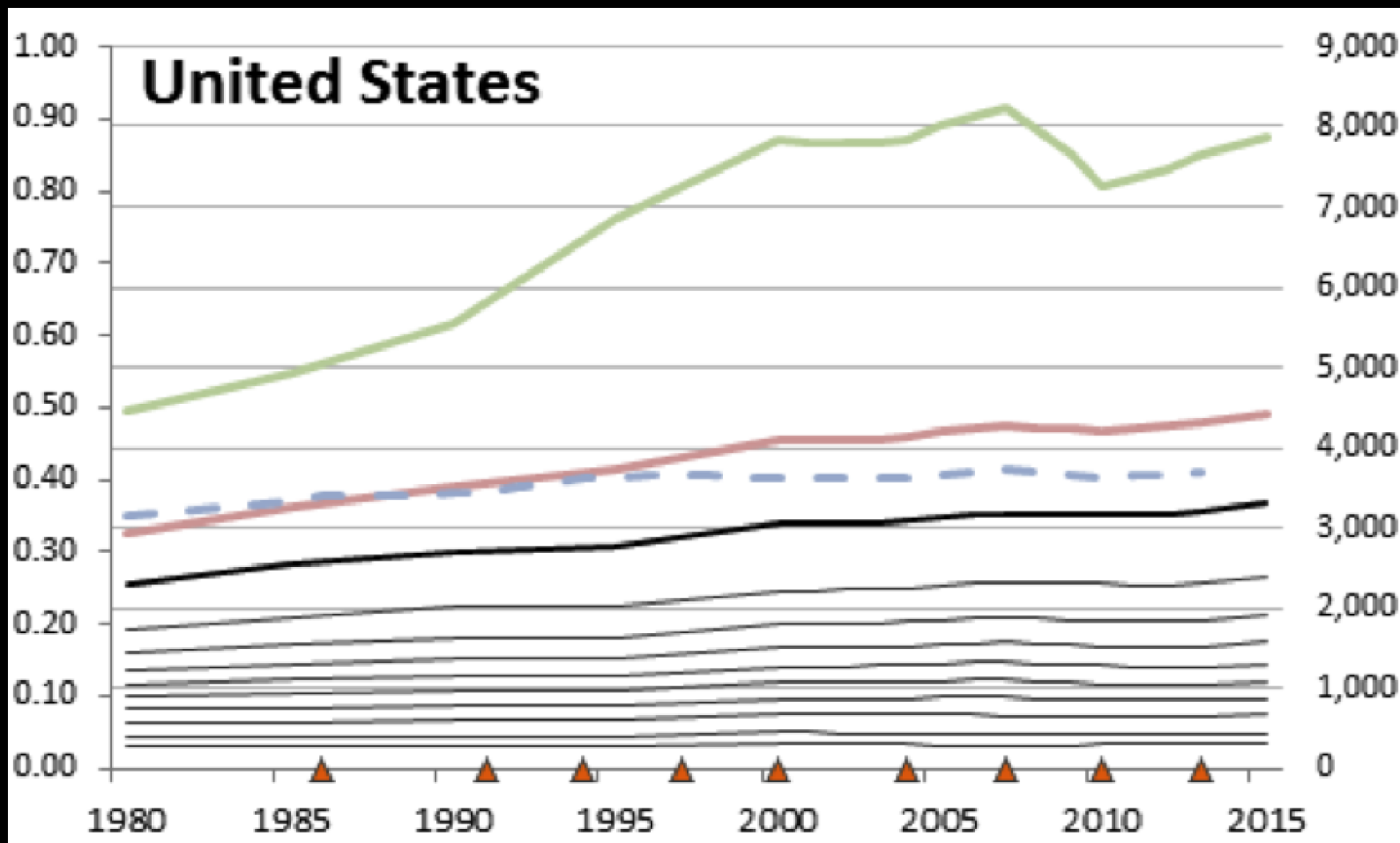
1980



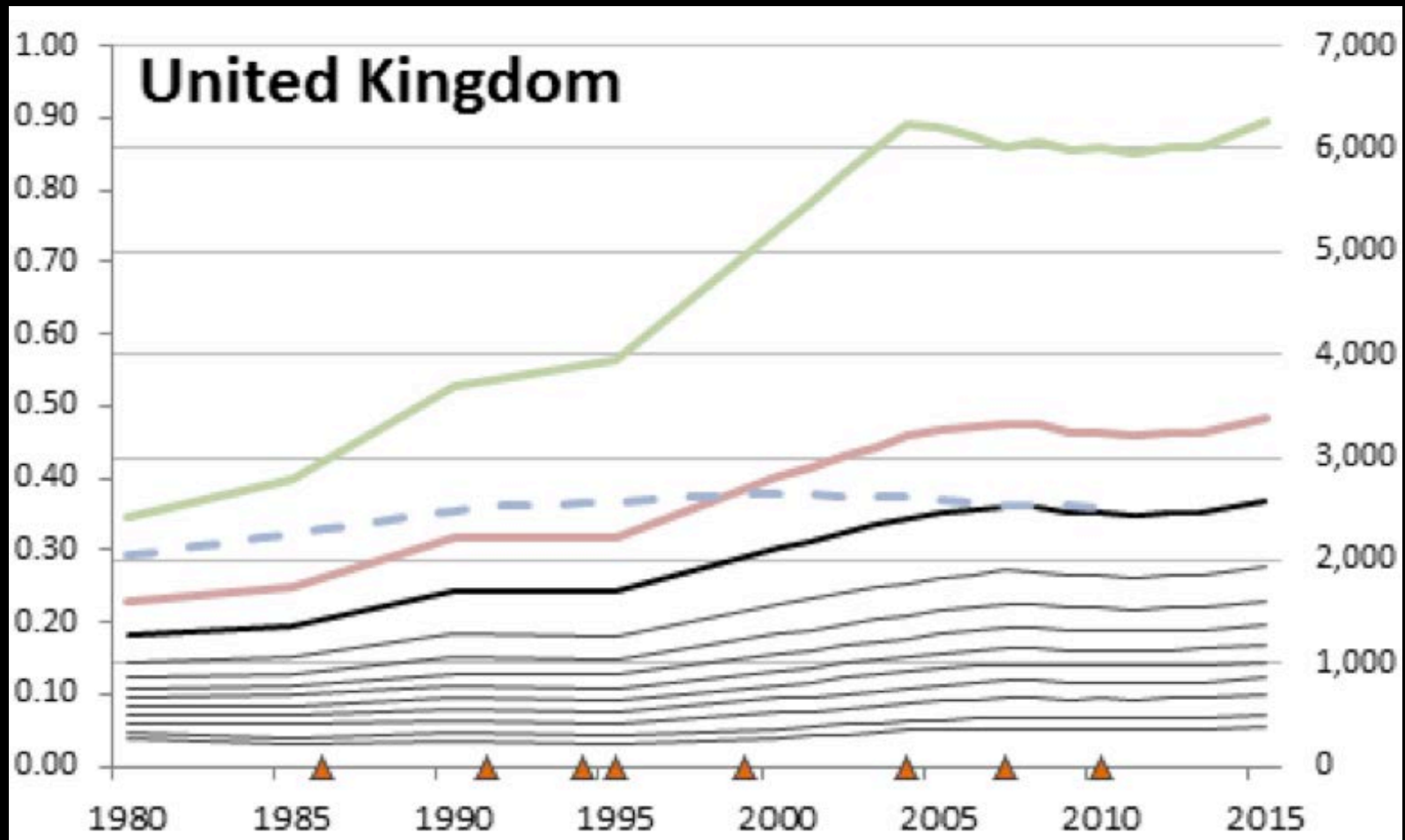
2010

Some Things We (Maybe) Did Not  
Know

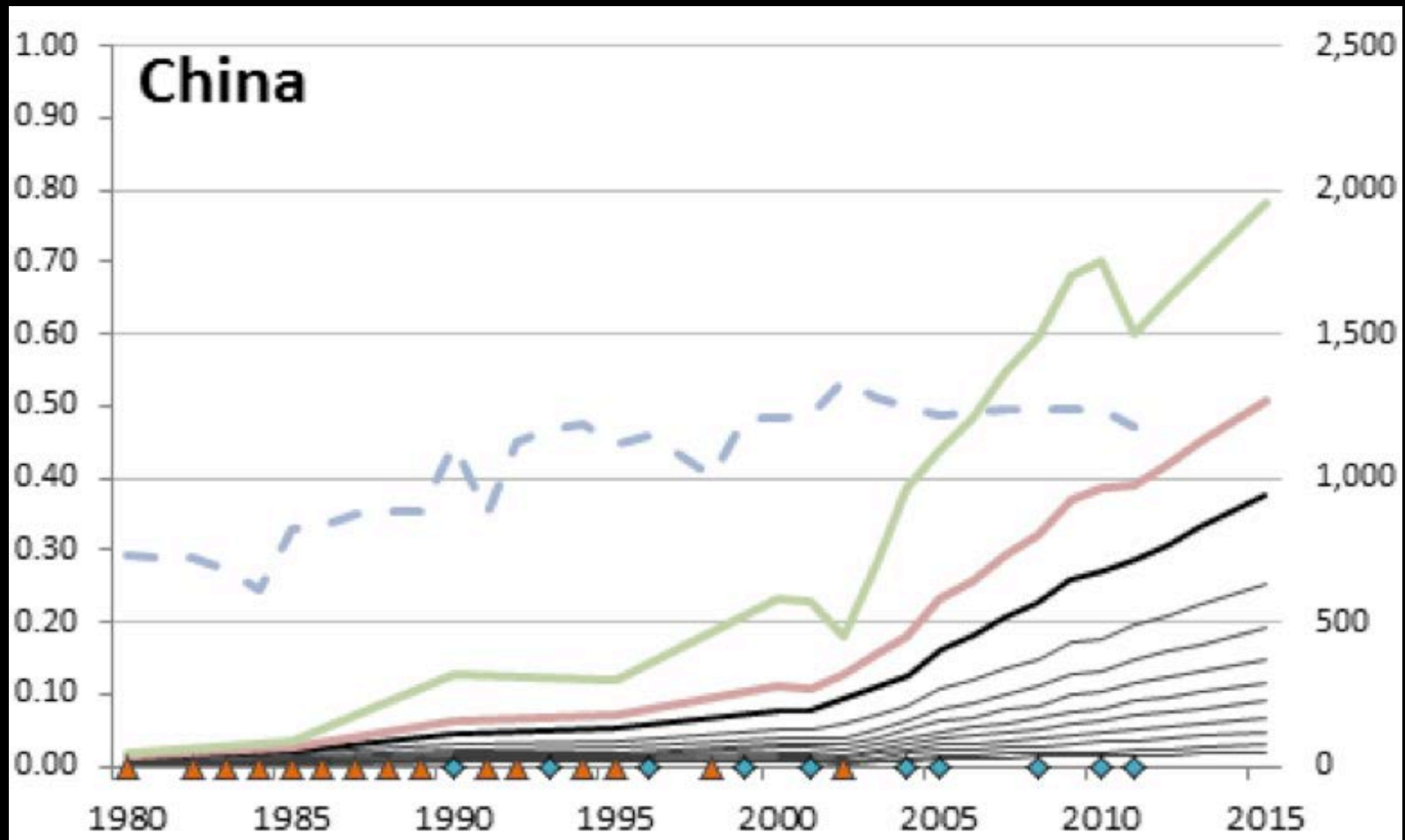
# Inclusivity of Growth: US



# Inclusivity of Growth: UK

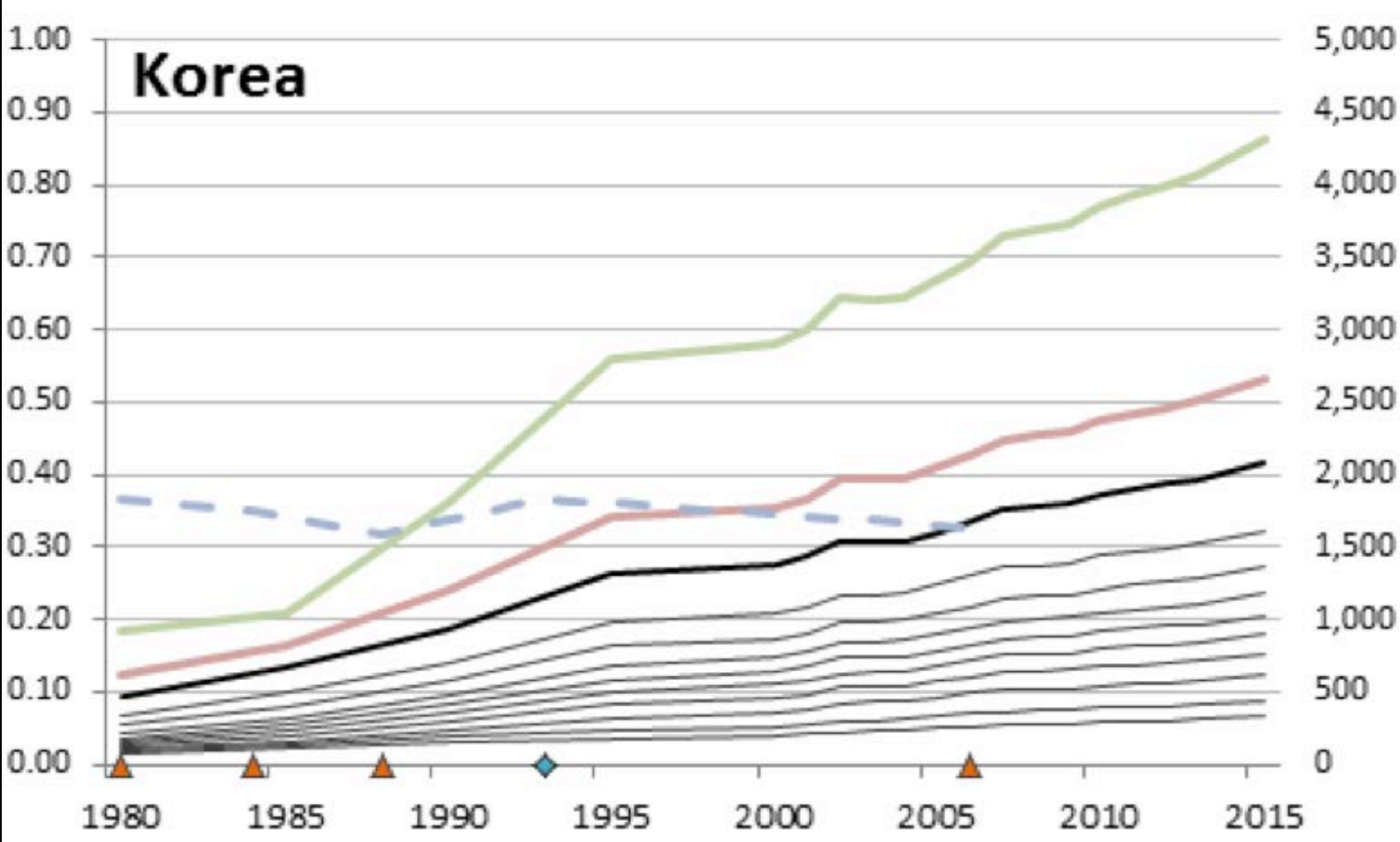


# Inclusivity of Growth: China

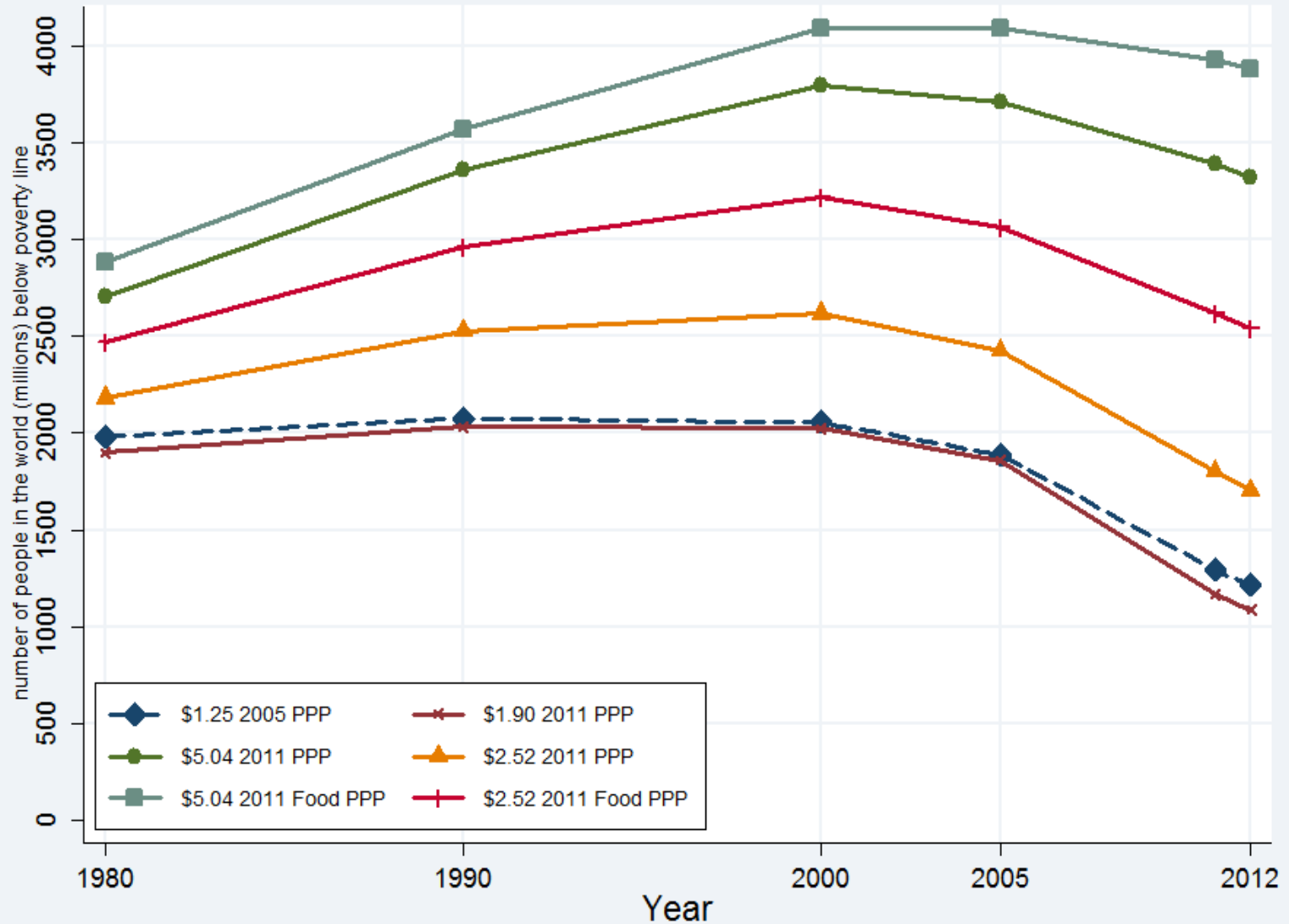




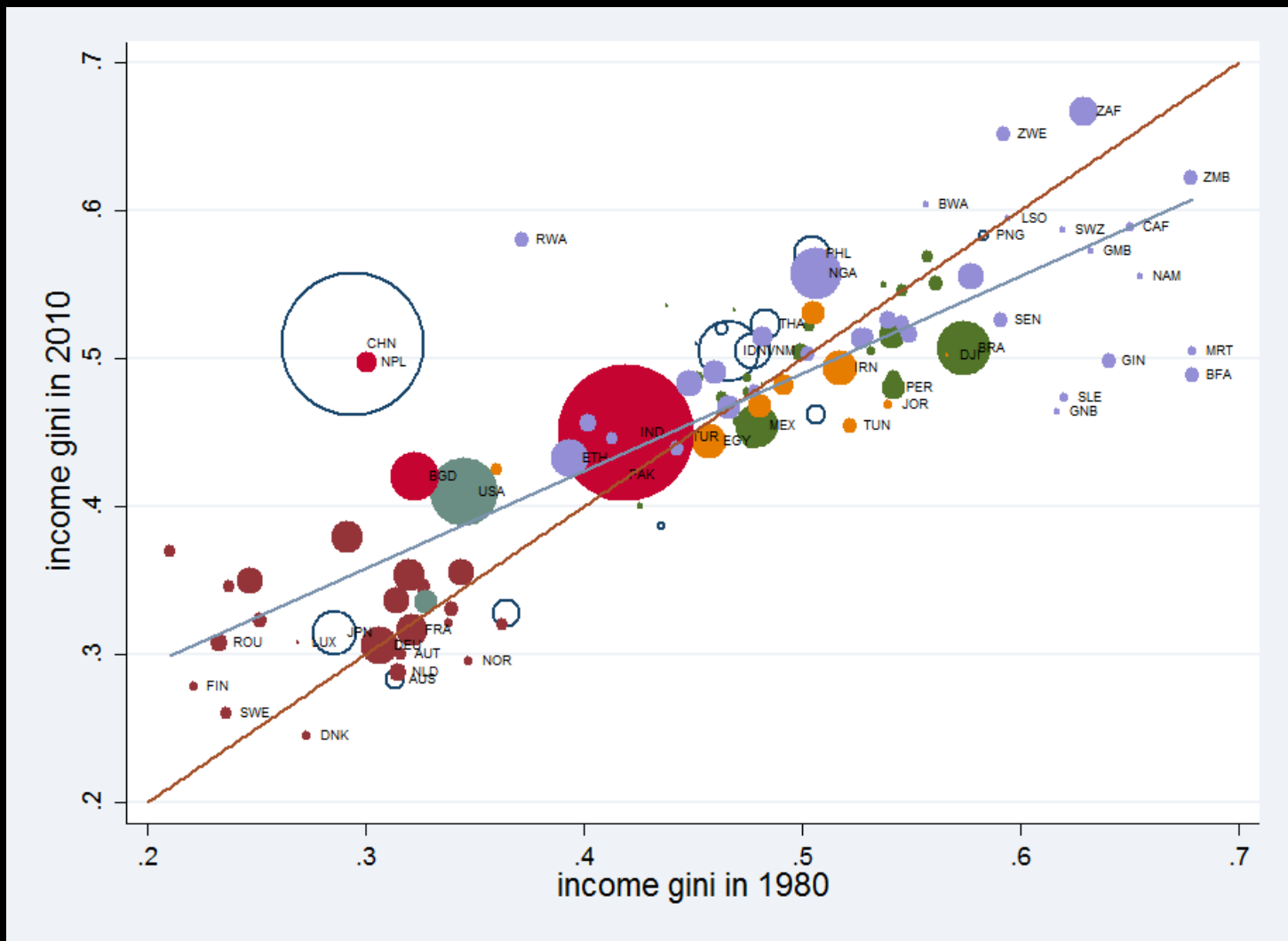
# Inclusivity of Growth: South Korea



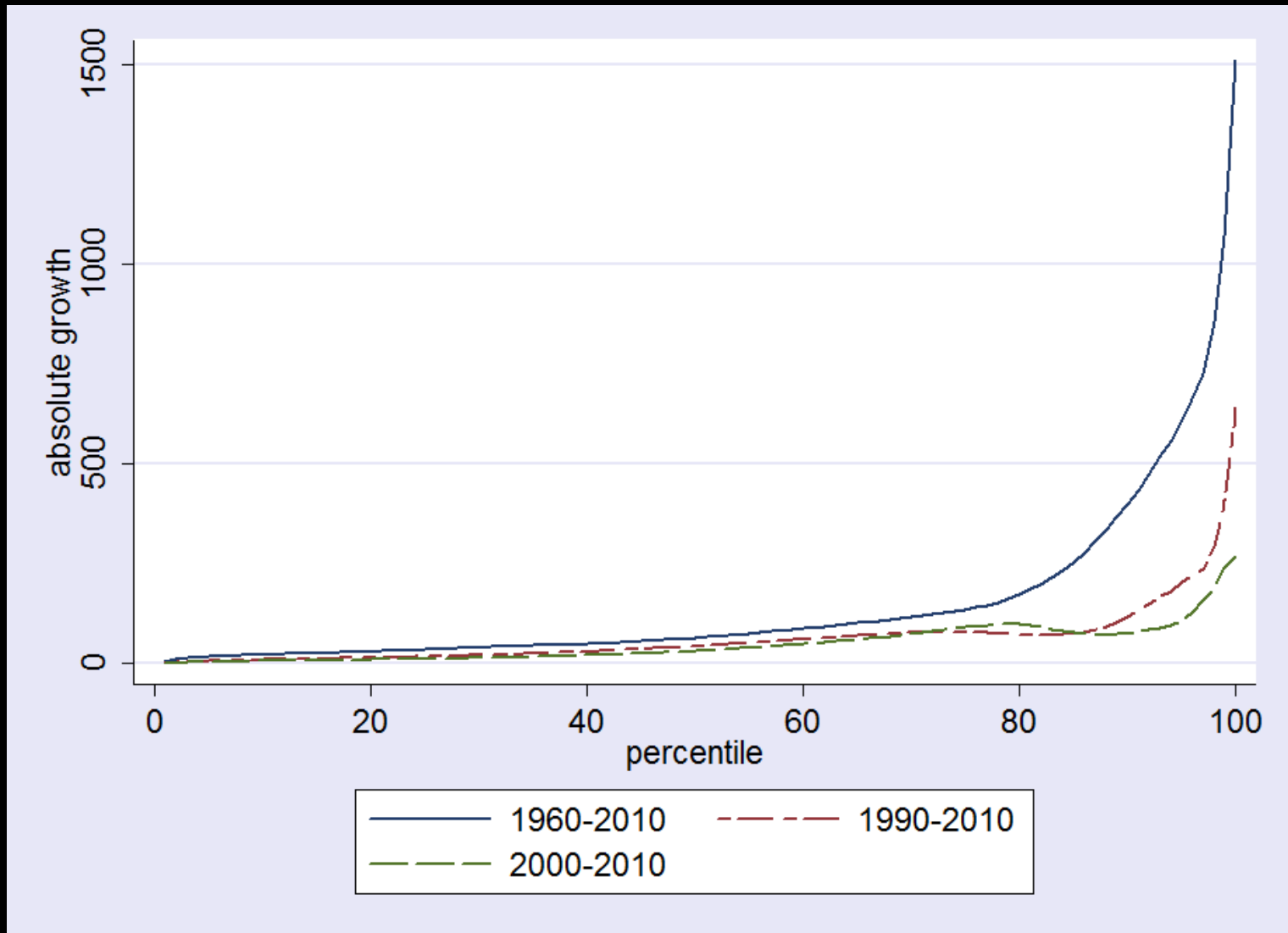
# Trends in Global Poverty



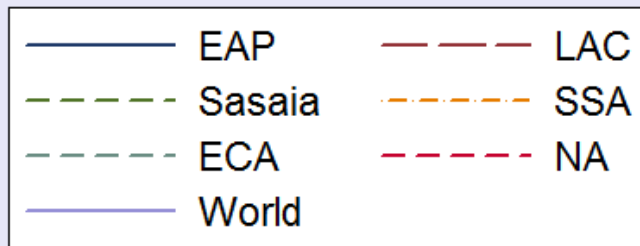
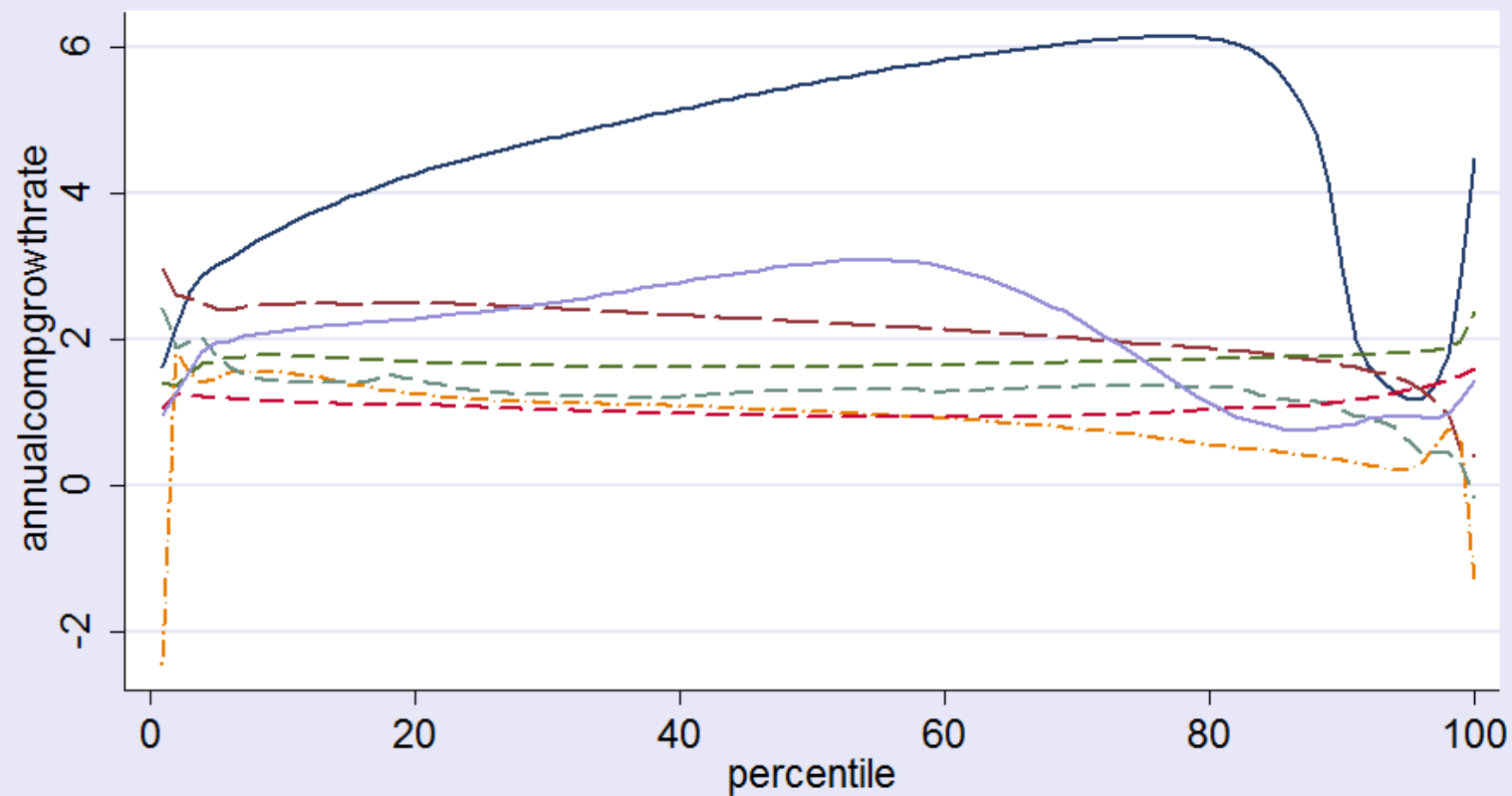
# Within Country Income Inequality



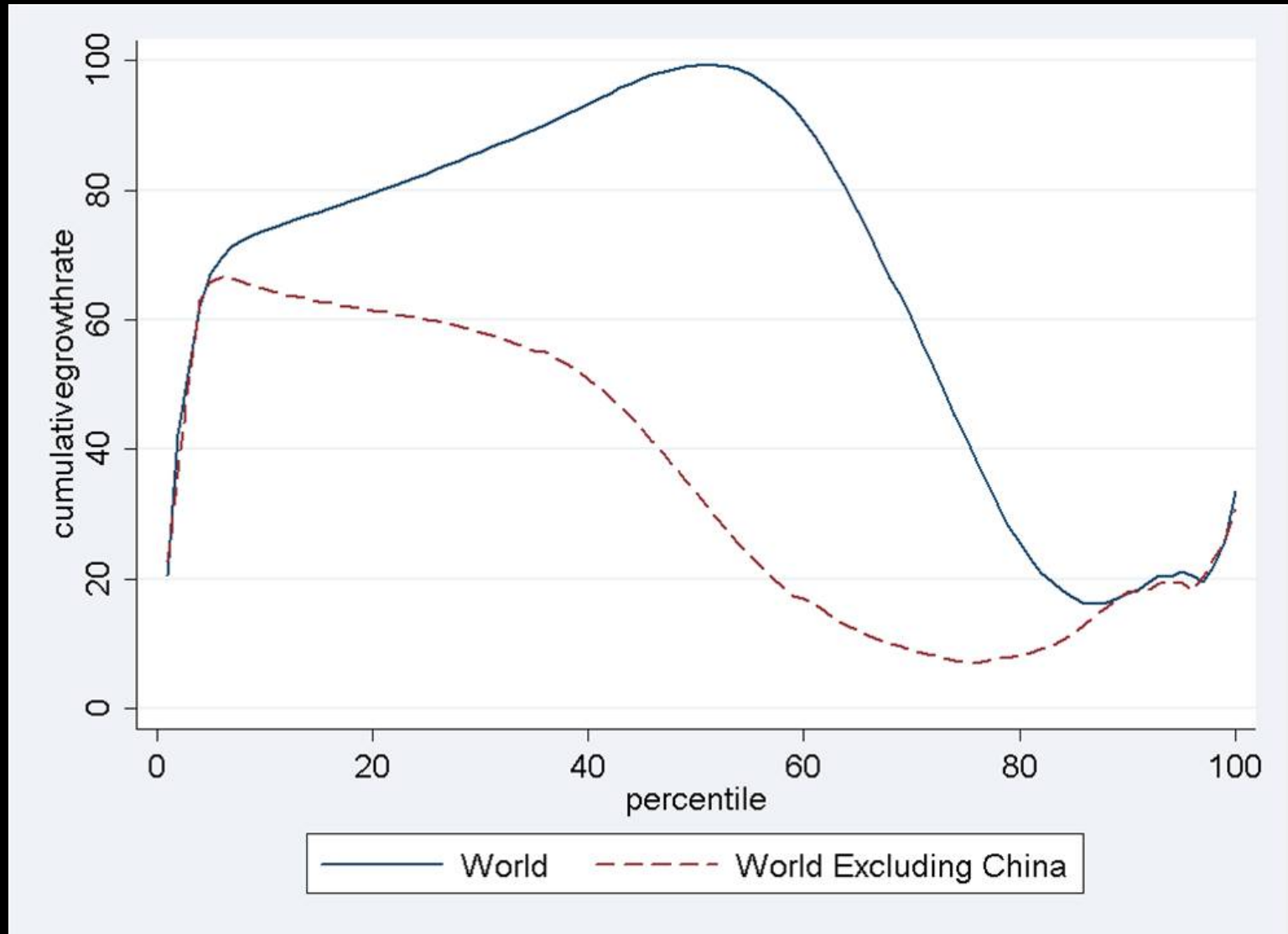
# Global Absolute Growth Incidence Curves



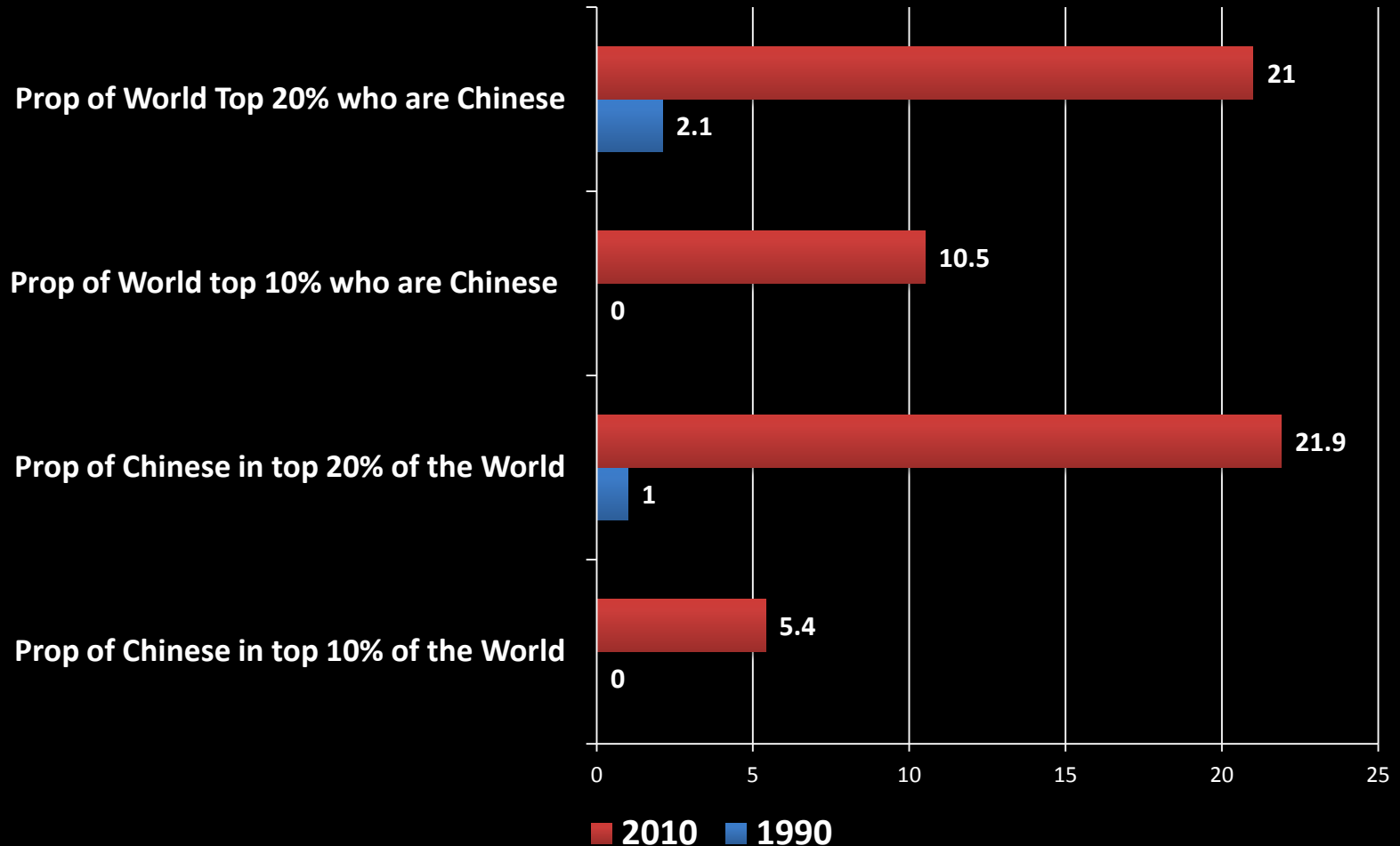
# Regional GIC's



# Growth without China (1990-2010)



# Elite Chinese in the World



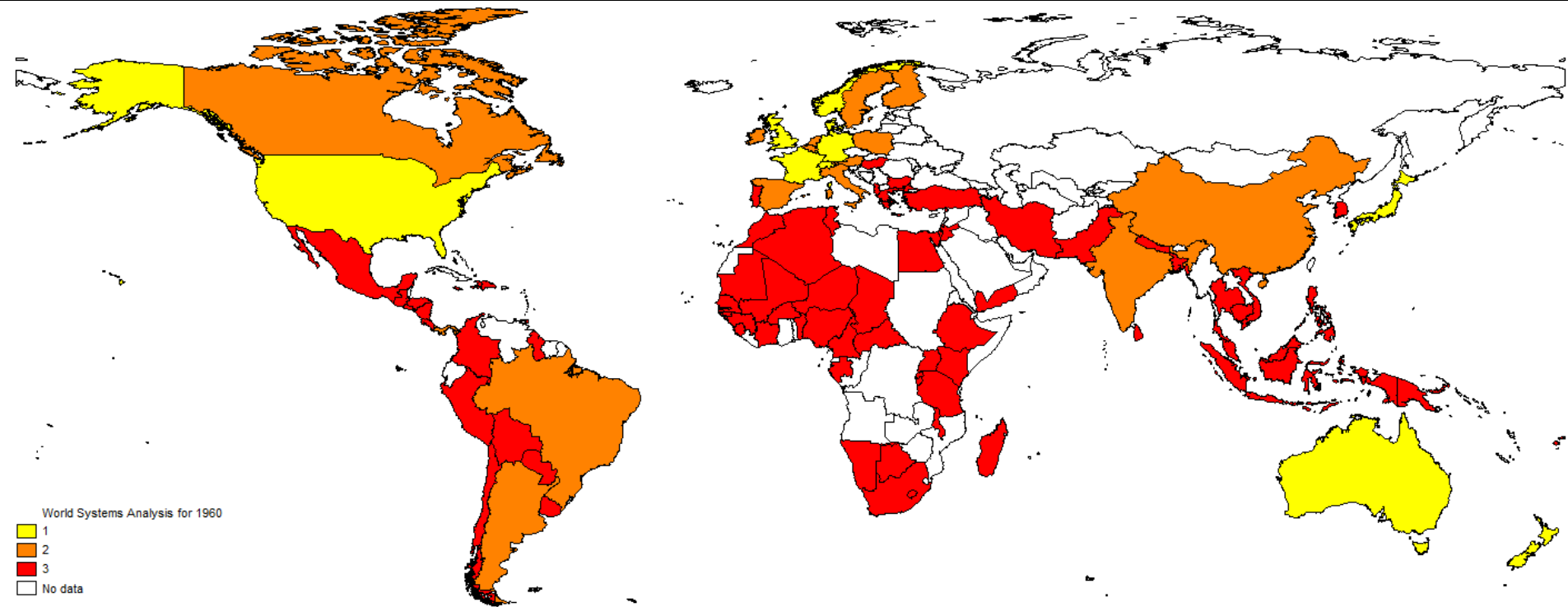
# Country's Share in World's Elite

(Population with Survey Income Above \$6,000 (2005 US\$))



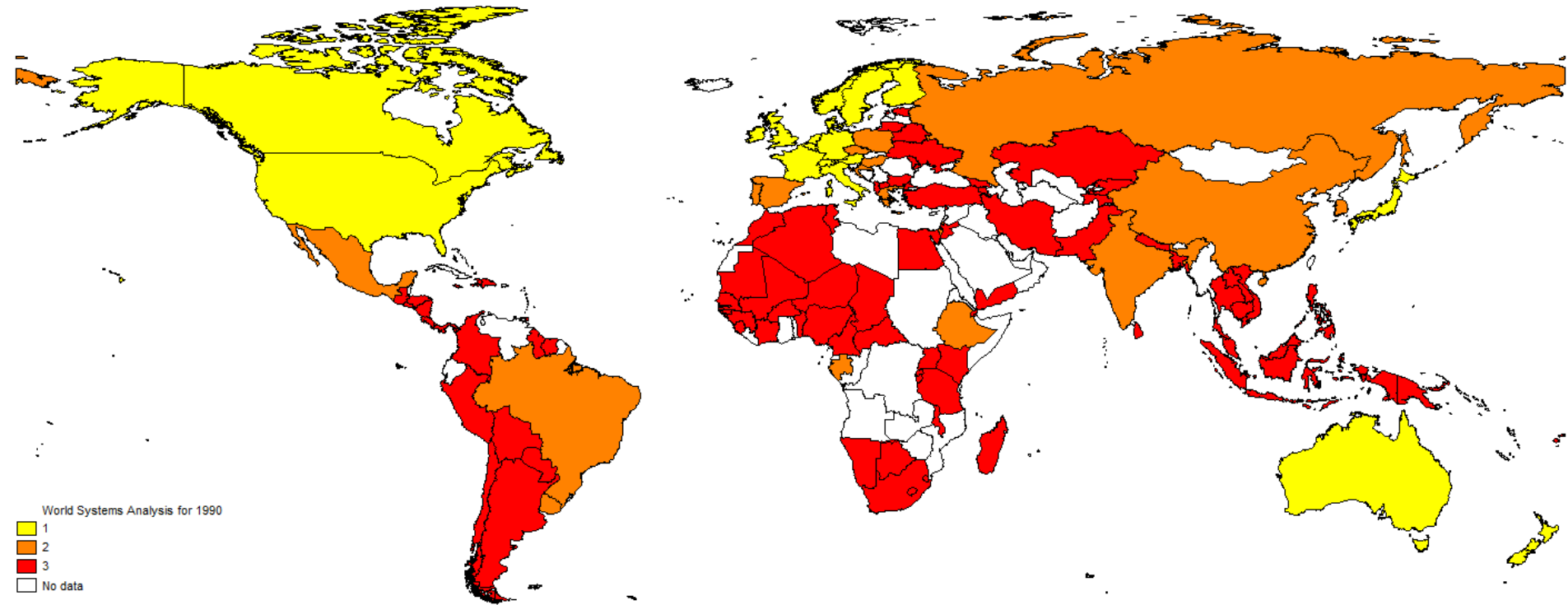


# World System - 1960

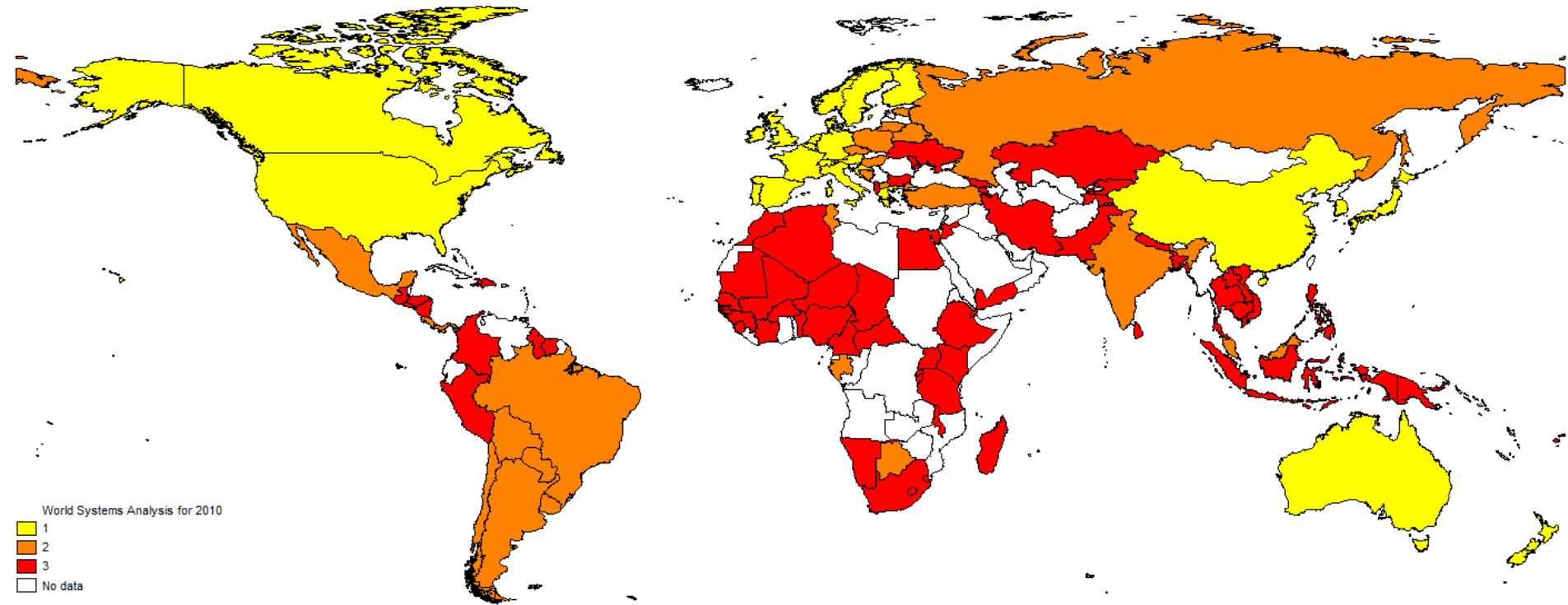


Core (Yellow) – Countries which satisfy any of the three non-per-capita income (w,x,y,z) criteria (5%, \$6000, 50%, 5%)  
Semi-Periphery (Orange) – Countries which satisfy any of the three non-per-capita-income criteria and are not part of the core (1%,\$3000,30%,5%)

# World System - 1990



# World System - 2010



# GCIP Working Papers

The Global Consumption and Income Project (GCIP): An Overview (November 24, 2015):

<http://ssrn.com/abstract=2480636>

Who Got What, Then and Now? A Fifty Year Overview from the Global Consumption and Income Project (May 6, 2015):

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2602268](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2602268)

\$1.90 Per Day: What Does it Say?: Published in New Left Review

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2685096](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2685096)

The Middle Muddle: Conceptualizing and Measuring the Global Middle Class (November 23, 2015). Available here: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2694624](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2694624)

Papers in Progress: national accounts vs. household surveys, fast growing countries and the world distribution, world poverty over fifty years, the dynamics of the world system, top income estimates, wealth estimates, etc.

Future

# Data Improvements:

Additional Surveys

Historical Surveys

Resolving Remaining Uncertainties

Alternate Exchange Rate Concepts

Integrate other Information (e.g. Census)

# Extension to Top Incomes

# Address Discrepancies between National Accounts and Surveys in Alternate Ways



Compare Levels in Other Ways (e.g.  
alternate PPP and market exchange  
rate concepts)

Access

Much data is downloadable as of  
today

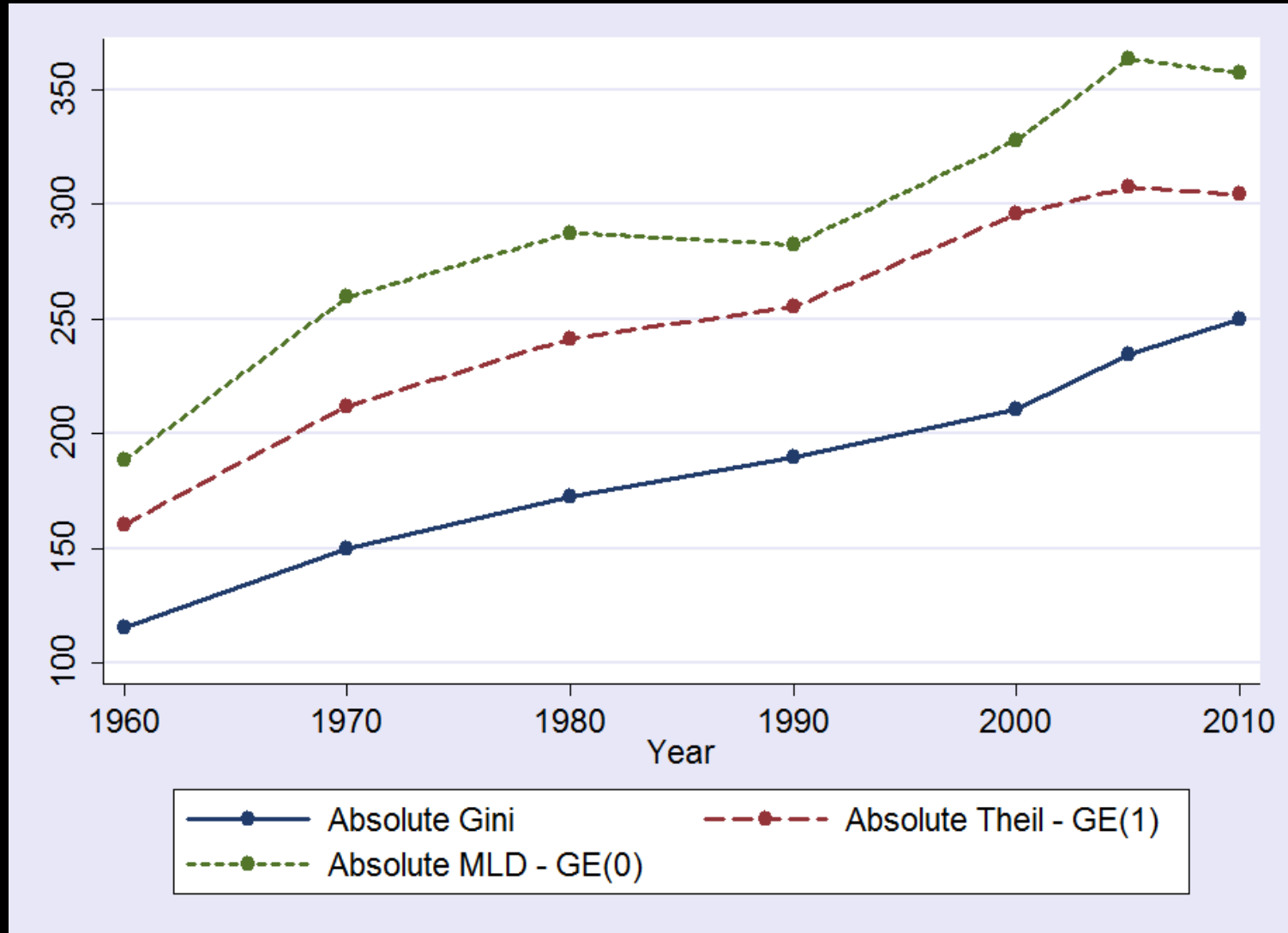
Other data and software will be  
made available in due course

:

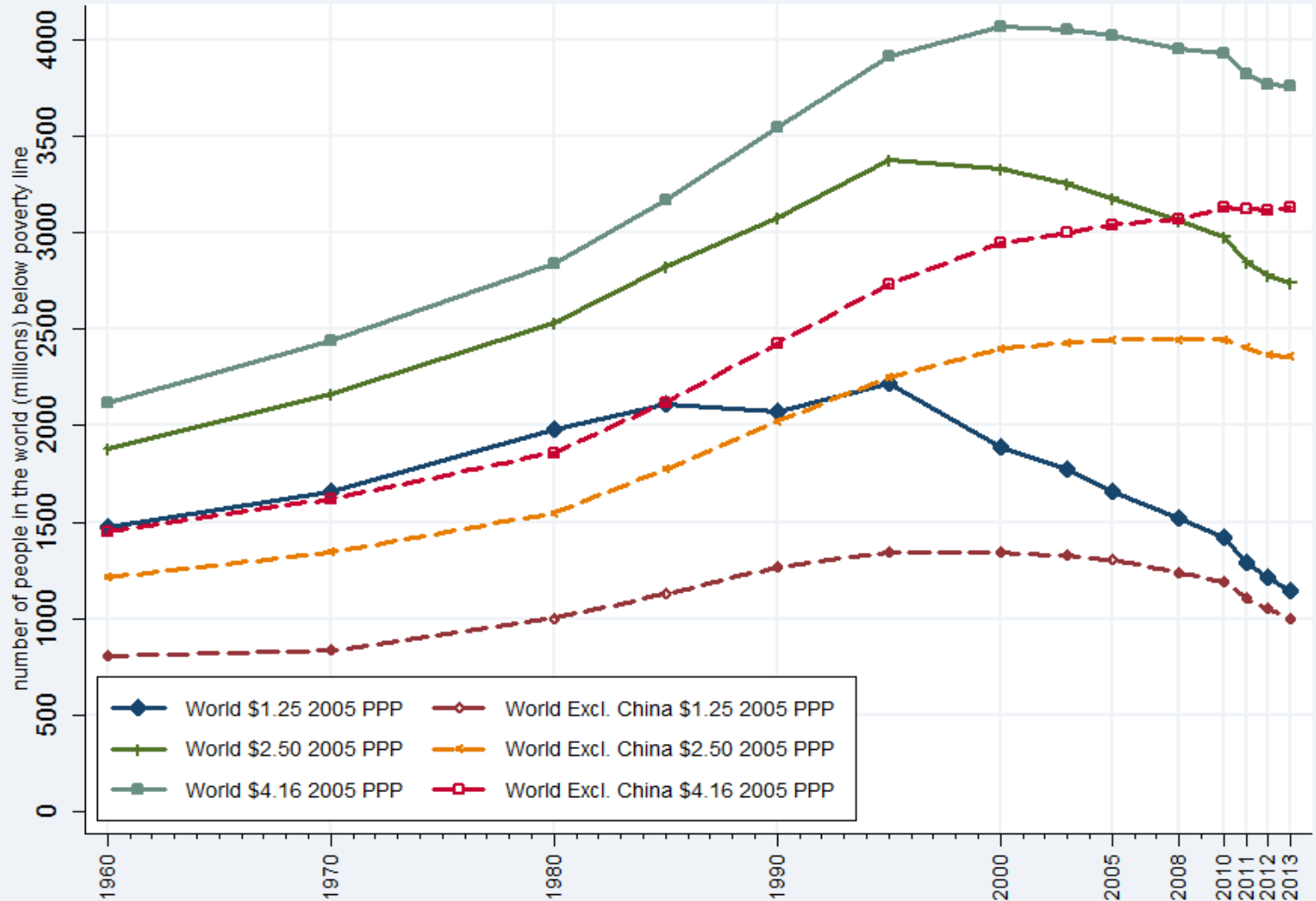
We need and welcome your  
engagement: [www.gcip.info](http://www.gcip.info)

	1	2	3	4	5
Consumption Quintile Share	0.325***	0.318***	0.345***	0.293***	0.324***
	0.034	0.032	0.031	0.034	0.031
Income Grouping (Base: Low Income)					
Lower Middle Income	0.197	0.273	0.486	0.557	-1.491
	0.392	0.436	0.431	0.456	1.499
Upper Middle Income	1.430***	1.668***	1.684***	1.206**	-5.990***
	0.421	0.47	0.465	0.492	1.616
High Income	2.112***	2.836***	3.114***	2.921***	-10.873***
	0.455	0.508	0.503	0.533	1.75
Region Grouping (Base: Africa & Middle East)					
East Asia & Pacific	1.002***	1.821***	2.219***	2.810***	-7.846***
	0.361	0.396	0.389	0.405	1.359
Europe	2.286***	3.602***	3.556***	2.616***	-12.140***
	0.352	0.395	0.389	0.405	1.349
Latin America & Caribbean	-0.485	0.294	0.899**	1.539***	-2.197
	0.364	0.406	0.401	0.424	1.395
Post Soviet	1.830***	2.452***	2.733***	2.887***	-9.879***
	0.418	0.469	0.464	0.489	1.611
South Asia	1.965***	3.243***	3.308***	2.758***	-11.272***
	0.532	0.591	0.581	0.606	2.023
Time (Base: 1995 or Later)					
Pre 1995	0.32	-0.177	-0.484**	-0.583**	0.895
	0.209	0.233	0.231	0.244	0.801
Constant	0.475	2.553***	4.988***	11.068***	48.899***
	0.392	0.48	0.551	0.779	2.192
R-square	0.686	0.753	0.761	0.631	0.755
N	204				

# Global Absolute Income Inequality

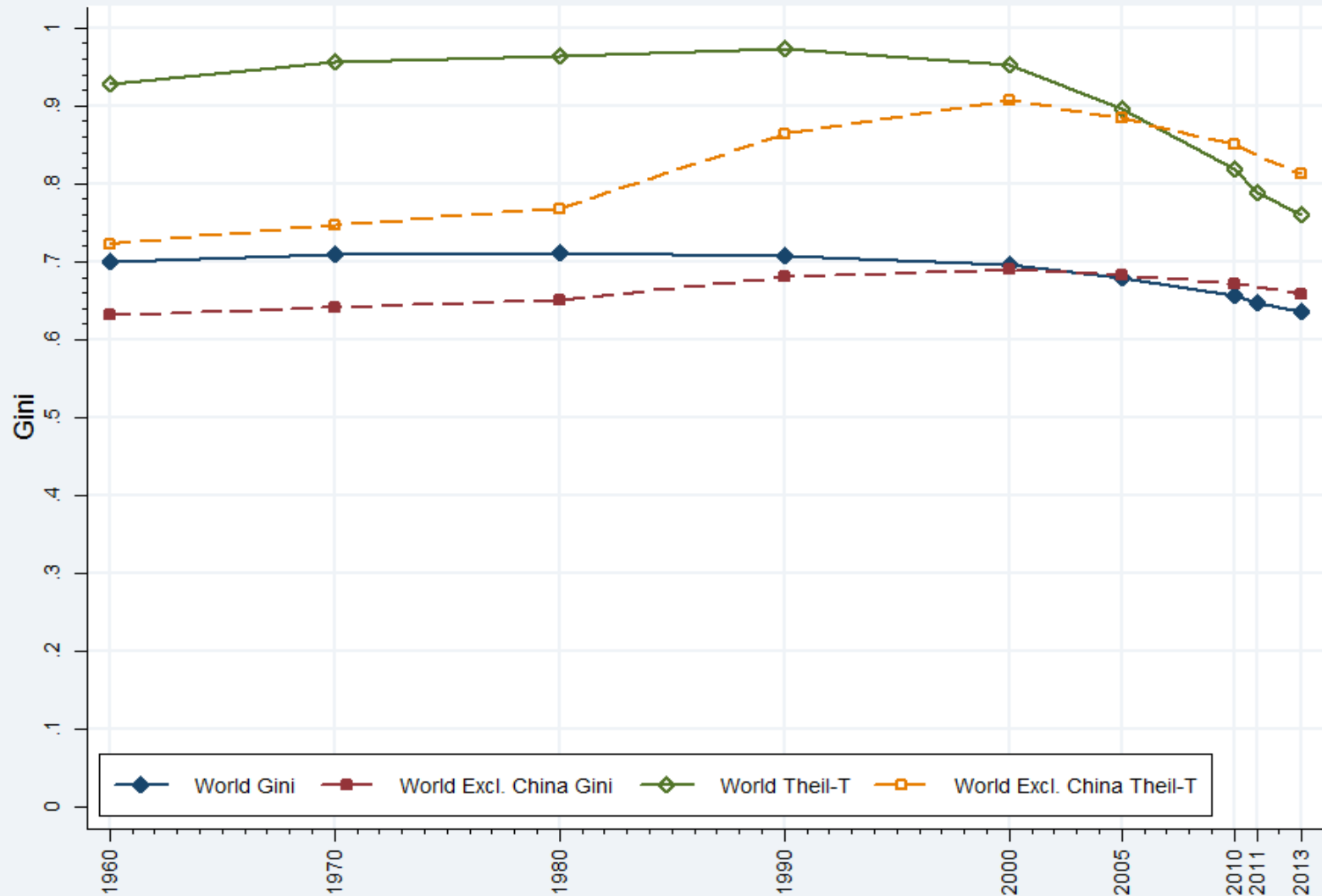


# Poverty in World excluding China





# Global Consumption Inequality



# Impact of Fast Growing Countries in Global Distribution

