



CROSS-NATIONAL
DATA CENTER
in Luxembourg

Poverty in 'LISSY World'

18th Winter School on Inequality and Social Welfare Theory
January 7-10, 2025 – Alba di Canazei

Teresa Munzi & Philippe Van Kerm

Outline

Part 1. What is LIS

Part 2. Review of poverty research done on LIS

Part 3: Some updated results in 'LISSY world'



Part 1

What is LIS?



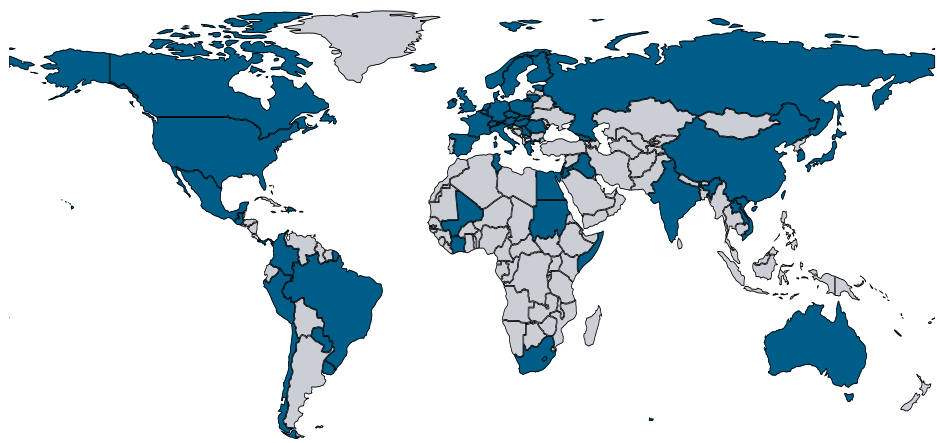
LIS history in a nutshell

- **Founded in 1983** out of the need to be able to compare income distributions across countries
- Currently directed by **Peter Lanjouw**, LIS' main strategy and priorities are set by a **board** including experts from all participating countries (currently presided by **François Bourguignon**)
- **Two LIS Satellite Offices**
 - *US LIS Satellite Office @ Stone Centre on Socio-Economic Inequality (CUNY, New York)*
 - *UK LIS Satellite Office @ International Inequalities Institute (LSE, London)*
- LIS is supported in by the **Luxembourg government**, the **US NSF**, and the **UK ESRC**, as well as by other national or supranational funders – supplemented by project-specific grants





LIS data



LIS Data

2 cross-national **harmonised** databases that allow international comparative research using **micro-data**:

- the **Luxembourg Income Study Database - LIS** (focus on income): 904 datasets from 52 countries (1963 to 2023)
- the **Luxembourg Wealth Study Database - LWS** (focus on wealth): 117 datasets from 21 countries (1995 to 2022)

Data access

- a **remote execution system (LISSY)** enables the use of our data around the world (an average of **1,000** researchers & students submit about **100,000** jobs remotely every year)
- **free access** for students, data providers and their staffs in **all countries**
- **free access** for researchers, and assimilated staff of non-profit organization or governmental organizations from **contributing member countries**



Research with LIS data

Topics of research

- Assessing income inequality
- Measuring poverty
- Comparing employment outcomes
- Analysing assets and debts
- Researching policy impacts

Comparative dimension:

- across countries
- over time

Decomposition by various dimensions



Research with LIS data

Types of reasearch

- **Statistical approaches**
 - *“classic” descriptive analyses (10%)*
 - *redistribution / decomposition methods (47%)*
 - *multivariate regression (36%)*
 - *multilevel models (7%)*
- **LIS microdata in conjunction with external data**
 - *“macro-macro”*
 - *“macro-micro”*
 - *“micro-micro”*



Part 2

Review of poverty
research done on LIS



Research on poverty with LIS data

Poverty measurement

- Poverty line
- Income definition
- Unit of analysis
- Equivalence Scale
- PPP Exchange Rates

Smeeding, T. 2006, Poor People in Rich Nations: The United States in Comparative Perspective, Journal of Economic Perspectives 20, no. 1 (2006): 69-90. [LIS WP 419]

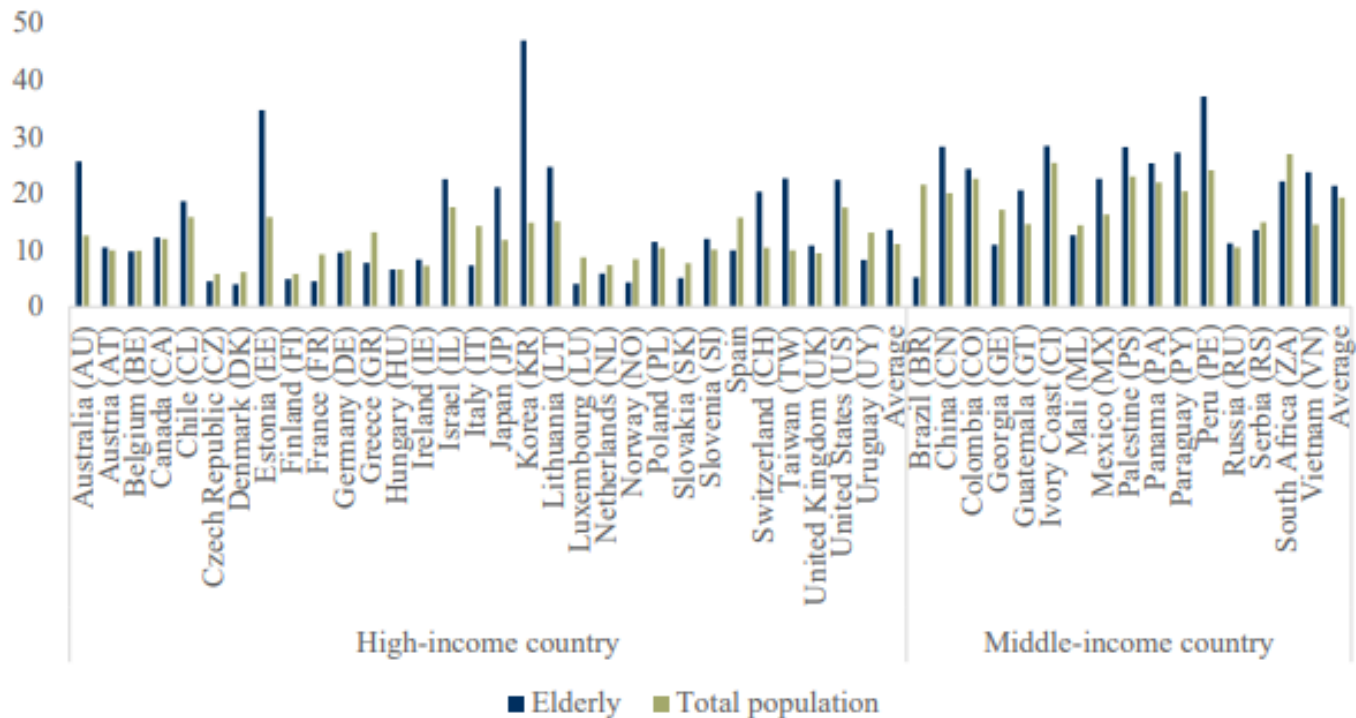
Poverty determinants: what causes poverty vs. what reduces poverty?

1. **Determinants of being poor:** analysis at individual level that focuses on explanation of the poor
2. **Determinants of poverty reduction or poverty increase:** analysis at institutional/political level that focuses on explanation of poverty reduction/increase

Old Age Incomes, Wealth, and Poverty across the Globe

Kenneth Nelson, Johan Fritzell, LIS WP 891, Nov 2024

Figure 1. Relative income poverty (50% threshold) among persons aged 65+ and in total population in 47 high-, upper-middle-, and lower-middle-income countries, around 2015 or 2020.



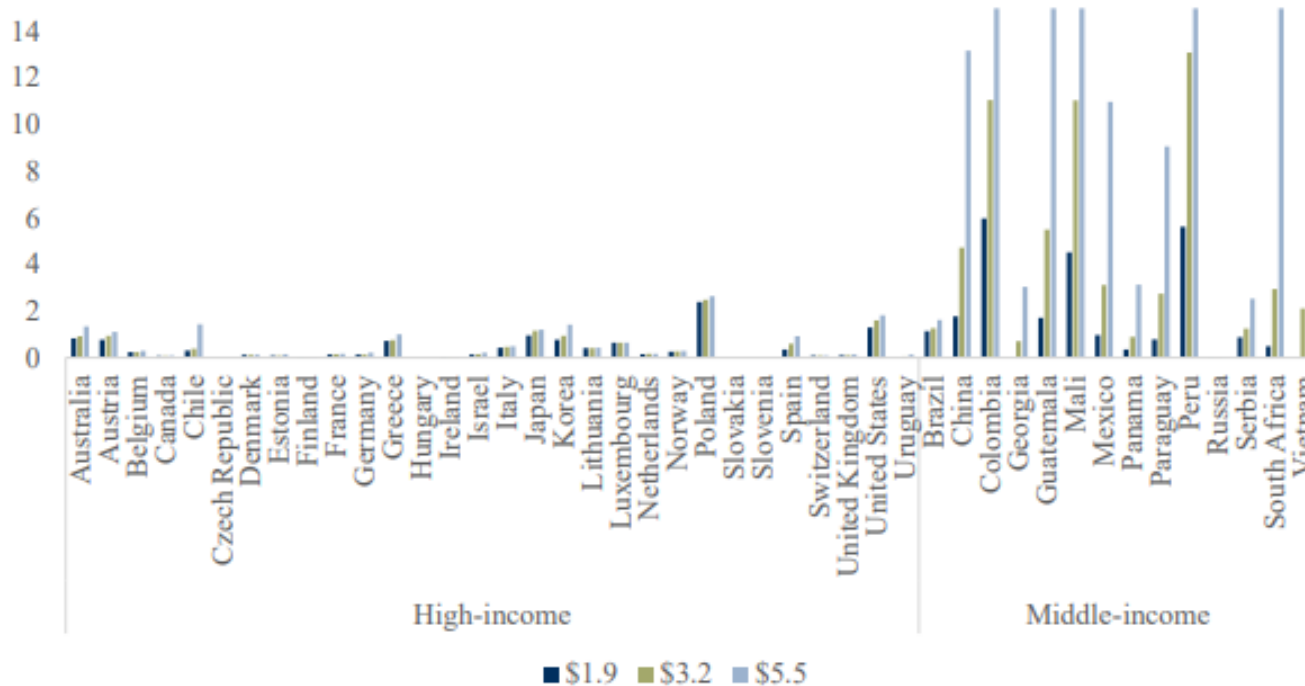
Note: Countries and years (in parenthesis). AU18, AT19, BE15, BR16, CA18, CL15, CN13, CO20, CI15, CZ16, DK16, EE16, FI16, FR18, GE19, DE18, GR16, GT14, HU15, IE18, IL18, IT16, JP13, LT18, LU13, ML19, MX18, NL18, NO19, PS17, PA16, PY20, PE16, PL20, RU19, RS16, SK18, SI15, ZA15, KR16, ES16, CH18, TW16, UK18, US19, UY19, VN13

Source: Luxembourg Income Study.

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Figure 4. Extreme poverty at \$1.9, \$3.2, and \$5.5 a day among persons aged 65+ in 44 countries, around 2015 or 2020.



Note: Countries and years (within parenthesis): AU18, AT19, BE15, BR16, CA18, CL15, CN13, CO20, CZ16, DK16, EE16, FI16, FR18, GE19, DE18, GR16, GT14, HU15, IE18, IL18, IT16, JP13, LT18, ML19, MX18, NL18, NO19, PA16, PY20, PE16, PL20, RS16, SK18, SI15, ZA15, KR16, ES16, CH18, UK18, US19, UY19, VN13.

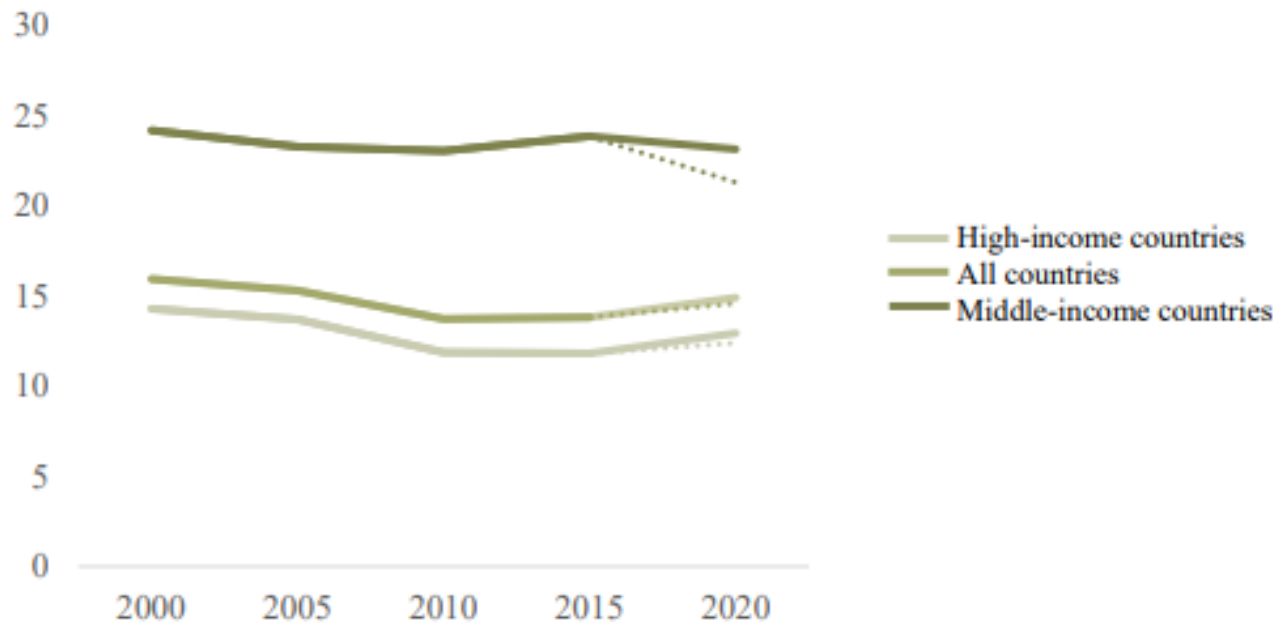
The extreme poverty rate at \$5.5 a day are truncated to 15 percent in Colombia (20.2), Guatemala (20.3), Mali (36.0), Peru (26.0), and South Africa (16.4). The actual rates of extreme poverty at \$5.5 a day are in parenthesis.



Old Age Incomes, Wealth, and Poverty across the Globe

Kenneth Nelson, Johan Fritzell, LIS WP 891, Nov 2024

Figure 2. Relative income poverty (50% threshold) among persons aged 65+ in 30 high- and middle-income countries, around 2000, 2005, ..., 2020.



Note: Countries included in the analysis: AU, AT, *BE*, CA, *CL*, CO, *CI*, CZ, *EE*, FI, FR, DE, GR, *HU*, IE, IL, IT, LU, MX, NL, NO, PY, PL, R, *SI*, *ES*, CH, *TW*, UK, US. Values for 2020 are estimated for countries in italics, and included in the series marked with dotted lines

Source: Luxembourg Income Study.

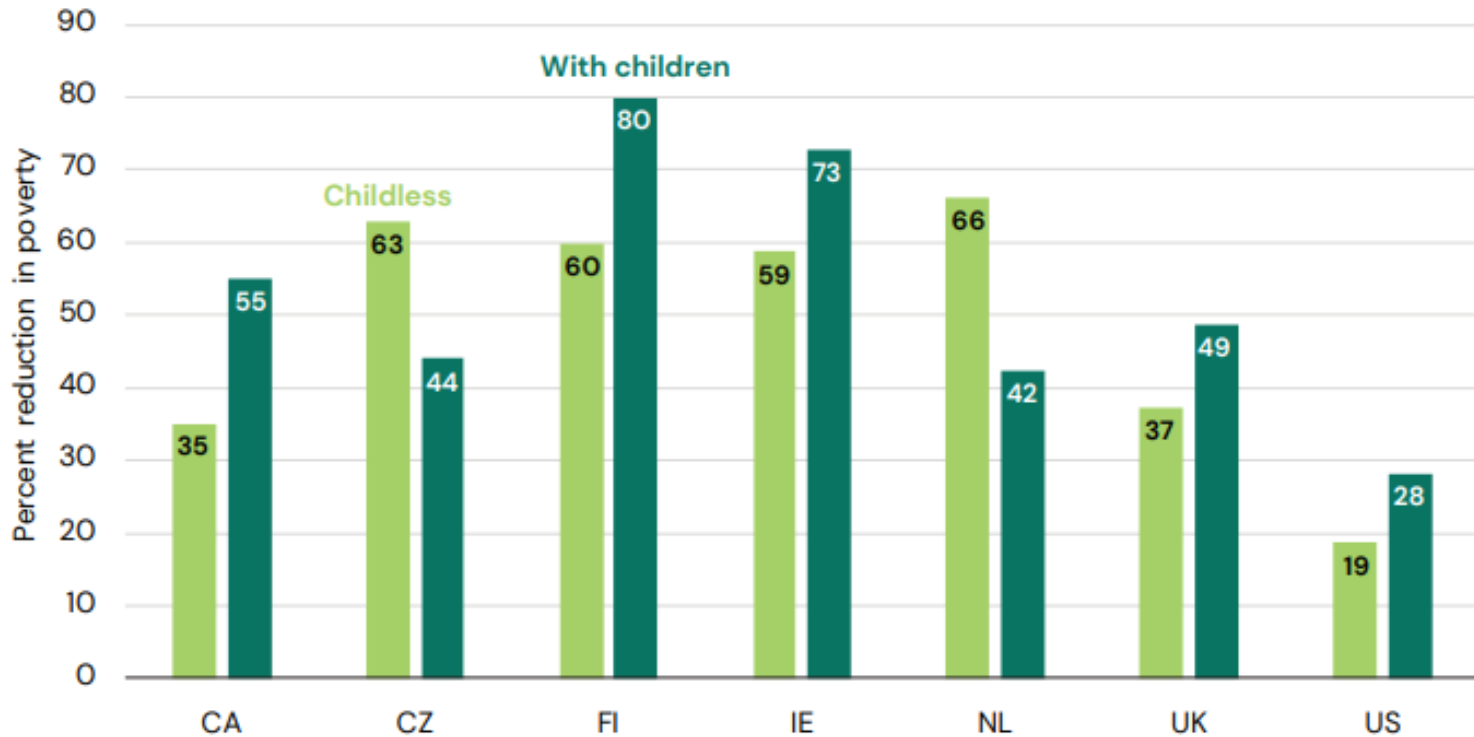


Poverty and Poverty Reduction Among Non-Elderly, Nondisabled, Childless Adults in Affluent Countries: The United States in Cross-National Perspective

Janet C. Gornick, David Brady, Ive Marx, Zachary Parolin, LIS WP 883, May 2024

FIGURE 3

Percent reduction in poverty due to taxes and transfers, nondisabled adults in households with and without children (seven countries, 2016–19)



Source: LIS Database.



The Role of Single Motherhood in America's High Child Poverty

David Brady, Regina S. Baker, Ryan Finnigan, LIS WP 881, Apr 2024

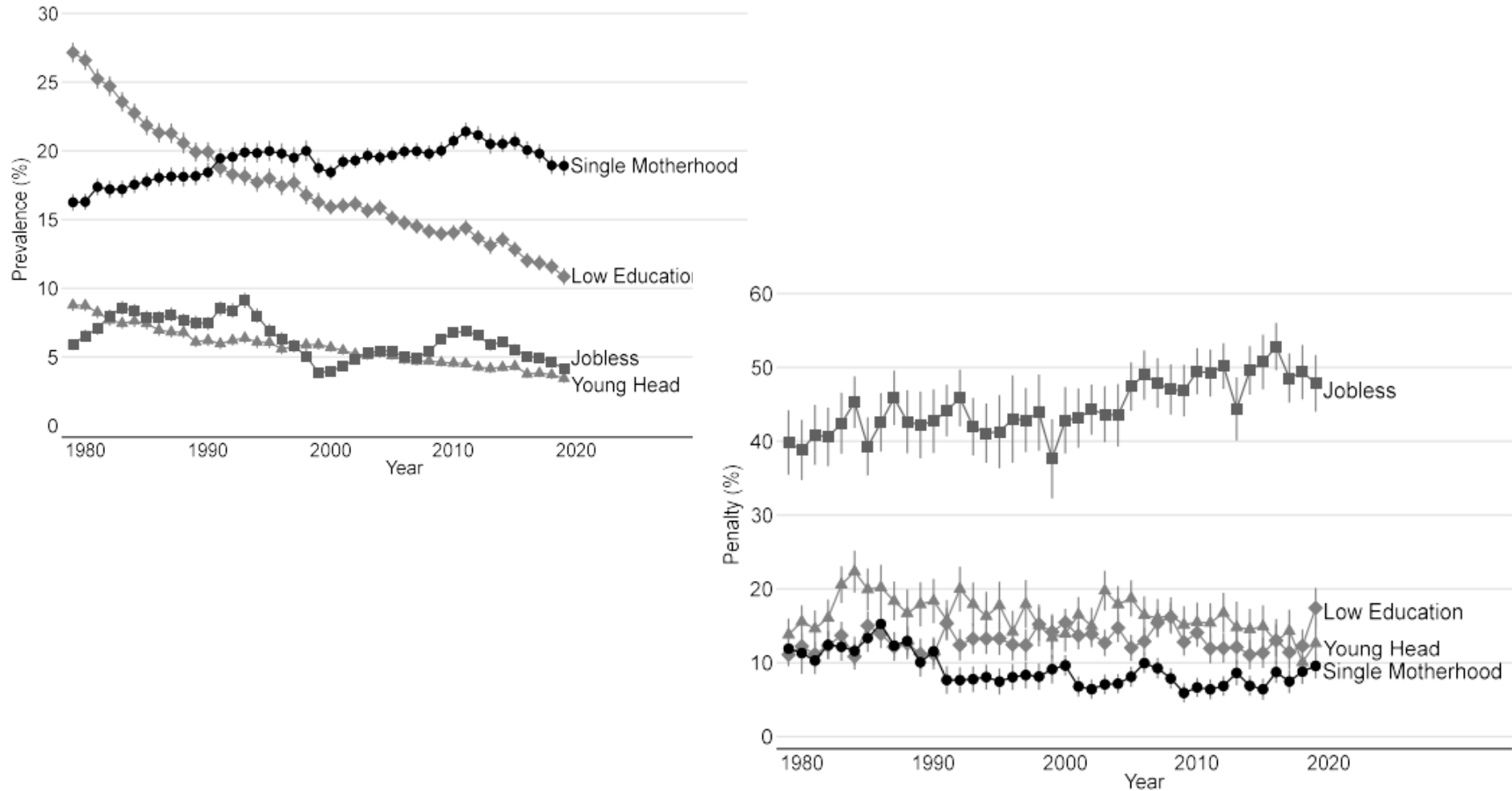


Figure 4. Trends in the Prevalences (upper panel) and Penalties (lower panel) of the Four Risks Child Poverty in the U.S. 1979–2019 in Recent LIS Data.

Note: Vertical lines represent 95% confidence intervals.



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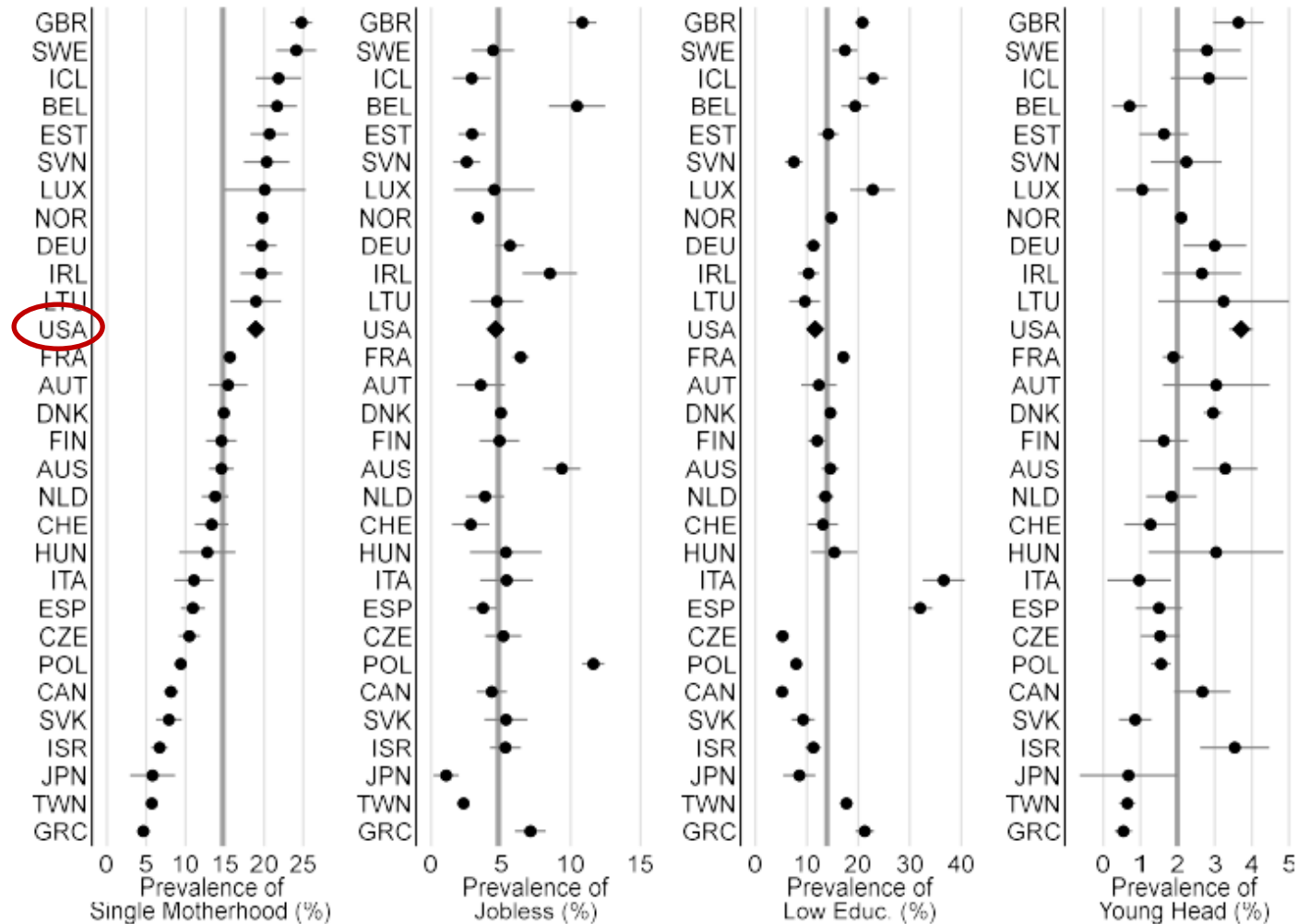


Figure 2. Distribution of Prevalences Across 30 Rich Democracies in Recent LIS Data.

Notes: Vertical lines represent median prevalences. Horizontal lines represent 95% confidence intervals.



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David Brady, Regina S. Baker, Ryan Finnigan, LIS WP 881, Apr 2024

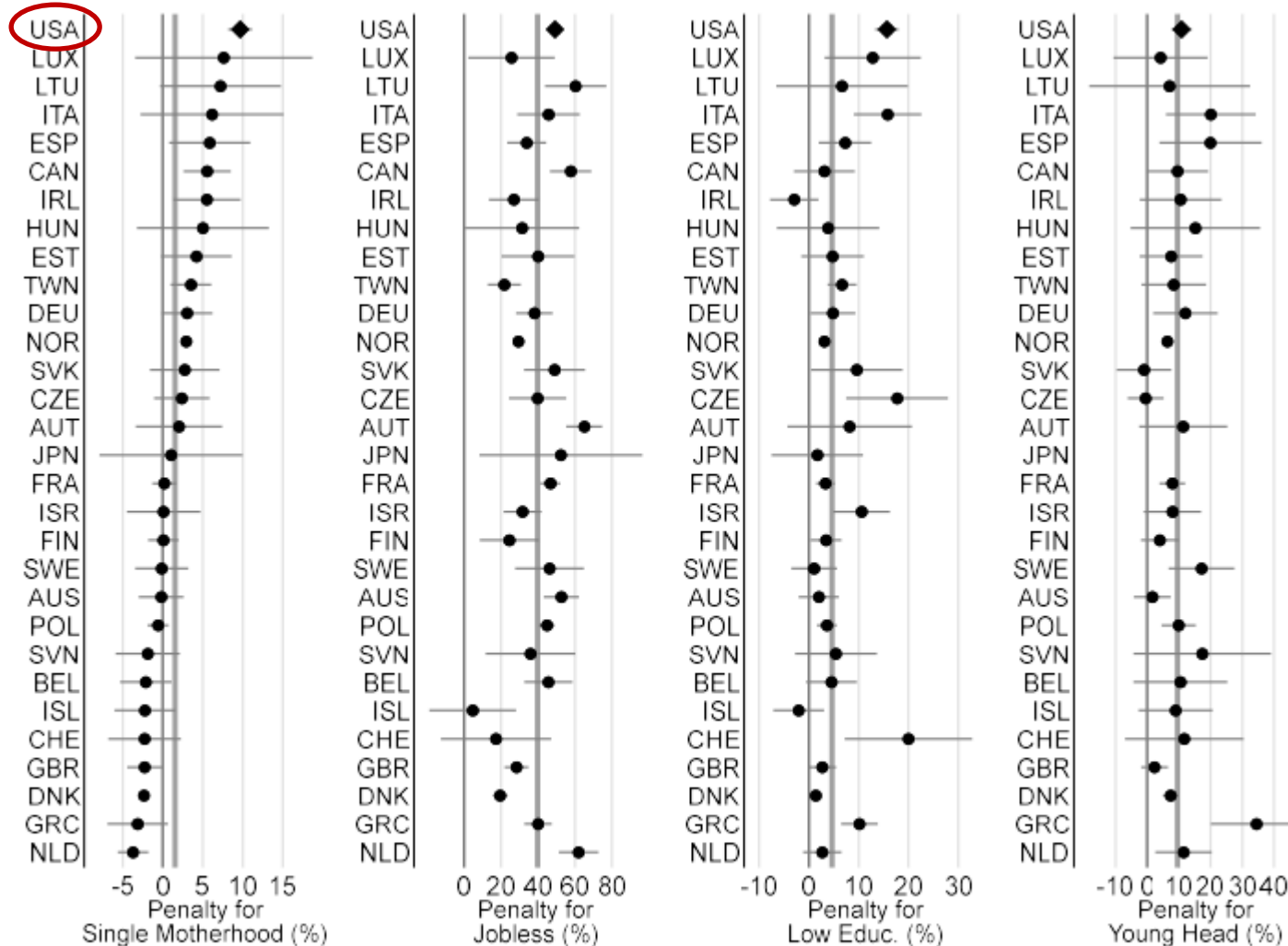


Figure 3. Distribution of Penalties Across 30 Rich Democracies in Recent LIS Data.

Notes: Vertical lines represent median penalties. Horizontal lines represent 95% confidence intervals.



Family, Work, Economy, or Social Policy: Examining Poverty among Children of Single Mothers in Affluent Democracies between 1985-2016

Amie Bostic, LIS WP 860, Jun 2023

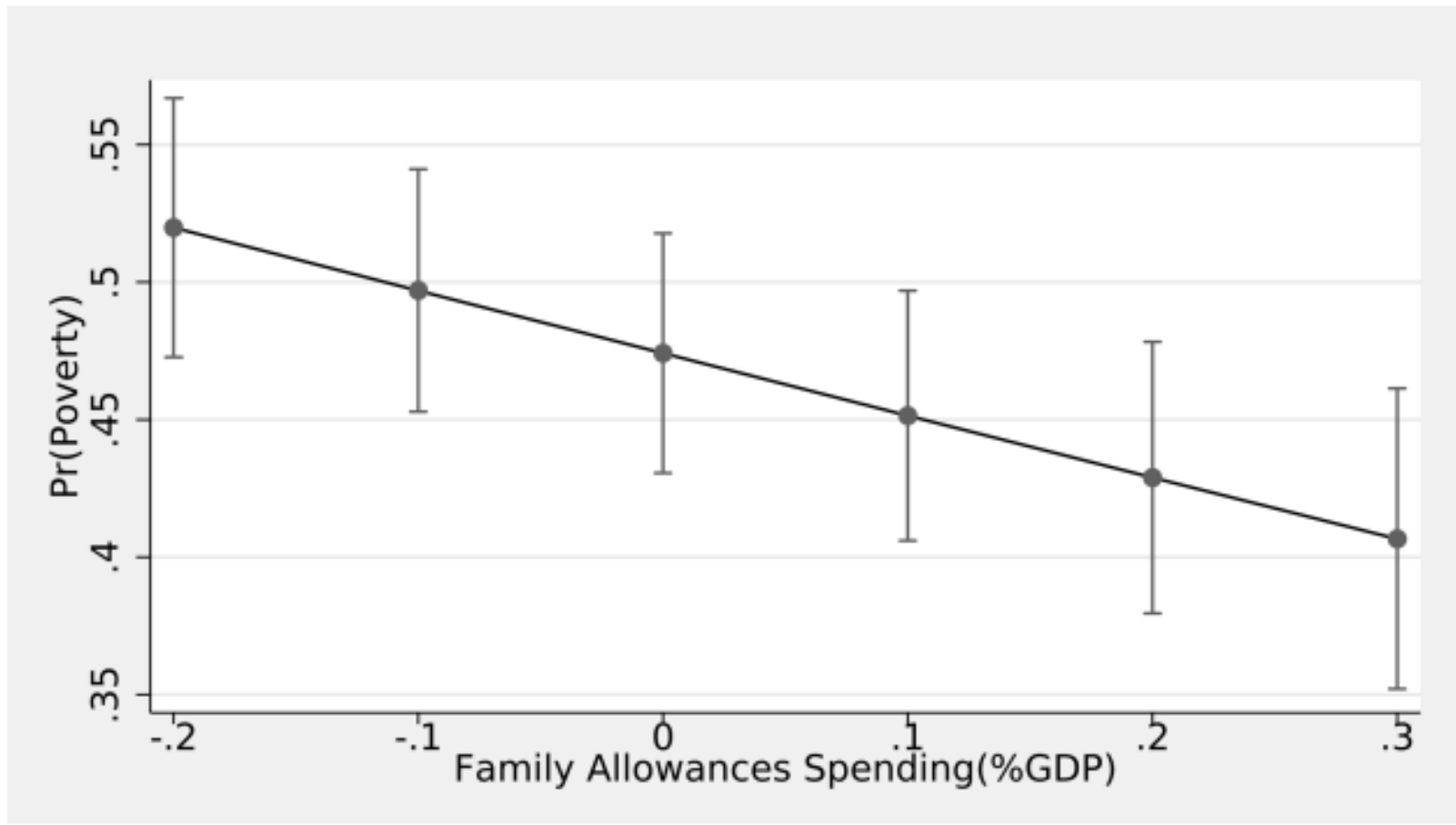


Fig. 2 Predicted Probabilities of Poverty for Children Living in Single Mother Households by Country-Mean Adjusted Family Allowance Spending (%GDP)



LIS most cited poverty papers

RePEc

1. Cross-Country Comparisons of Poverty

- *LIS WP 188: Kenworthy, in Social Forces 1999*
- *LIS WP 205: Jäntti & Bradbury, in Journal of Population and Social Security 1999*

2. Sub-Population Analysis

- *LIS WP 112: Garfinkel & Casper, in American Sociological Review 1994*
- *LIS WP 398: Smeeding & Sandstrom, in Feminist Economics 2005*

3. Longitudinal and Historical Perspectives

- *LIS WP 406: Chen & Corak, in Journal of Demography 2005*

4. Policy Effectiveness and Redistribution

- *LIS WP 174: Korpi & Palme, in American Sociological Review 1998*
- *LIS WP 228: Kim, in International Social Security Review 2000*



LIS most cited poverty papers

RePEc

5. Equivalence Scales and Poverty Measurement

- *LIS WP 17: Rainwater et al., in Review of Income and Wealth 1988*

6. Intersection of Poverty and Inequality

- *LIS WP 693: Brady et al., in American Journal of Sociology 2017*

7. Working Poverty and Labor Market Impacts

- *LIS WP 590: Brady et al., in American Sociological Review 2013*

8. Multidimensional Poverty Frameworks

- *LIS WP 706: Allen, in American Economic Review 2017*

9. Cross-National Learning for Policy Recommendations

- *LIS WP 352: Brady, in Social Forces 2003*



Further references in recent LIS WPs

- Welfare state performance: 831
- Child Poverty: 860, 840
- Old-age poverty: 857, 842, 777
- Single parents poverty: 825, 824
- Racial poverty: 820, 836
- Consumption taxes and poverty elevation: 807
- Methodology on poverty measures: 786, 885
- Individualistic explanation of the poor AND Institutional/political explanation of poverty: 867

Part 3

Some updated results
based on latest LIS release
“Poverty in LISSY World”



Sustainable Development Goal #1: END POVERTY



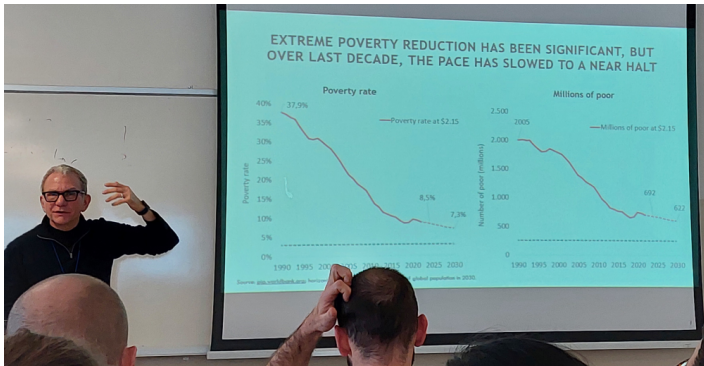
Sustainable Development Goal #1: Targets

1.1 By 2030, eradicate extreme poverty for all people everywhere

Stalled progress (...a head-scratching result?)

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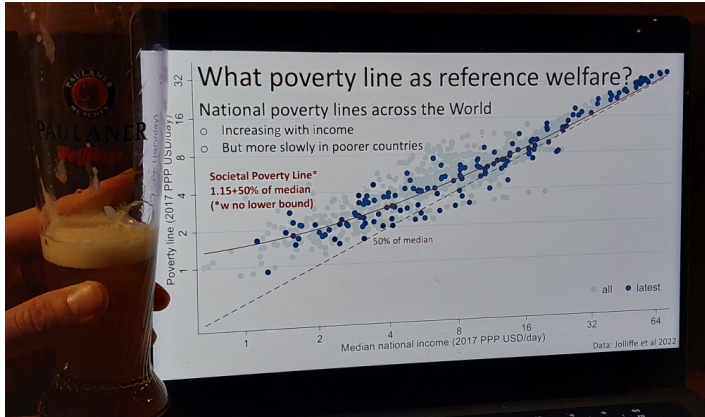
Sustainable Development Goal #1: Targets

1.1 By 2030, eradicate extreme poverty for all people everywhere

1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

National definitions in LISSY World?

National definitions in LISSY World?



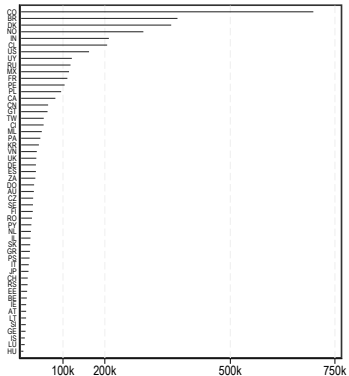
The exercise...

- Relative poverty measures using the classic EU definition of “at risk of poverty”: household disposable income (in single-adult equivalent) above 60% of the median
- Apply it across about 50 LIS countries
- How many are on track to reach the SDG Target 1.2?
Where?
- Starting point taken as of 2011 (close to latest known measures when SDG target were published) and 15 years horizon
- Linear SDG trajectory after 2011:

$$p_t = p_0 - (t - 2011) \frac{1}{15} \frac{p_0}{2}$$

LISSY World?

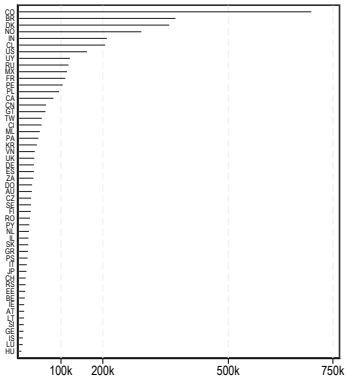
Average sample sizes



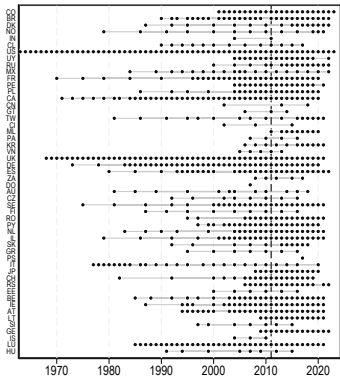
Coverage

LISSY World?

Average sample sizes

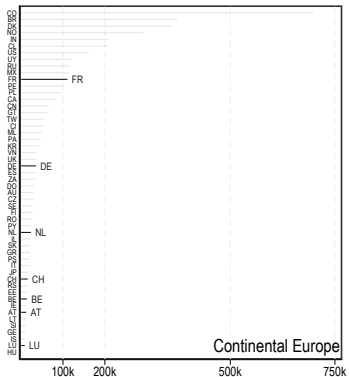


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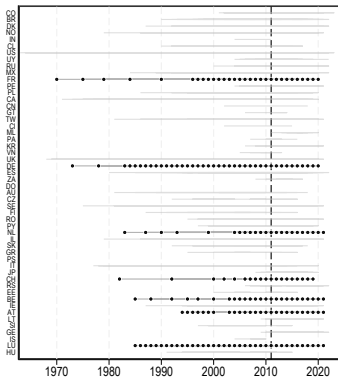


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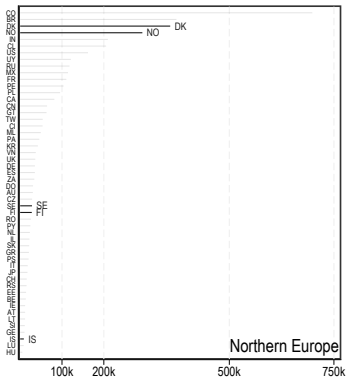


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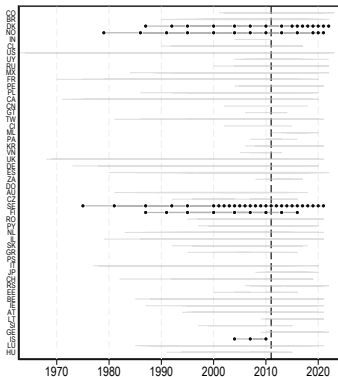


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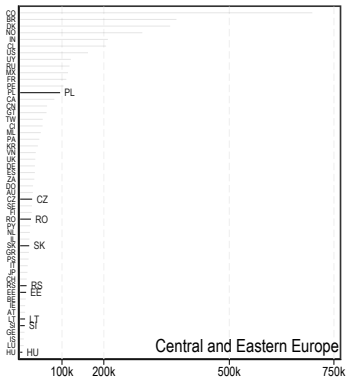


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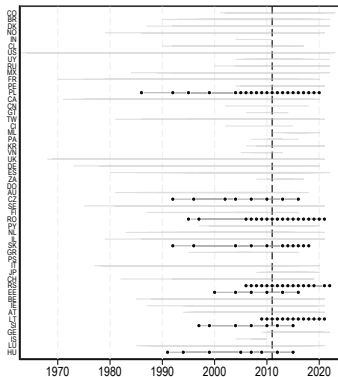


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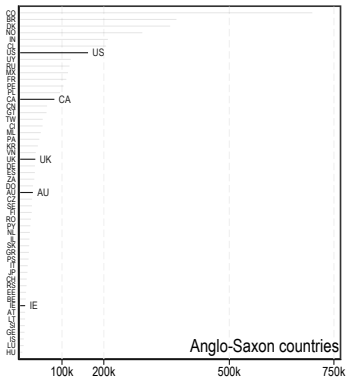


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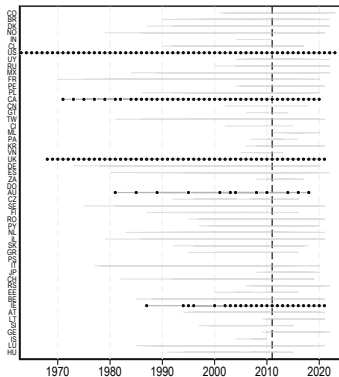


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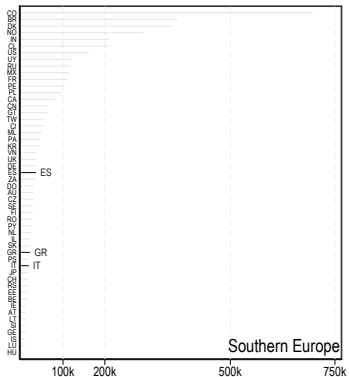


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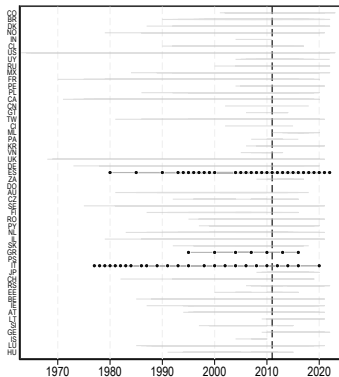


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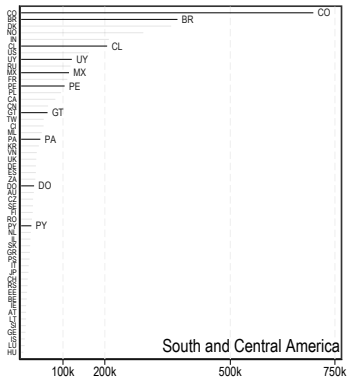


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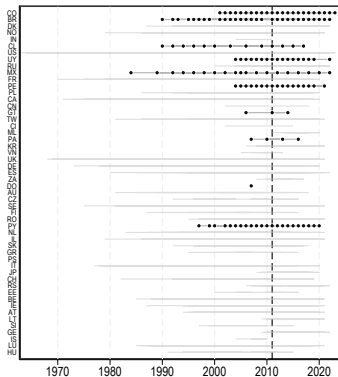


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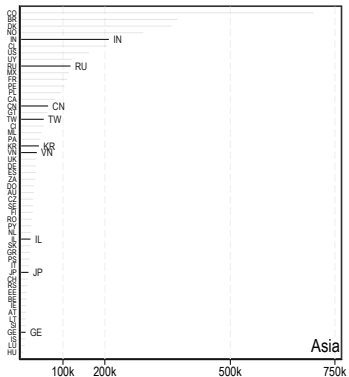


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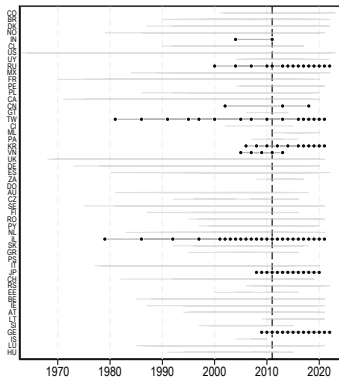


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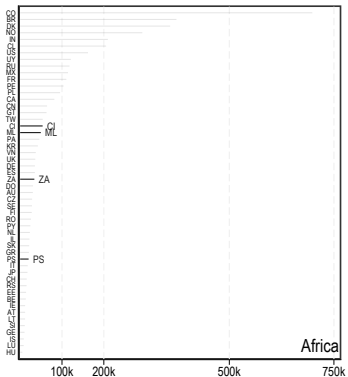


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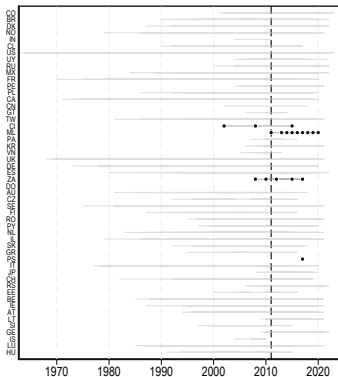


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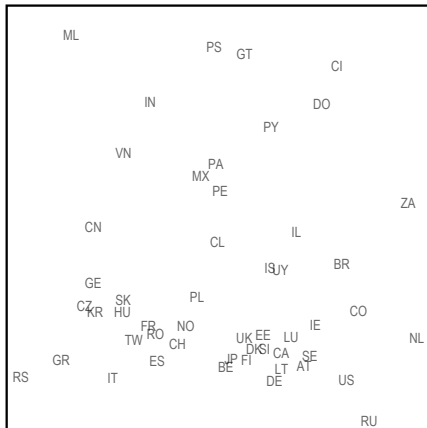
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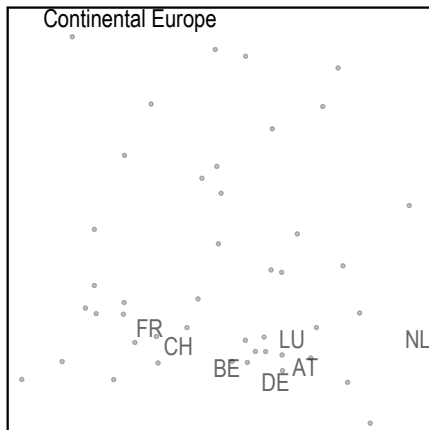
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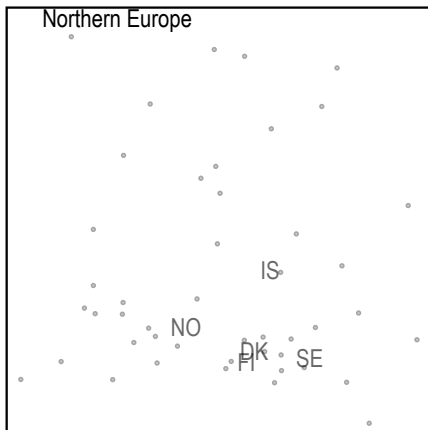
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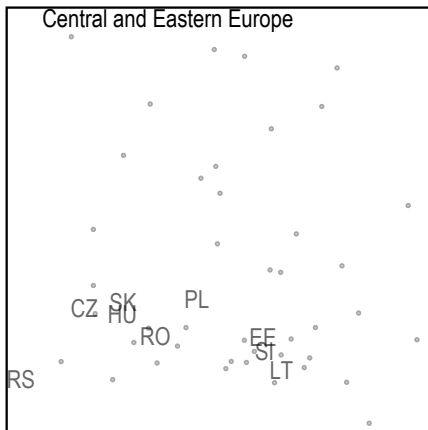
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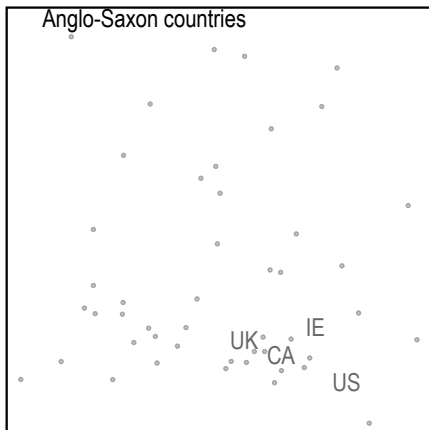
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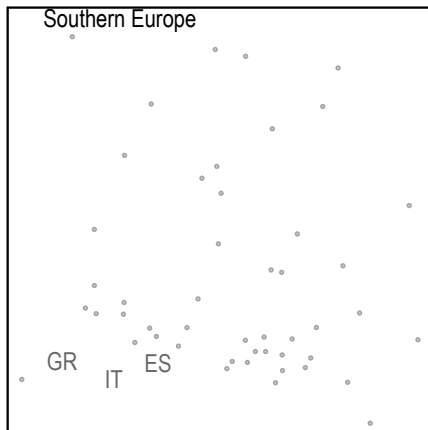
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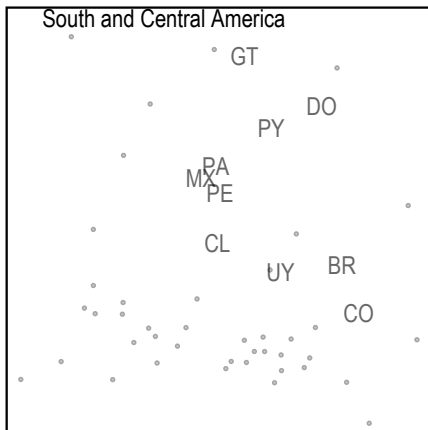
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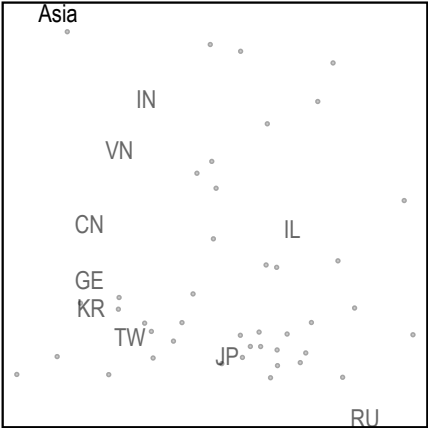
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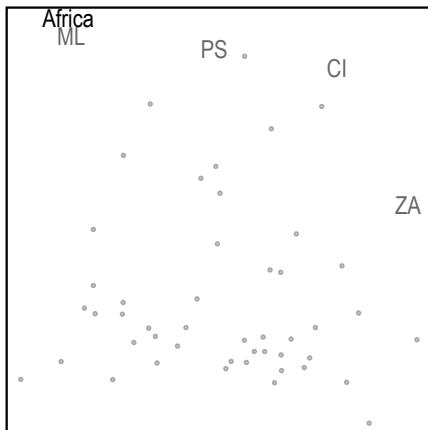
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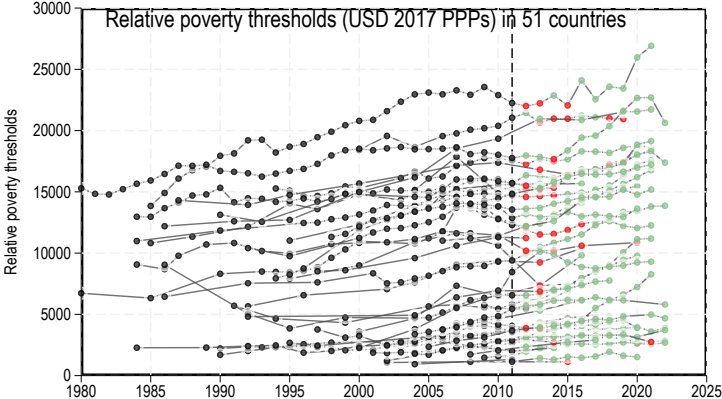


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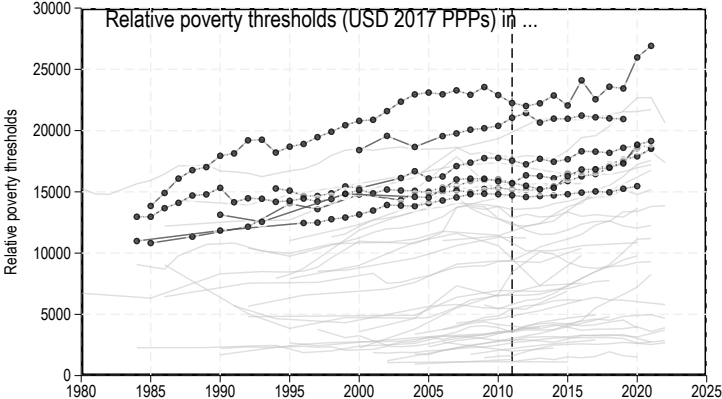


Relative poverty thresholds: 60 percent of median income (PPP 2017)

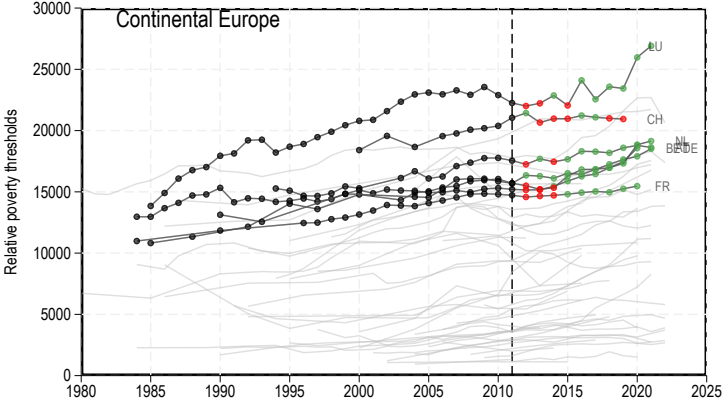
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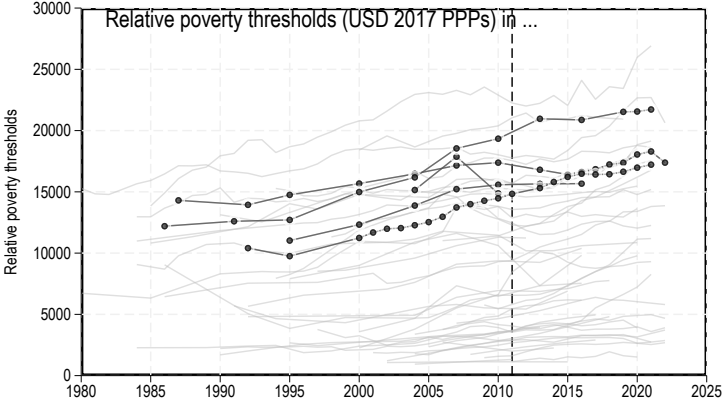
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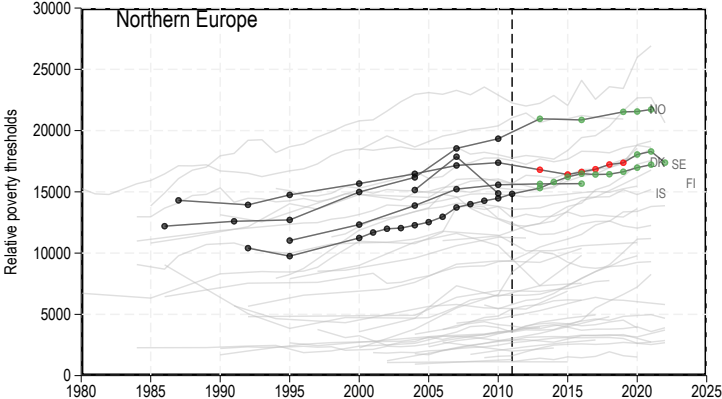
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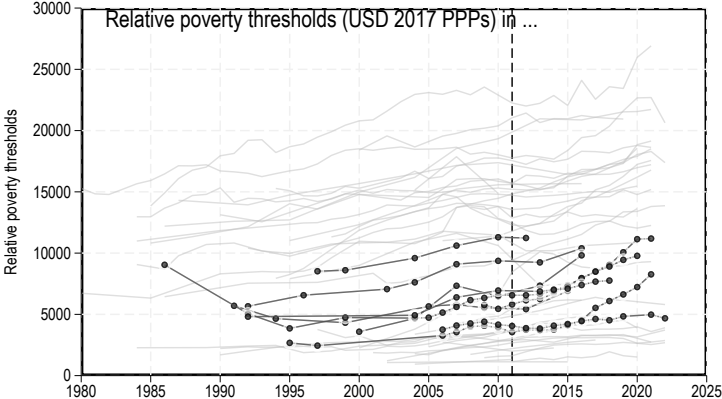
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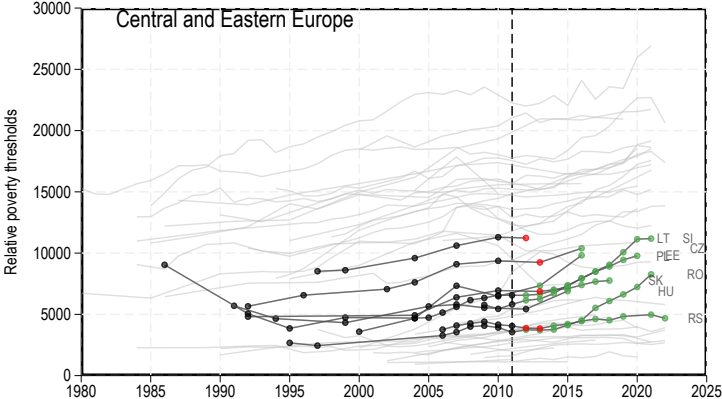
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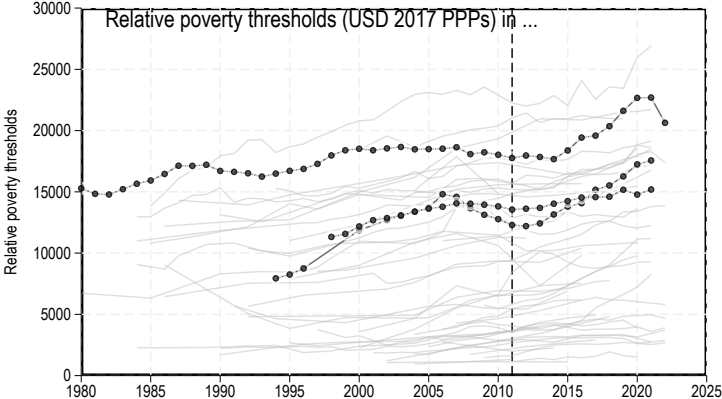
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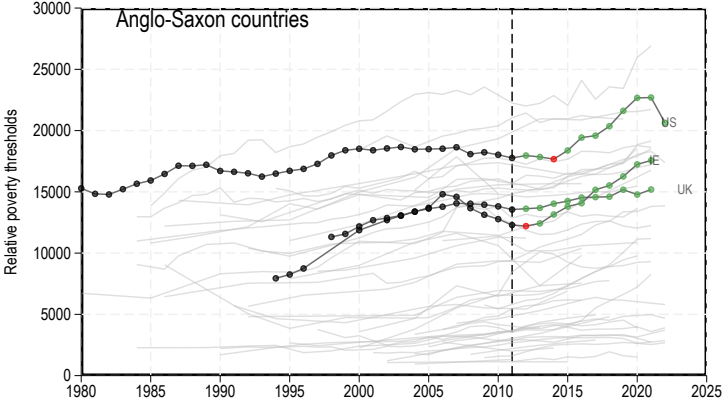
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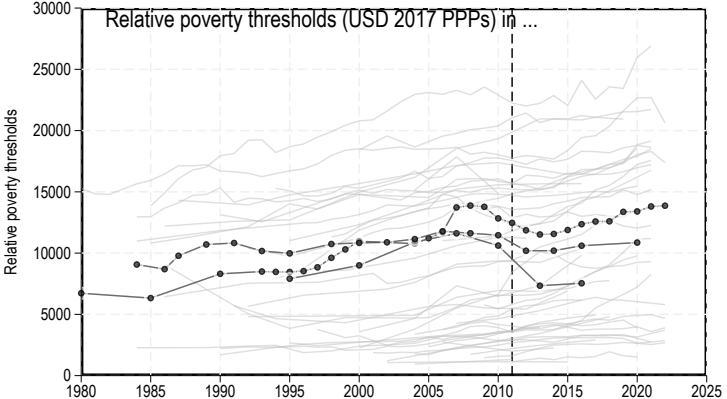
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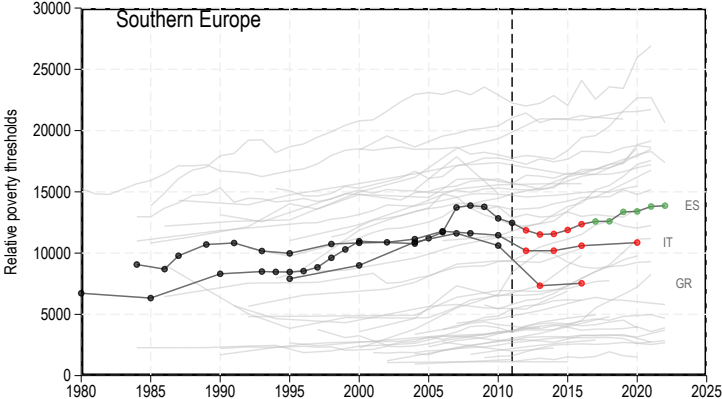
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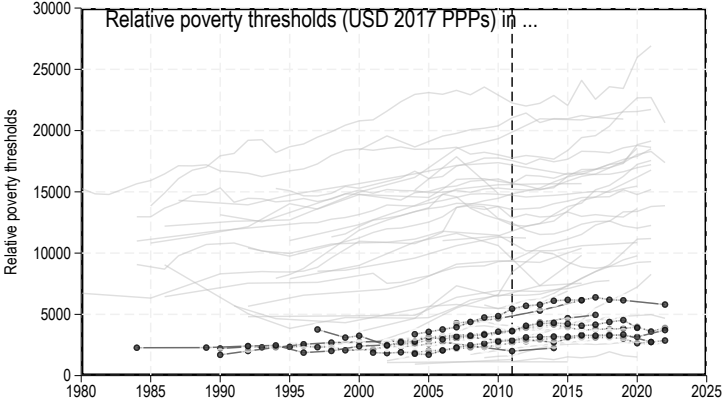
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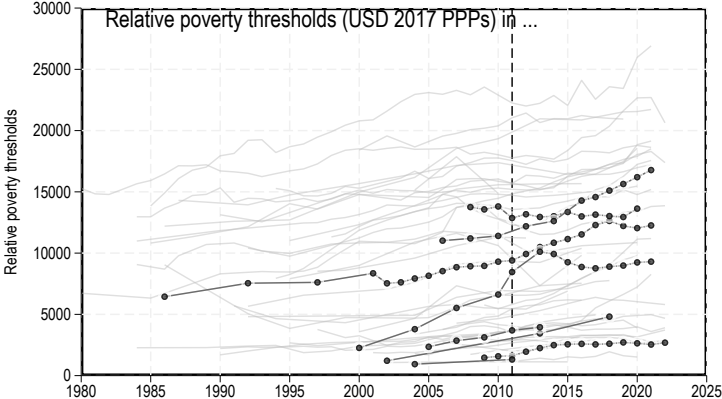
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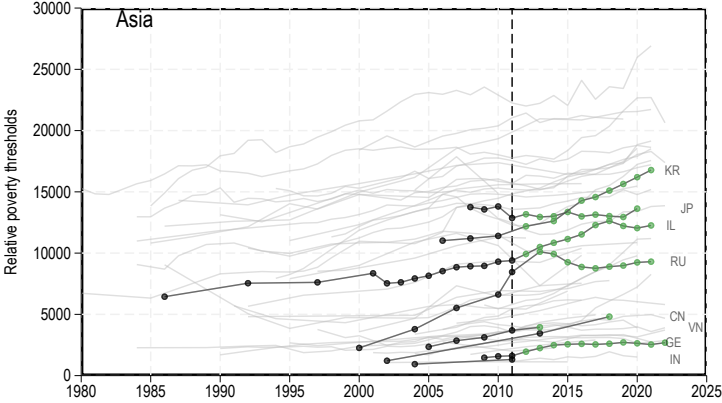
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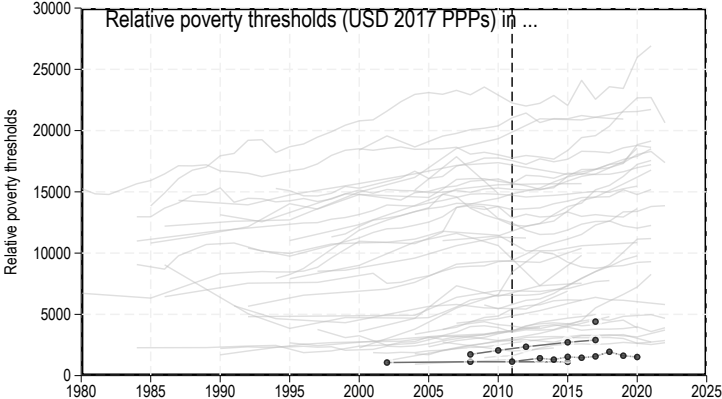
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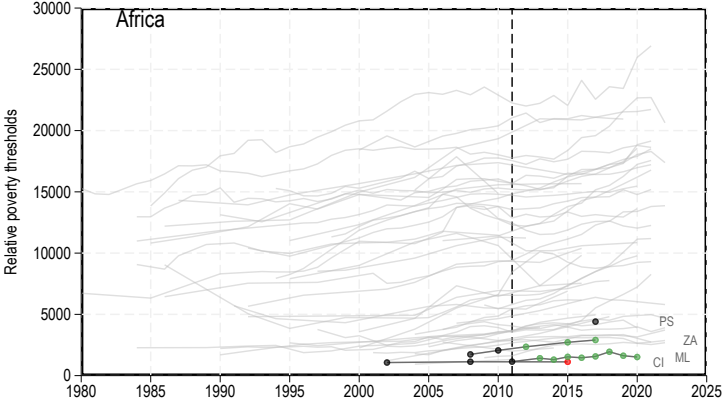
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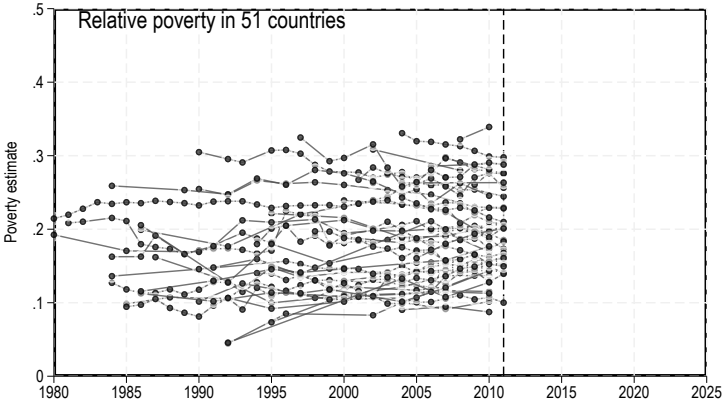


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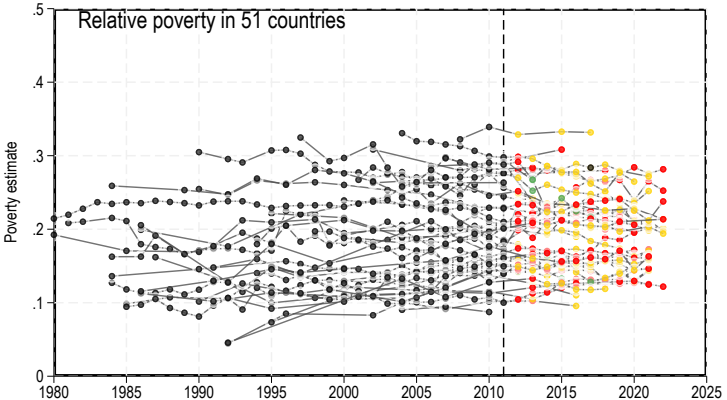


Relative poverty rates

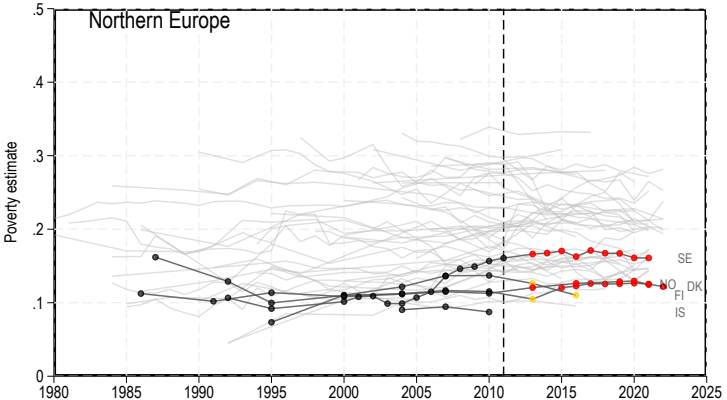
Relative poverty rates



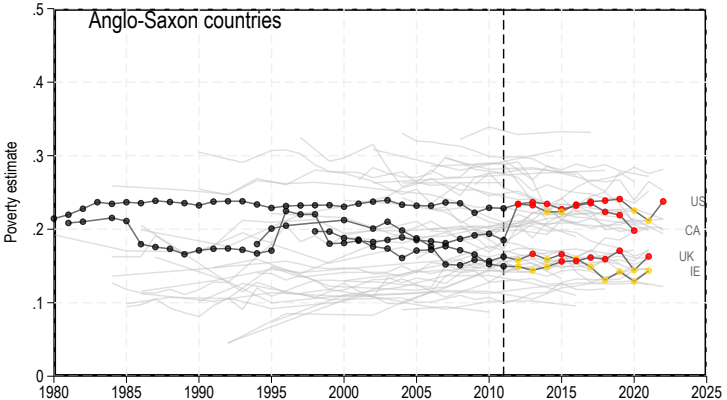
Relative poverty rates



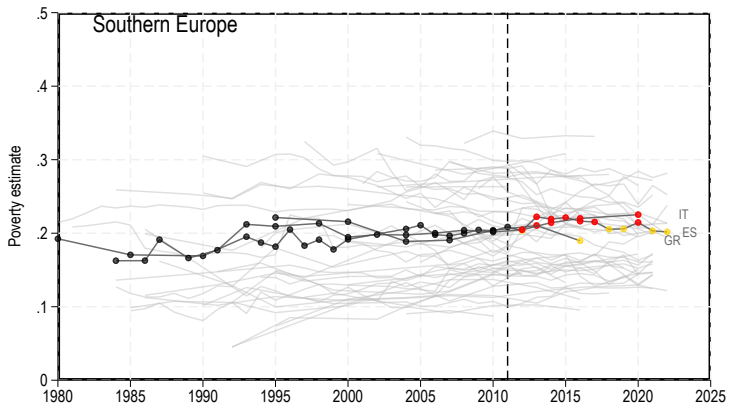
Relative poverty rates



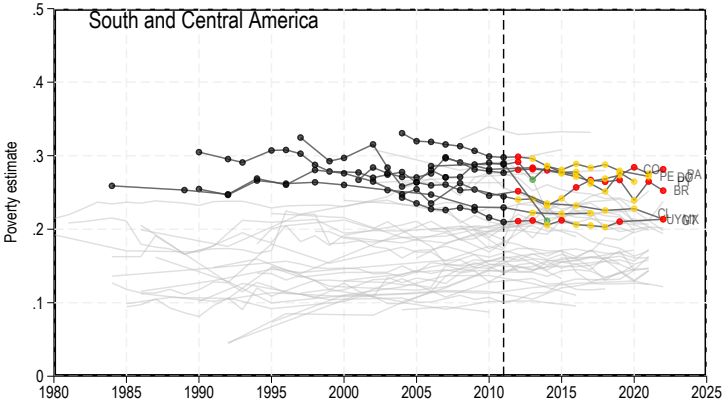
Relative poverty rates



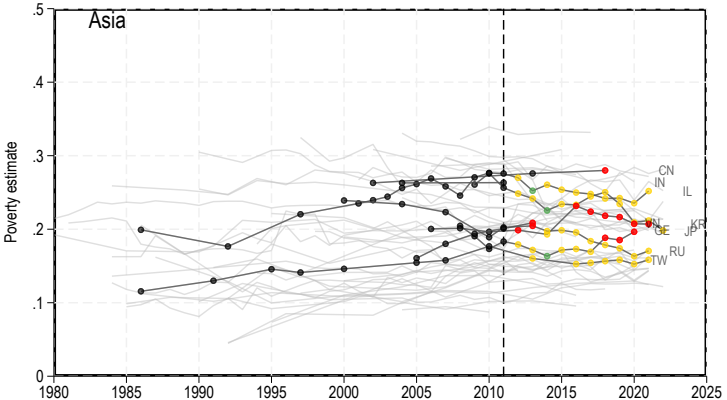
Relative poverty rates



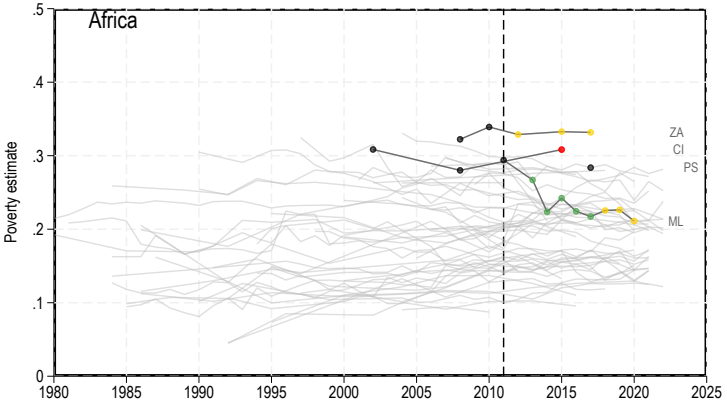
Relative poverty rates



Relative poverty rates



Relative poverty rates



Bleak performance!

Where is there progress towards SDG Target 1.2?

	#	Relative
Total	49	6
Continental Europe	7	0
Northern Europe	5	1
Central and Eastern Europe	9	1
Anglo-Saxon countries	3	0
Southern Europe	3	0
South and Central America	10	2
Asia	8	1
Africa	4	1

Bleak performance!

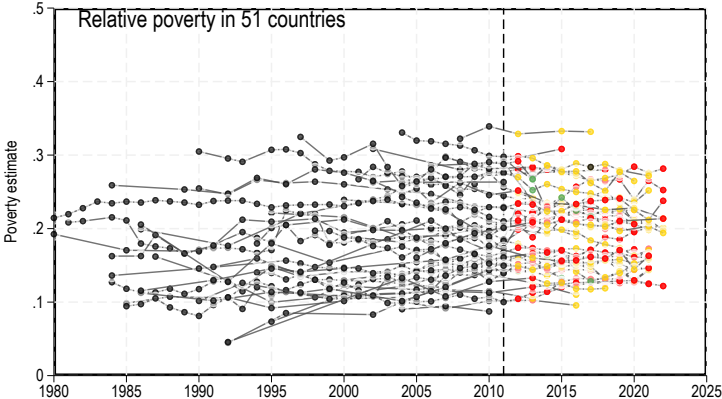
Where is there progress towards SDG Target 1.2?

	#	Relative
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South and Central America	10	2
Asia	8	1
Africa	4	1

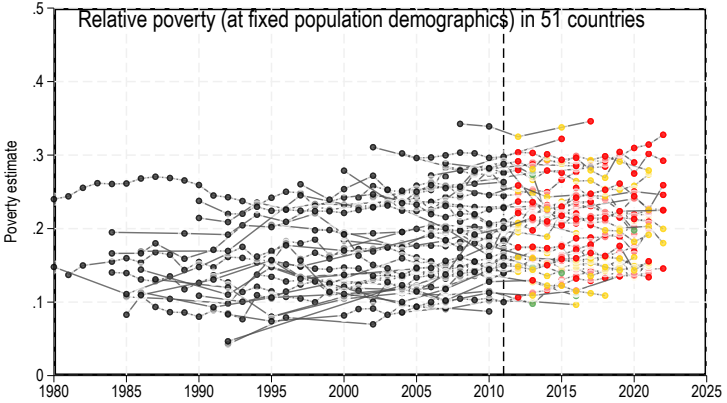
Good news anywhere?

Relative poverty rates... at constant population demographic characteristics

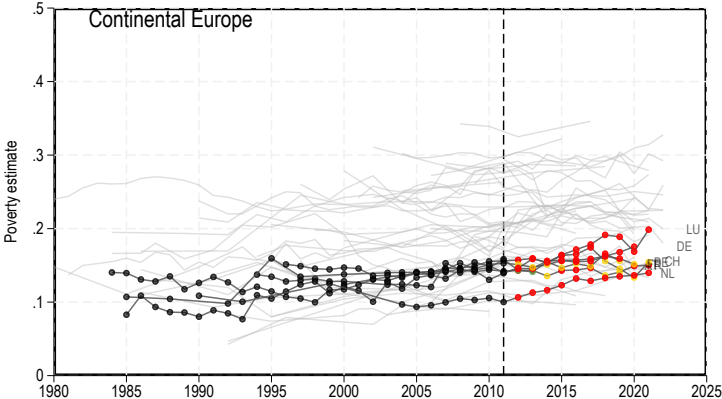
Relative poverty rates... at constant population demographic characteristics



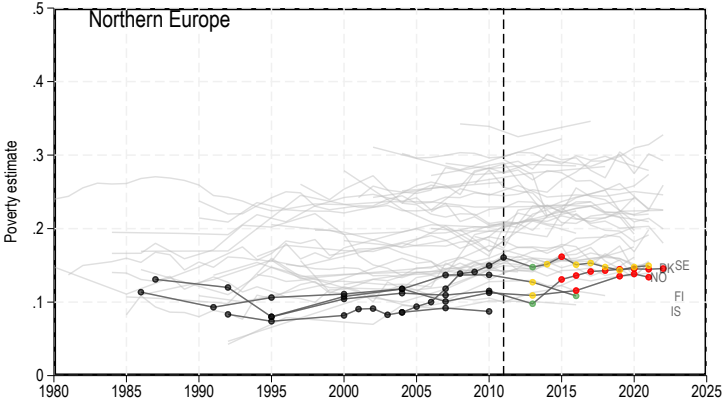
Relative poverty rates... at constant population demographic characteristics



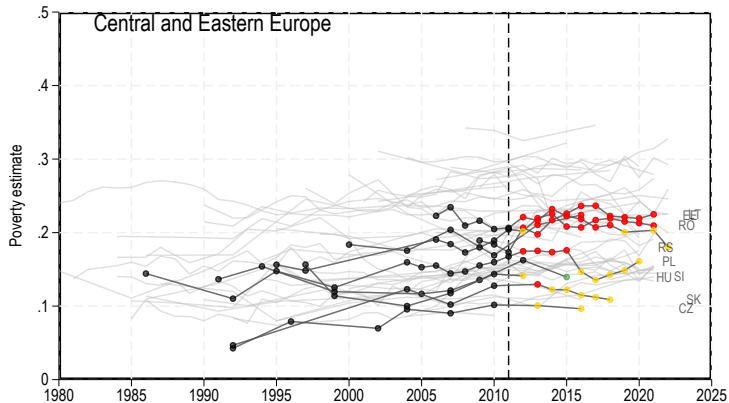
Relative poverty rates... at constant population demographic characteristics



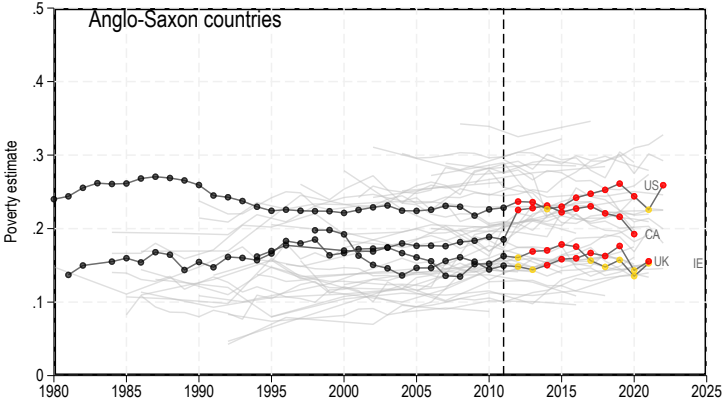
Relative poverty rates... at constant population demographic characteristics



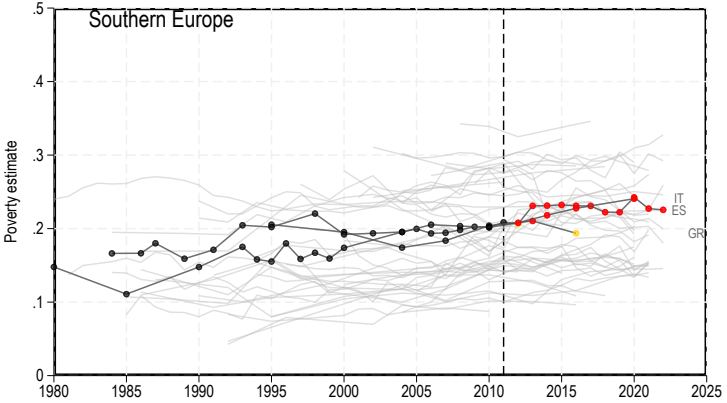
Relative poverty rates... at constant population demographic characteristics



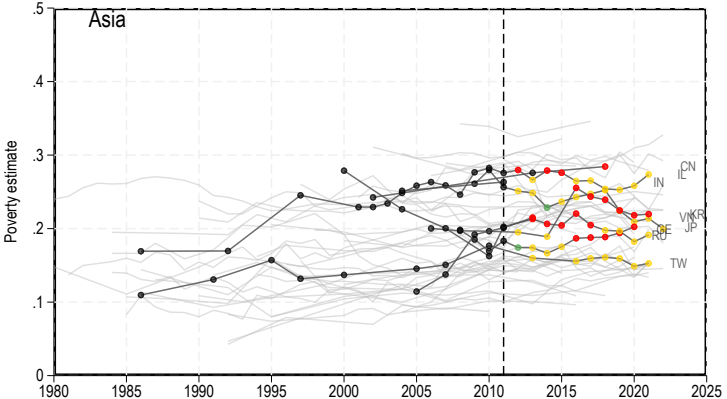
Relative poverty rates... at constant population demographic characteristics



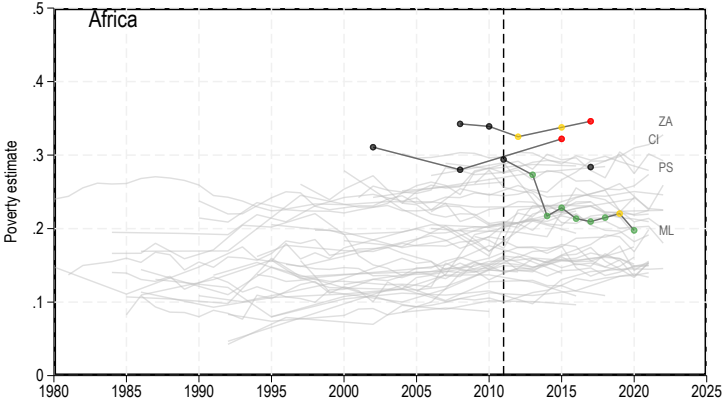
Relative poverty rates... at constant population demographic characteristics



Relative poverty rates... at constant population demographic characteristics

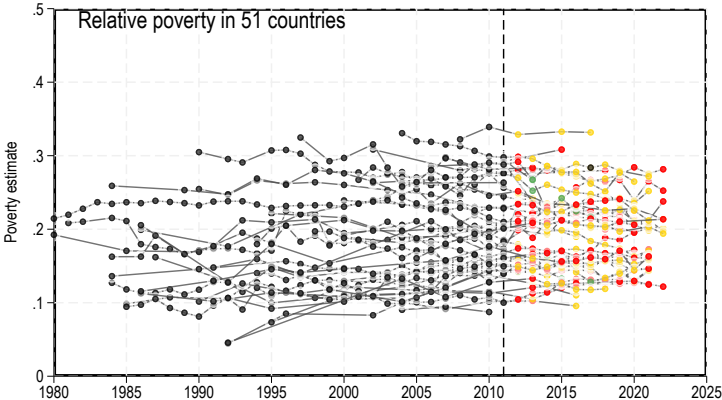


Relative poverty rates... at constant population demographic characteristics

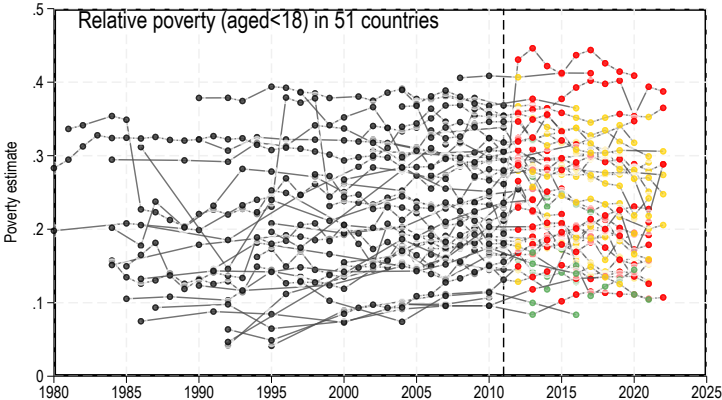


Relative poverty rates for children (<18)

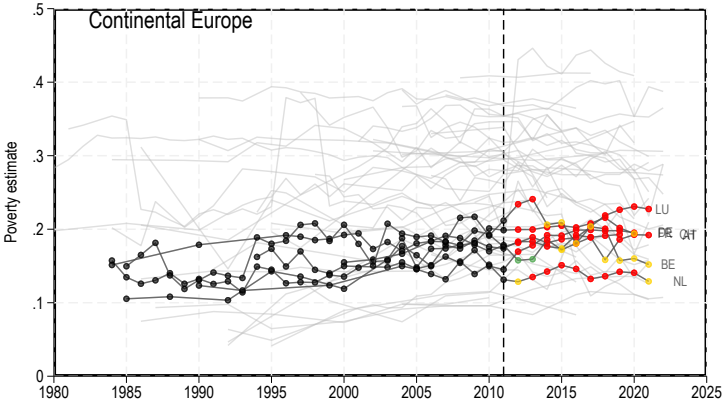
Relative poverty rates for children (<18)



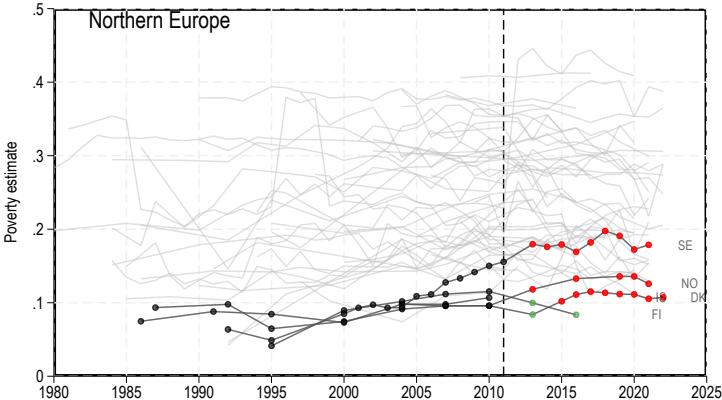
Relative poverty rates for children (<18)



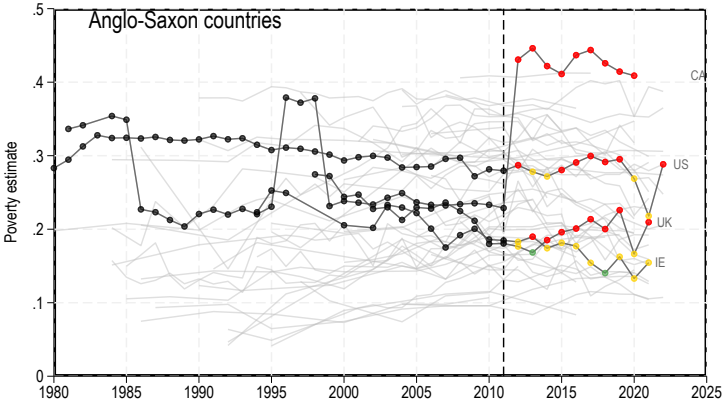
Relative poverty rates for children (<18)



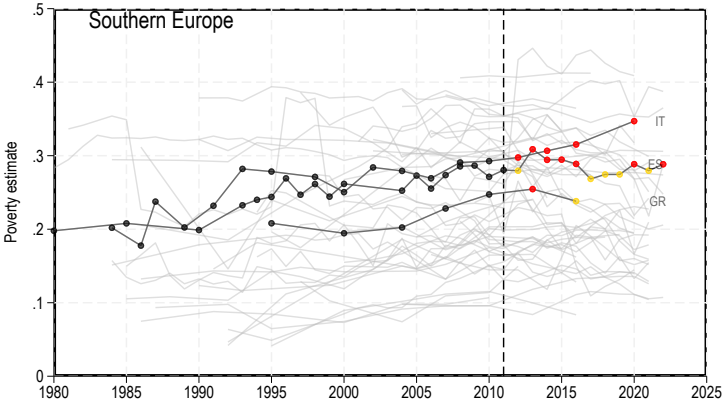
Relative poverty rates for children (<18)



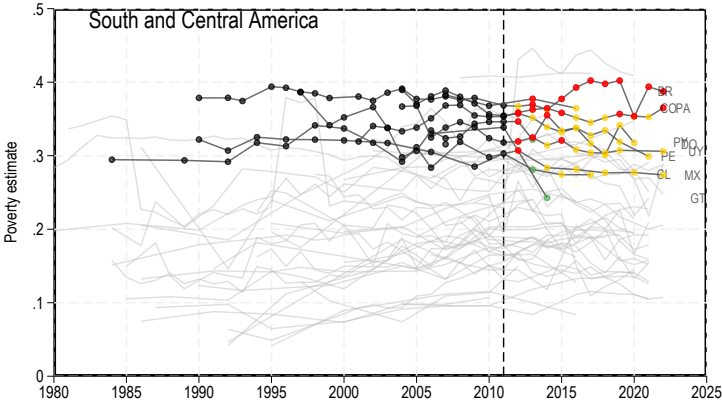
Relative poverty rates for children (<18)



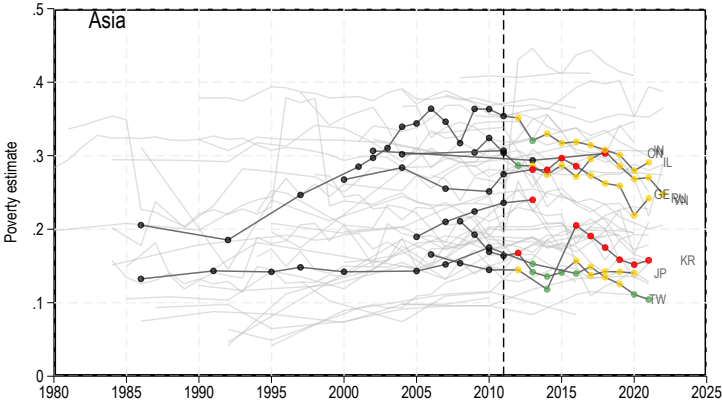
Relative poverty rates for children (<18)



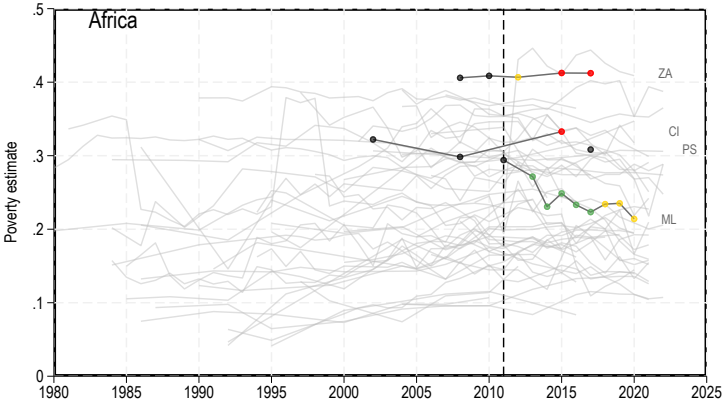
Relative poverty rates for children (<18)



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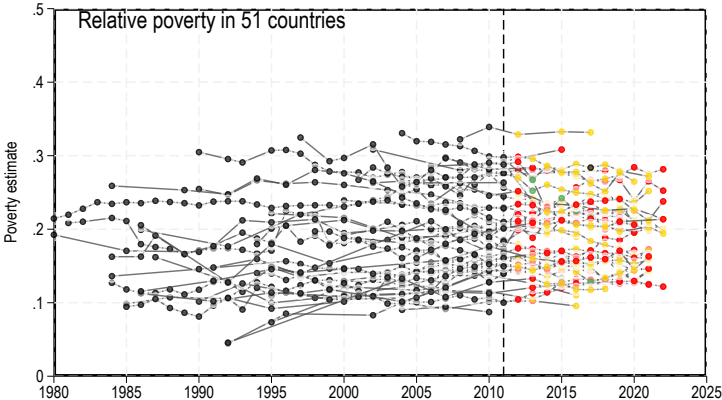


Relative poverty rates for children (<18)

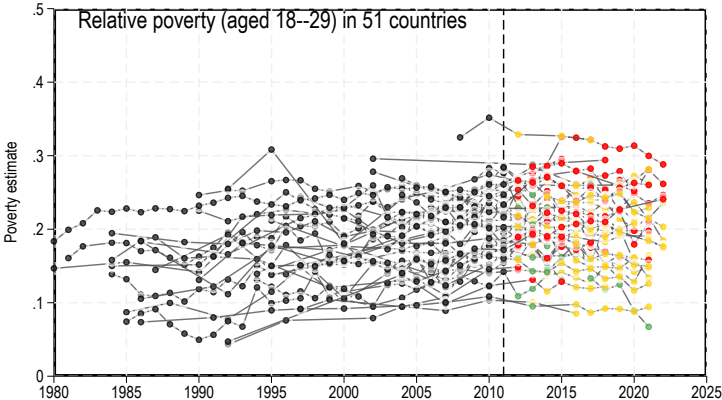


Relative poverty rates for young adults (aged 18–29)

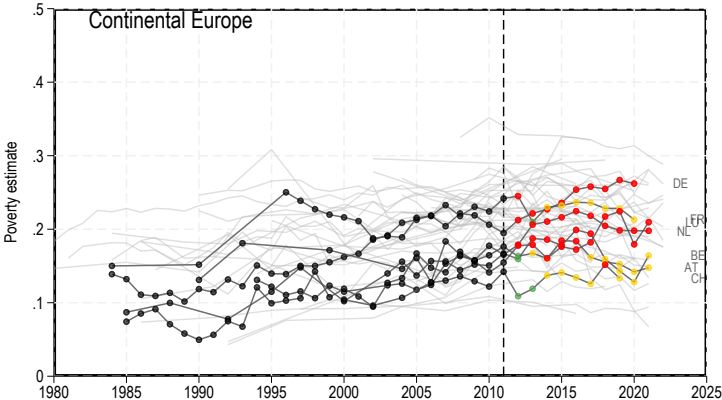
Relative poverty rates for young adults (aged 18–29)



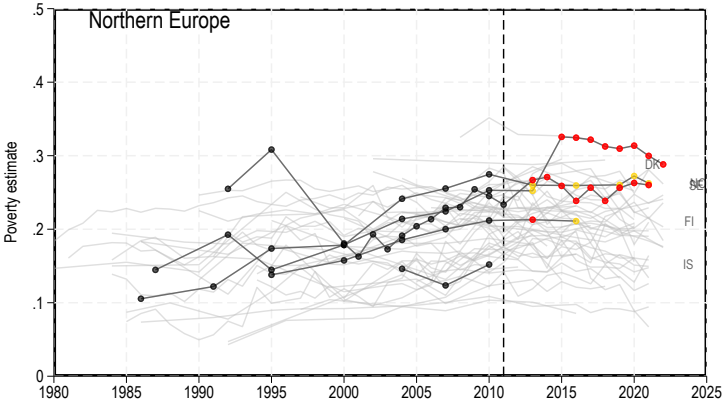
Relative poverty rates for young adults (aged 18–29)



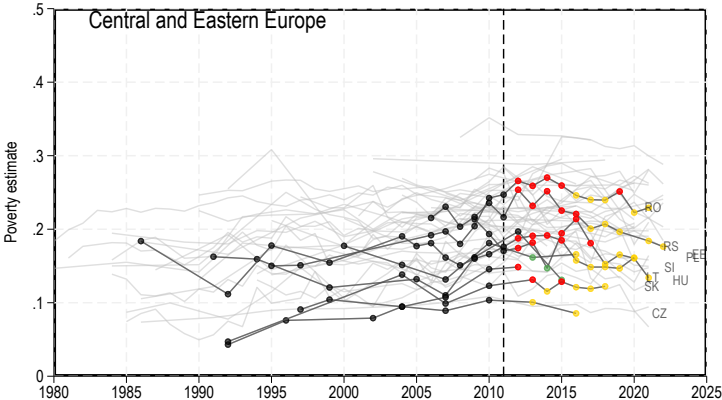
Relative poverty rates for young adults (aged 18–29)



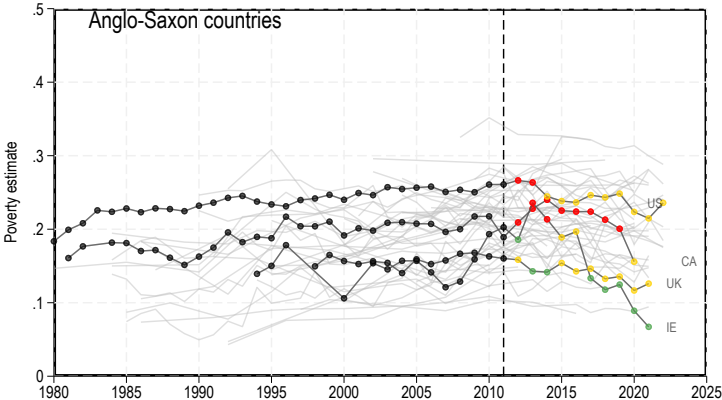
Relative poverty rates for young adults (aged 18–29)



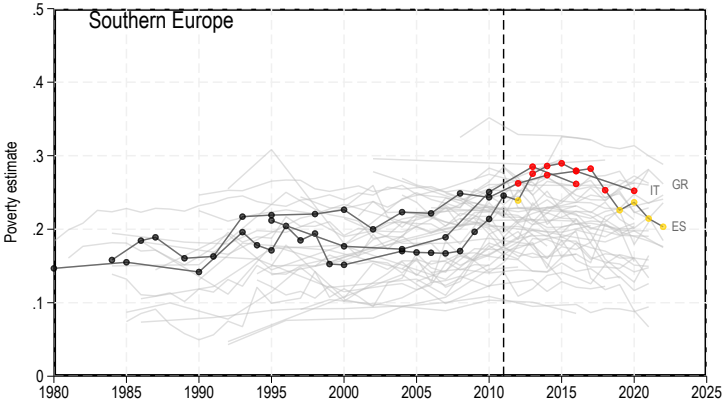
Relative poverty rates for young adults (aged 18–29)



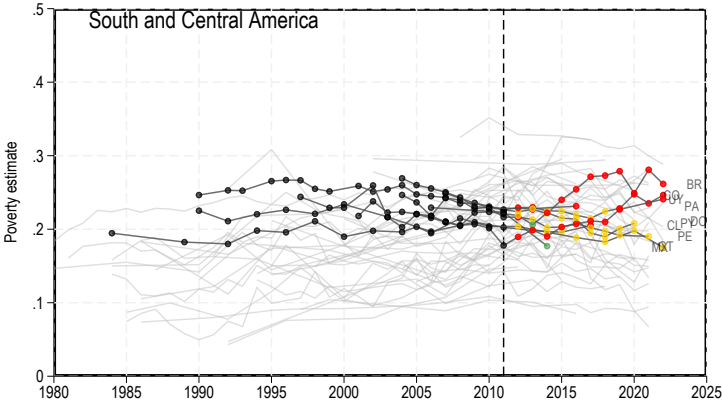
Relative poverty rates for young adults (aged 18–29)



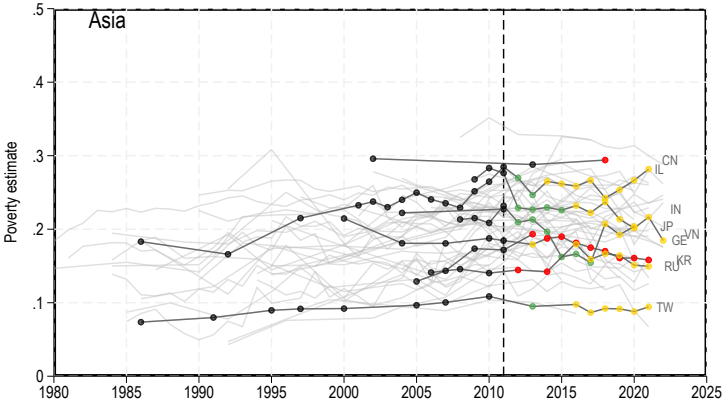
Relative poverty rates for young adults (aged 18–29)



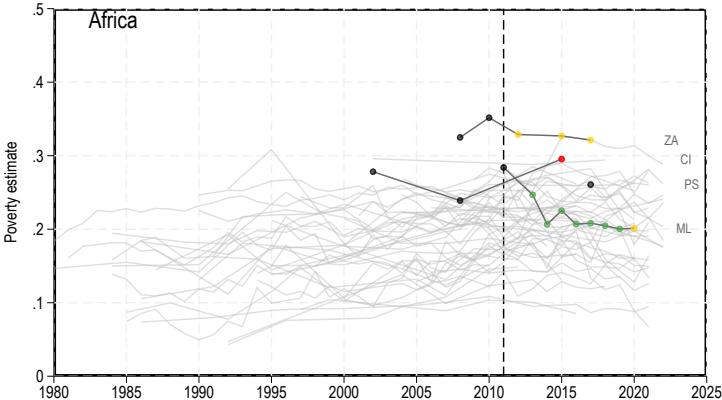
Relative poverty rates for young adults (aged 18–29)



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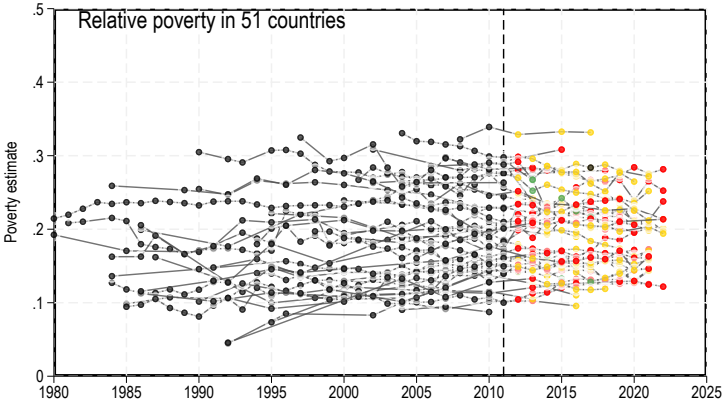


Relative poverty rates for young adults (aged 18–29)

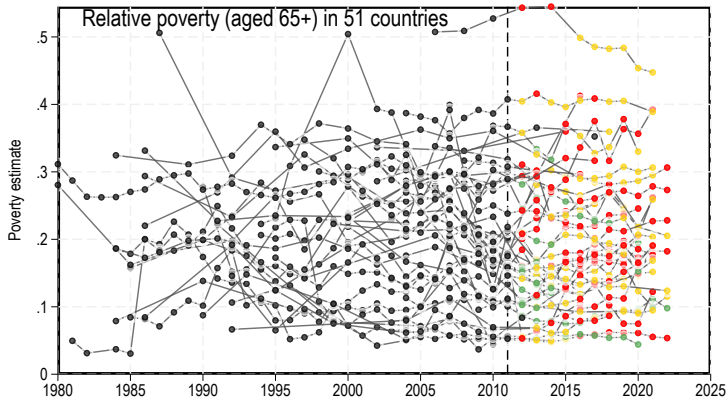


Relative poverty rates for the elderly (aged 65+)

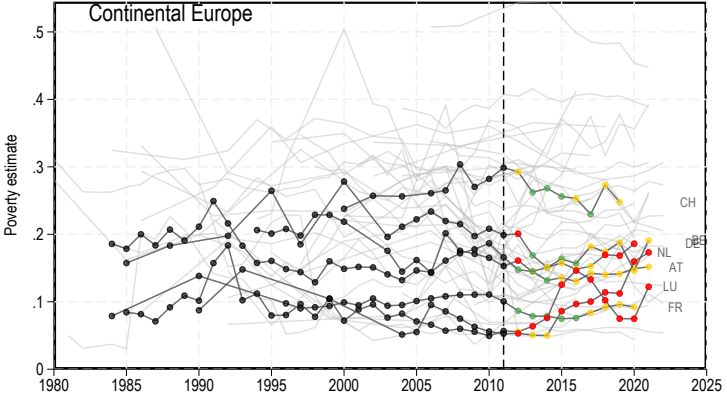
Relative poverty rates for the elderly (aged 65+)



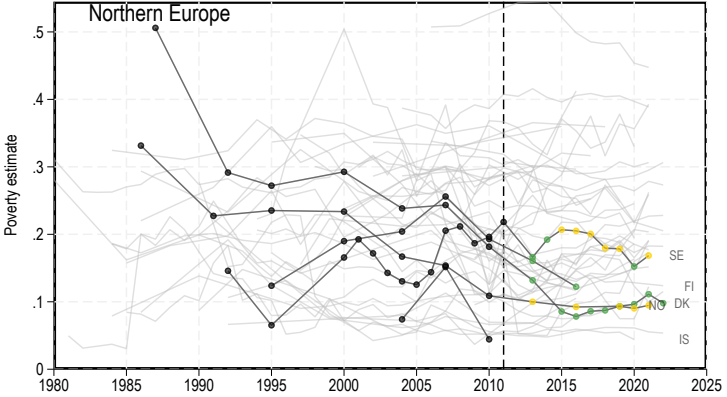
Relative poverty rates for the elderly (aged 65+)



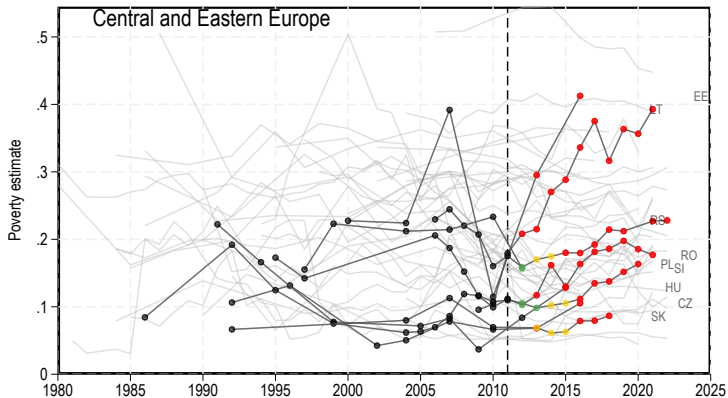
Relative poverty rates for the elderly (aged 65+)



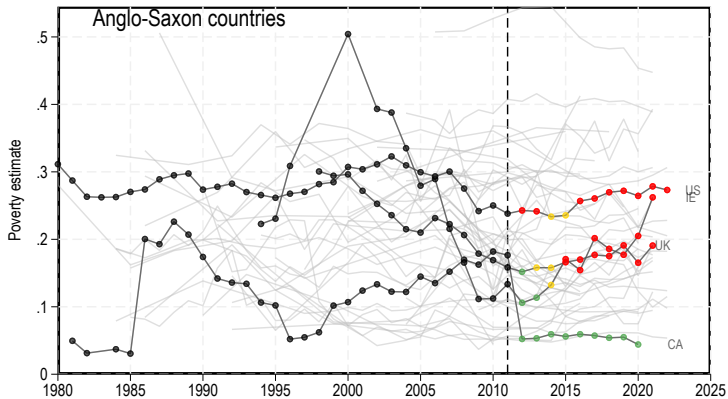
Relative poverty rates for the elderly (aged 65+)



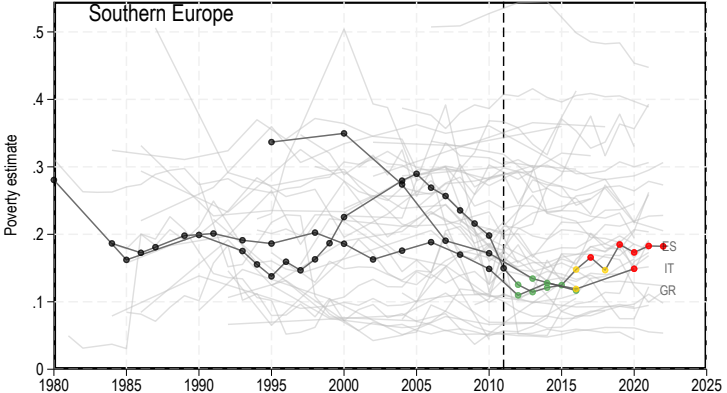
Relative poverty rates for the elderly (aged 65+)



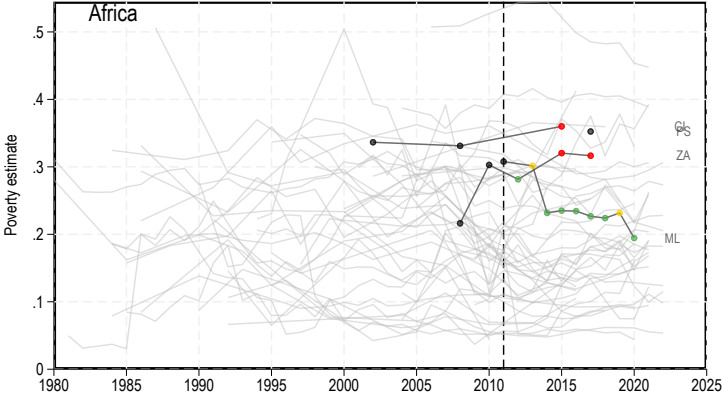
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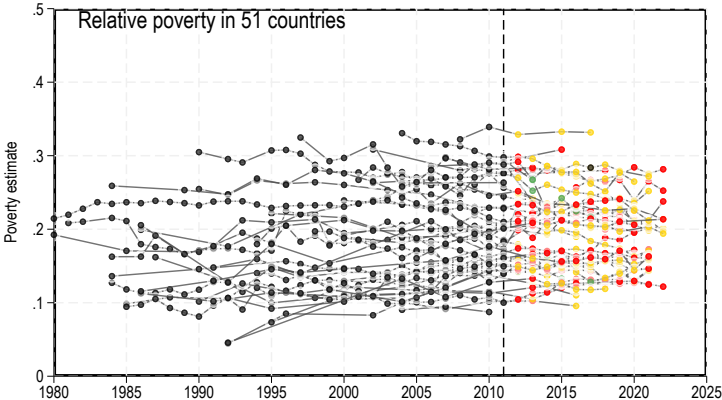


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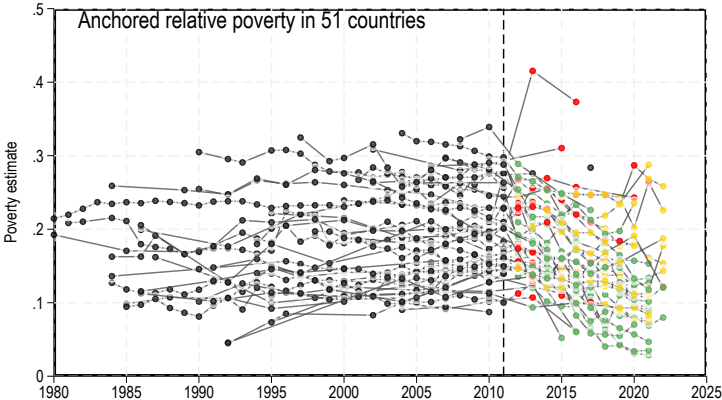


Relative poverty rates... but at 2011 fixed thresholds

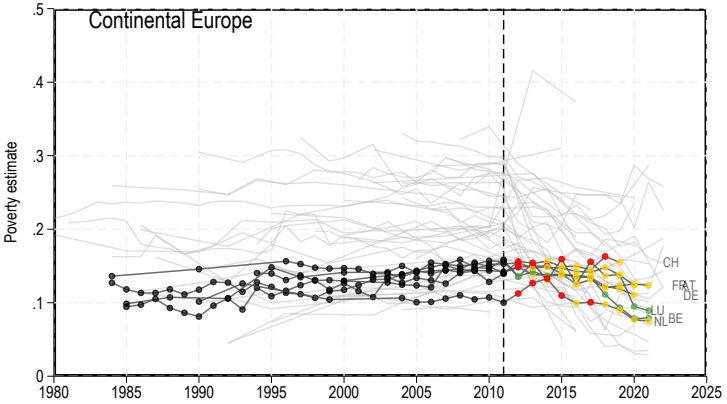
Relative poverty rates... but at 2011 fixed thresholds



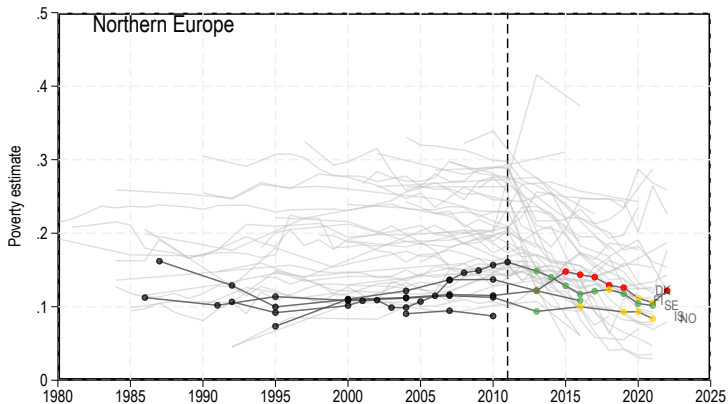
Relative poverty rates... but at 2011 fixed thresholds



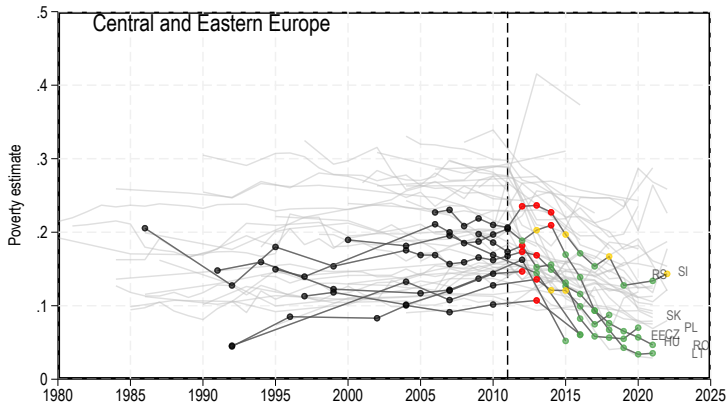
Relative poverty rates... but at 2011 fixed thresholds



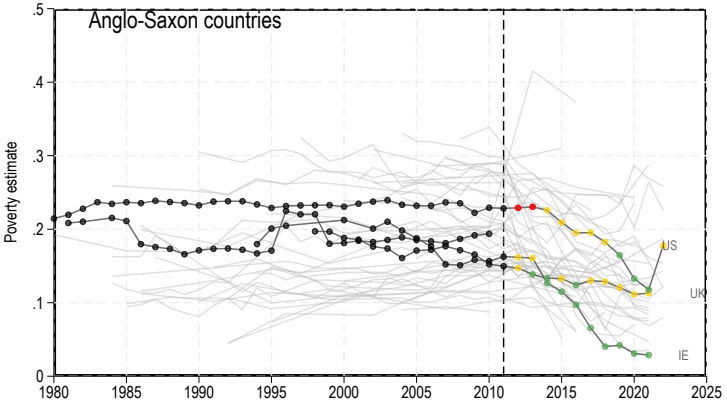
Relative poverty rates... but at 2011 fixed thresholds



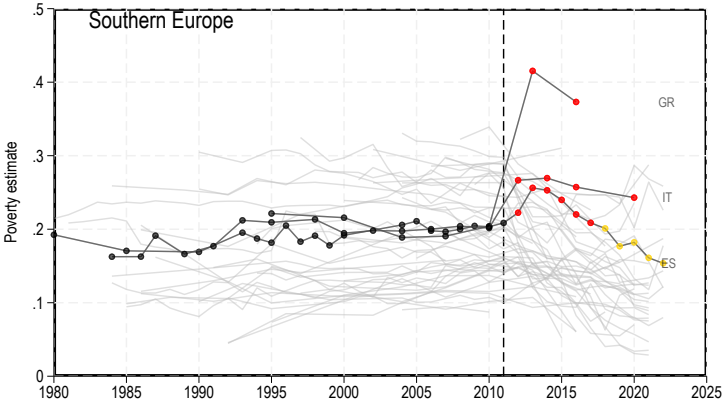
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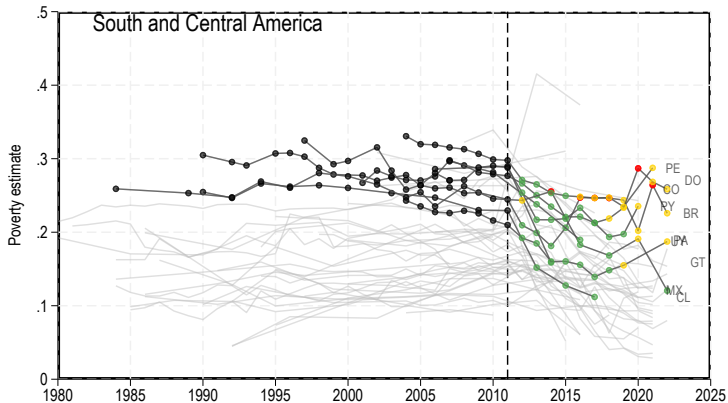
Relative poverty rates... but at 2011 fixed thresholds



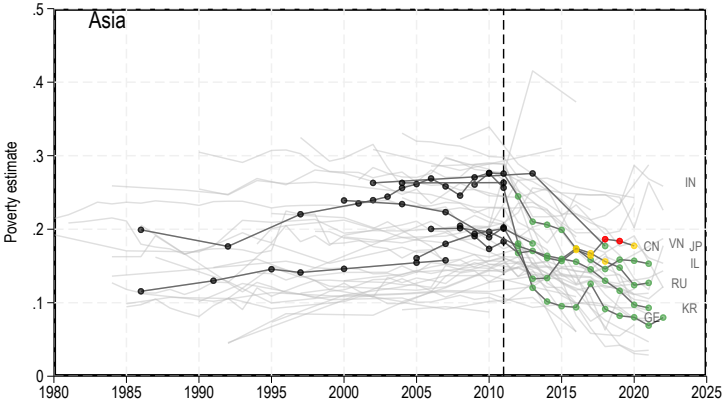
Relative poverty rates... but at 2011 fixed thresholds



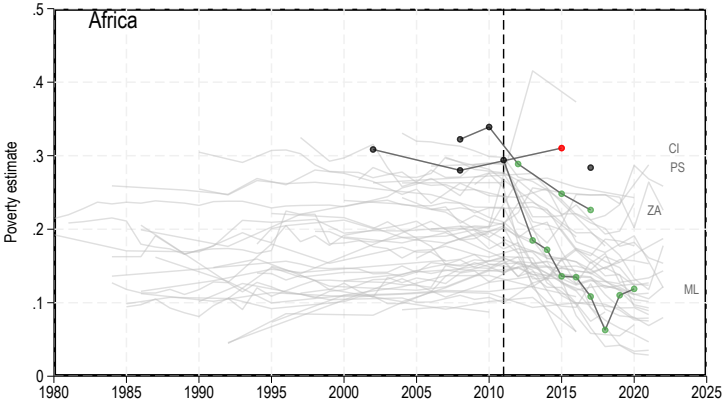
Relative poverty rates... but at 2011 fixed thresholds



Relative poverty rates... but at 2011 fixed thresholds



Relative poverty rates... but at 2011 fixed thresholds



Where is there progress towards SDG Target 1.2?

	#	Rel.	Pop	Kids	Young	Old	Fixd.
Total	49	6	7	9	7	10	28
Continental Europe	7	0	0	0	0	0	2
Northern Europe	5	1	2	2	1	3	3
Central and Eastern Europe	9	1	0	3	1	1	7
Anglo-Saxon countries	3	0	0	0	1	0	1
Southern Europe	3	0	0	0	0	1	0
South and Central America	10	2	2	2	2	2	5
Asia	8	1	1	1	1	1	7
Africa	4	1	2	1	1	2	3

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	#	Rel.	Pop	Kids	Young	Old	Fixd.
Total	49	6	7	9	7	10	28
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Southern Europe	3	0	0	0	0	1	0
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Asia	8	1	1	1	1	1	7
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Anglo-Saxon countries	3	0	0	0	1	0	1
Southern Europe	3	0	0	0	0	1	0
South and Central America	10	2	2	2	2	2	5
Asia	8	1	1	1	1	1	7
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Central and Eastern Europe	9	1	0	3	1	1	7
Anglo-Saxon countries	3	0	0	0	1	0	1
Southern Europe	3	0	0	0	0	1	0
South and Central America	10	2	2	2	2	2	5
Asia	8	1	1	1	1	1	7
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Central and Eastern Europe	9	1	0	3	1	1	7
Anglo-Saxon countries	3	0	0	0	1	0	1
Southern Europe	3	0	0	0	0	1	0
South and Central America	10	2	2	2	2	2	5
Asia	8	1	1	1	1	1	7
Africa	4	1	2	1	1	2	3

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Anglo-Saxon countries	3	0	0	0	1	0	1
Southern Europe	3	0	0	0	0	1	0
South and Central America	10	2	2	2	2	2	5
Asia	8	1	1	1	1	1	7
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Where is there progress towards SDG Target 1.2?

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Anglo-Saxon countries	3	0	0	0	1	0	1
Southern Europe	3	0	0	0	0	1	0
South and Central America	10	2	2	2	2	2	5
Asia	8	1	1	1	1	1	7
Africa	4	1	2	1	1	2	3

Research opportunities at LIS

(LIS)2ER initiative: institutional collaboration between LIS and the Luxembourg Institute for Socio-Economic Research (LISER), aimed at fostering collaborative research on **Policies to Fight Inequality**

☐ ***(LIS)2ER Visiting scholars grants***

- *Senior Fellowships: targeted at senior researchers willing to stay between 3 and 6 months at the LIS-LISER premises in Luxembourg*
- *Research Stays: individual researchers of all seniority levels (or small teams of researchers) interested in spending between 2 and 8 weeks the LIS-LISER premises in Luxembourg*

☐ ***6th (LIS)2ER Workshop on policies to fight inequality***

- *November 2025 in Luxembourg*
- *Focus on old-age and pensions*

Other research activities and support

- **2nd LIS/III joint Comparative Economic Inequality Conference – February 27-28 2025, Luxembourg**
- **LIS Summer workshop – June 30-July 4 2025, Luxembourg**

