Appendix – Construction of Index Variables for Factor Analysis

To capture the multidimensional concept of party system fragmentation and demobilization, we construct four variables corresponding to key theoretical dimensions. Below we describe the formulas used to operationalize each measure.

Type A Electoral Volatility
This measure captures party system instability resulting from the entry and exit of parties between two consecutive elections, following Mainwaring and Su (2021) and Powell and Tucker (2014):

Volatility (Type A) = $(1/2) \times \Sigma |v_{i,t} - v_{i,t-1}|$

where $v_{i,t}$ is the vote share of party i at time t, and the sum is taken over all parties that either newly enter or disappear from the system between elections.

Range of values:

Volatility Type A (Period 1) - Min: 0.628 / Max: 20.428 / Range: 19.800

Volatility Type A (Period 2) - Min: 0.223 / Max: 27.880 / Range: 27.657

Effective Number of Electoral Parties (ENEP)
The ENEP reflects vote fragmentation by adjusting the raw number of parties based on their relative vote shares, following Laakso and Taagepera (1979):

ENEP = $1 / \Sigma (p_i^2)$

where p_i is the vote share (as a proportion) of party i, and the sum is over all parties receiving votes.

Range of values:

ENEP (Period 1) - Min: 2.211 / Max: 4.768 / Range: 2.557

ENEP (Period 2) - Min: 1.930 / Max: 7.921 / Range: 5.992

Polarization (Inverted)
We measure ideological polarization as the vote-weighted standard deviation of party ideology scores and invert the result so that higher values reflect less polarization:

Polarization = $\sqrt{[\Sigma\, p_i \cdot (x_i - \bar{x})^2]}$

where $\bar{x} = \Sigma\, (p_i \cdot x_i)$

Inverted Polarization = − Polarization

Here, x_i is the ideology score of party i, and p_i is its vote share.

Range of values:

Polarization (inverted) (Period 1) - Min: -0.074 / Max: -0.029 / Range: 0.045

Polarization (inverted) (Period 2) - Min: -0.068 / Max: -0.016 / Range: 0.051

Voter Turnout (Inverted)

To align turnout with the direction of the index (where higher values indicate demobilization), we invert the raw turnout rate:

Inverted Turnout = − Turnout

Turnout is expressed as the percentage of eligible (or registered) voters who cast a valid ballot.

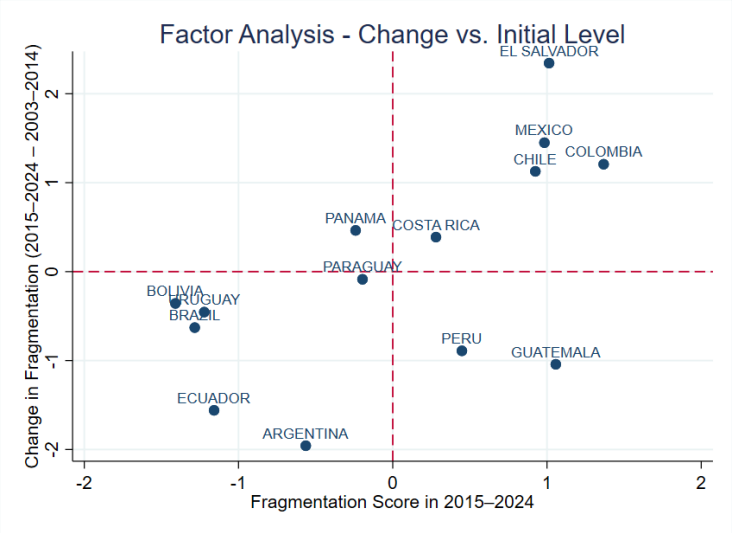
Range of values:

Turnout (inverted) (Period 1) - Min: -90.307 / Max: -45.833 / Range: 45.473

Turnout (inverted) (Period 2) - Min: -90.130 / Max: -47.025 / Range: 43.105

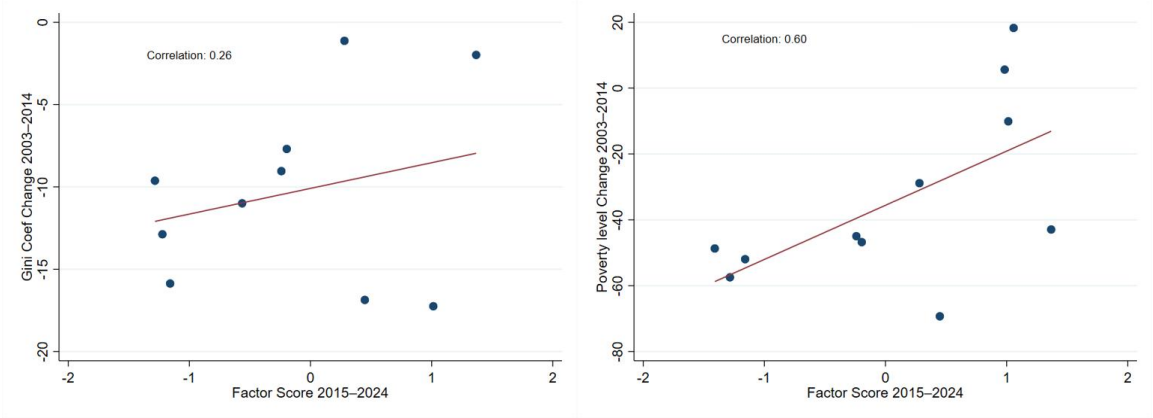
Appendix 2 – Results Excluding Honduras

FIGURE A1: Change in Gini Coefficient and Poverty and Factor Score in 2015-2024 (Excluding Honduras)



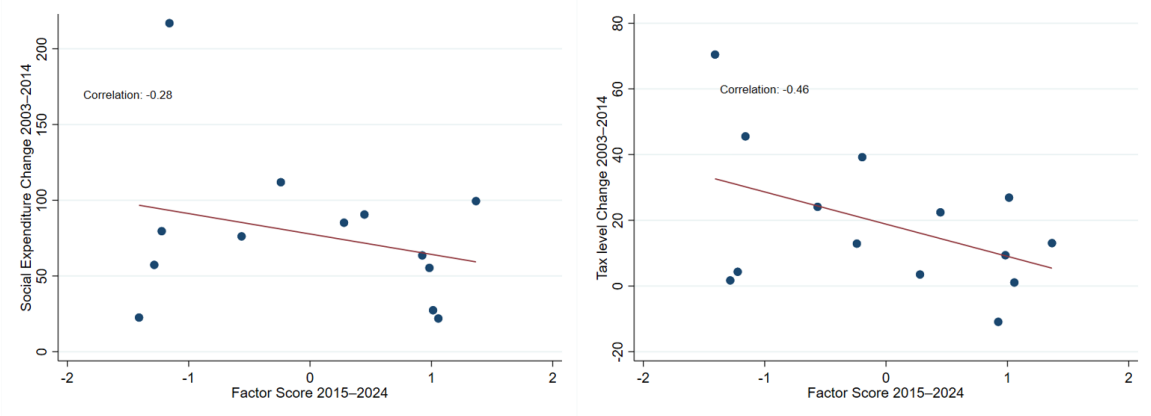
Source: authors' calculation using data from Baker and Greene (2024) and the International Institute for Democracy and Electoral Assistance.

FIGURE A2: Change in Gini Coefficient and Poverty and Factor Score in 2015-2024 (Excluding Honduras)



Source: authors' calculations using data from CEPAL, Baker and Greene (2024) and the International Institute for Democracy and Electoral Assistance.

FIGURE A3: Social Policies Spending and Taxation Post-Boom Factor Score in 2015-2024 (Excluding Honduras)



Source: authors' calculations using data from CEPAL, Baker and Greene (2024) and the International Institute for Democracy and Electoral Assistance.