

# Redistributive preferences in unequal contexts: Changes in Latin America between 2008 and 2014

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# 1 Descriptive statistics

Table 1: Descriptive statistics

| Statistical               | N       | Mean / % | Stand. dev. | Min    | Max    |
|---------------------------|---------|----------|-------------|--------|--------|
| Redistributive Preference | 113.804 | 5,685    | 1,609       | 1      | 7      |
| Income (decil)            | 113.804 | 6,955    | 3,455       | 1      | 11     |
| Age                       | 113.804 | 39,522   | 15,892      | 18     | 101    |
| System Confidence         | 113.804 | 3,790    | 1,332       | 1      | 7      |
| Gender                    | 113.804 |          |             |        |        |
| Man                       |         | 49,0%    |             |        |        |
| Woman                     |         | 51,0%    |             |        |        |
| Civil status              | 113.804 |          |             |        |        |
| Married                   |         | 59,1%    |             |        |        |
| Not married               |         | 40,9%    |             |        |        |
| Political Ideology        | 113.804 |          |             |        |        |
| Right                     |         | 26,4%    |             |        |        |
| Center                    |         | 31,9%    |             |        |        |
| Left                      |         | 23,6%    |             |        |        |
| Not declared              |         | 18,1%    |             |        |        |
| Zone                      | 113.804 |          |             |        |        |
| Urban                     |         | 70,8%    |             |        |        |
| Rural                     |         | 29,2%    |             |        |        |
| Employment                | 113.804 |          |             |        |        |
| No workforce              |         | 14,0%    |             |        |        |
| Unemployment              |         | 30,3%    |             |        |        |
| Employment                |         | 55,7%    |             |        |        |
| Education                 | 113.804 |          |             |        |        |
| Primary                   |         | 31,9%    |             |        |        |
| Secondary                 |         | 47,9%    |             |        |        |
| Tertiary                  |         | 20,2%    |             |        |        |
| Gini                      | 72      | 49,881   | 4,884       | 37,900 | 59,400 |
| GDP per cápita            | 72      | 6,495    | 3,729       | 1,523  | 14,442 |

Note: Means are indicated for continuous variables and percentages for categorical variables.

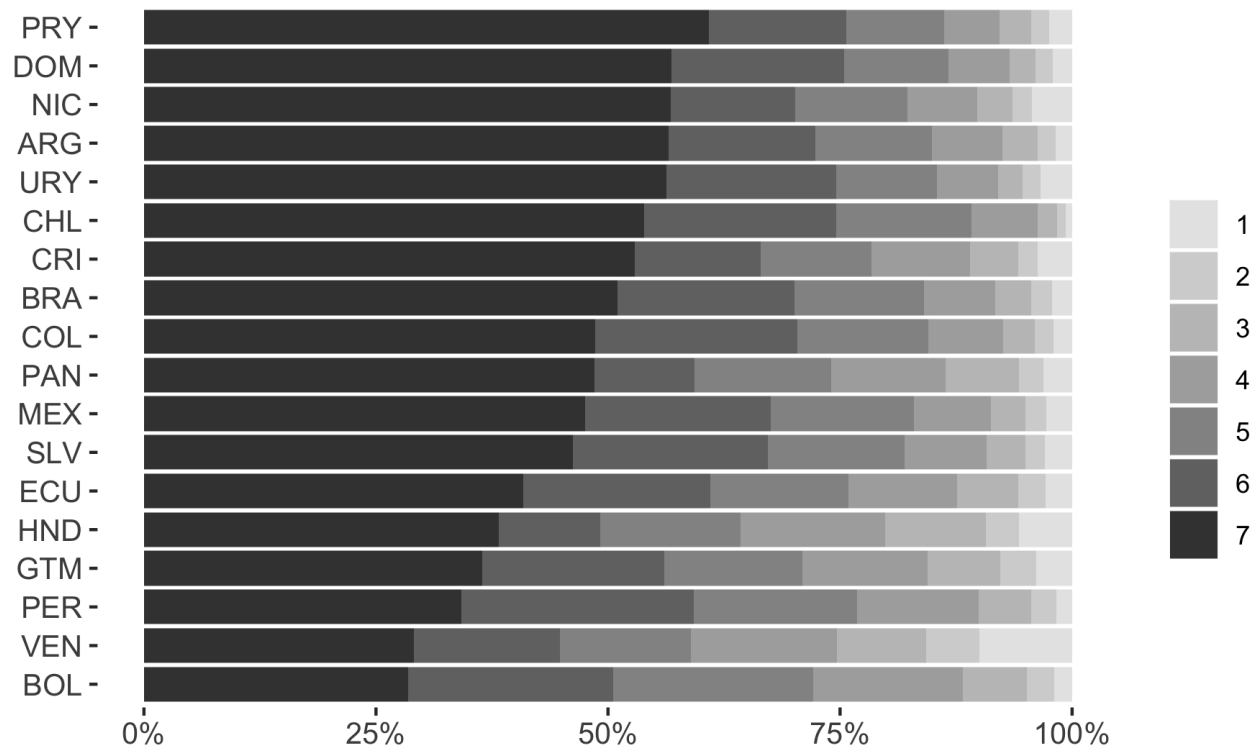


Figure 1: Redistributive Preference by countries. Percentage by category.

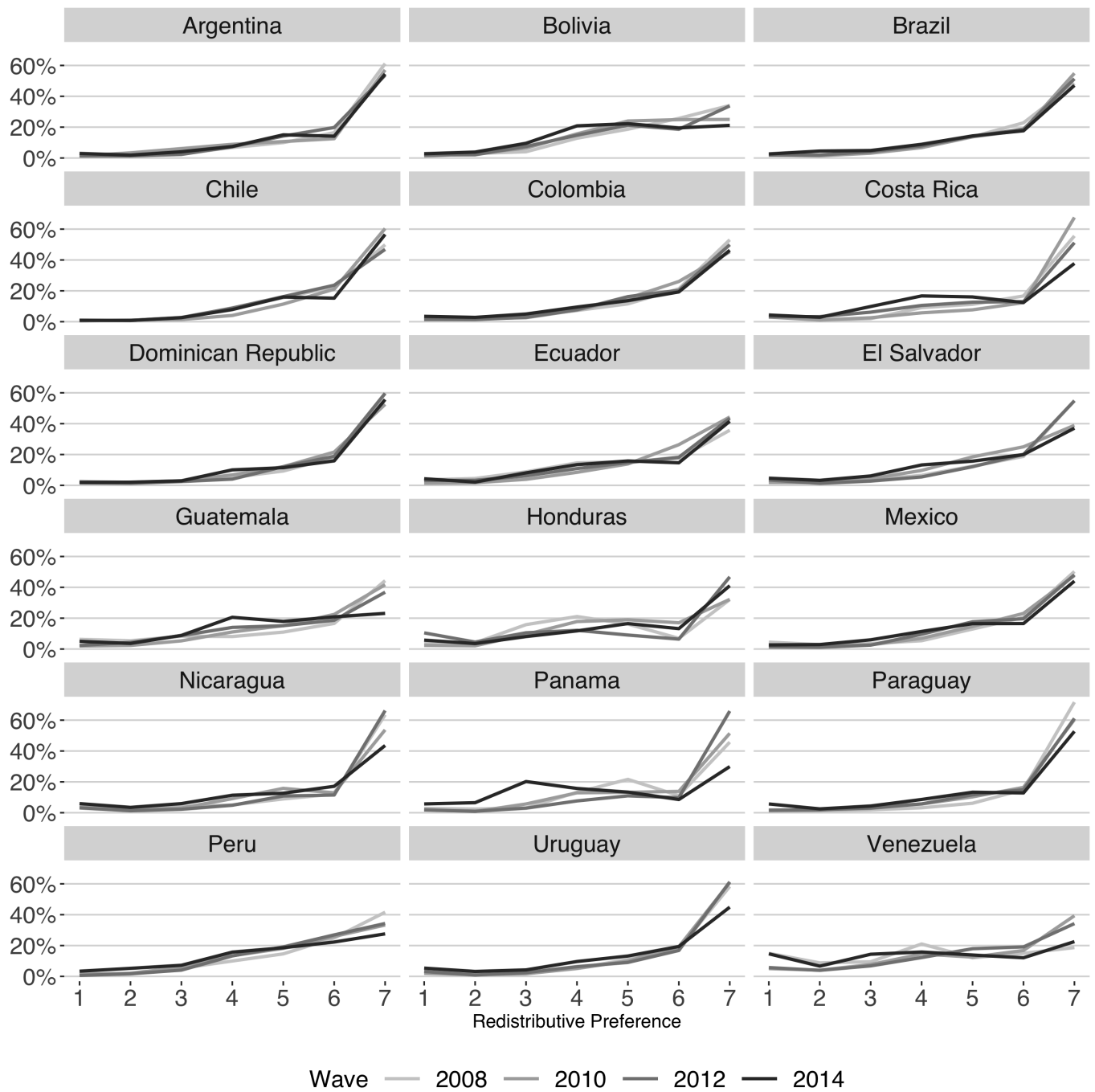


Figure 2: Redistributive Preference by country and year. Percentage by category.

Table 2: Average redistribution preference of income deciles, by country

|                    | D1          | D2          | D3          | D4          | D5          | D6          | D7   | D8          | D9   | D10         | Total |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|------|-------------|------|-------------|-------|
| Argentina          | <b>6,15</b> | 6,03        | 6,06        | 6,02        | 5,89        | 6,03        | 5,98 | 6,02        | 6,05 | 5,91        | 6,02  |
| Bolivia            | 5,44        | 5,28        | 5,26        | 5,36        | 5,42        | 5,29        | 5,25 | 5,30        | 5,26 | <b>5,44</b> | 5,33  |
| Brazil             | 5,86        | 5,79        | 5,91        | <b>6,00</b> | 5,89        | 5,94        | 5,99 | 5,96        | 5,84 | 5,88        | 5,91  |
| Chile              | 6,19        | 6,11        | 6,13        | <b>6,23</b> | 6,12        | 6,05        | 6,14 | 6,10        | 6,06 | 6,05        | 6,12  |
| Colombia           | 5,99        | <b>6,07</b> | 5,78        | 5,93        | 5,84        | 5,97        | 5,82 | 5,95        | 5,79 | 5,83        | 5,90  |
| Costa Rica         | <b>5,87</b> | 5,86        | 5,80        | 5,81        | 5,75        | 5,74        | 5,80 | 5,84        | 5,74 | 5,57        | 5,78  |
| Dominican Republic | 6,03        | 6,05        | 6,12        | <b>6,18</b> | 5,96        | 6,10        | 6,10 | 6,06        | 6,02 | 6,01        | 6,06  |
| Ecuador            | 5,49        | <b>5,66</b> | 5,52        | 5,64        | 5,62        | 5,56        | 5,47 | 5,53        | 5,53 | 5,54        | 5,56  |
| El Salvador        | 5,82        | 5,72        | 5,75        | 5,73        | <b>5,87</b> | 5,77        | 5,76 | 5,85        | 5,82 | 5,86        | 5,79  |
| Guatemala          | 5,26        | 5,22        | 5,29        | 5,37        | <b>5,47</b> | 5,40        | 5,44 | 5,44        | 5,23 | 5,43        | 5,36  |
| Honduras           | 5,25        | 5,16        | 5,13        | 5,18        | 5,14        | <b>5,28</b> | 5,15 | 5,25        | 5,10 | 5,10        | 5,17  |
| Mexico             | 5,76        | 5,73        | 5,83        | 5,86        | 5,92        | 5,86        | 5,88 | <b>5,93</b> | 5,71 | 5,76        | 5,82  |
| Nicaragua          | 5,91        | 5,89        | 5,90        | <b>5,98</b> | 5,90        | 5,94        | 5,68 | 5,91        | 5,69 | 5,74        | 5,85  |
| Panama             | <b>5,79</b> | 5,75        | 5,65        | 5,54        | 5,55        | 5,57        | 5,51 | 5,53        | 5,61 | 5,53        | 5,60  |
| Paraguay           | <b>6,21</b> | 5,96        | 6,06        | 6,03        | 6,13        | 6,08        | 6,09 | 6,09        | 6,06 | 6,16        | 6,09  |
| Peru               | 5,58        | 5,59        | 5,47        | <b>5,69</b> | 5,51        | 5,56        | 5,50 | 5,60        | 5,42 | 5,55        | 5,55  |
| Uruguay            | 6,10        | 6,01        | 6,04        | 6,00        | 5,89        | <b>6,20</b> | 5,86 | 6,03        | 5,93 | 5,92        | 6,00  |
| Venezuela          | 4,97        | 4,80        | <b>5,00</b> | 4,98        | 4,66        | 4,81        | 4,83 | 4,89        | 4,61 | 4,64        | 4,82  |
| Total              | 5,76        | 5,70        | 5,71        | 5,75        | 5,70        | 5,73        | 5,68 | 5,74        | 5,64 | 5,66        | 5,71  |

Note: Note: In bold, maximum values per country.

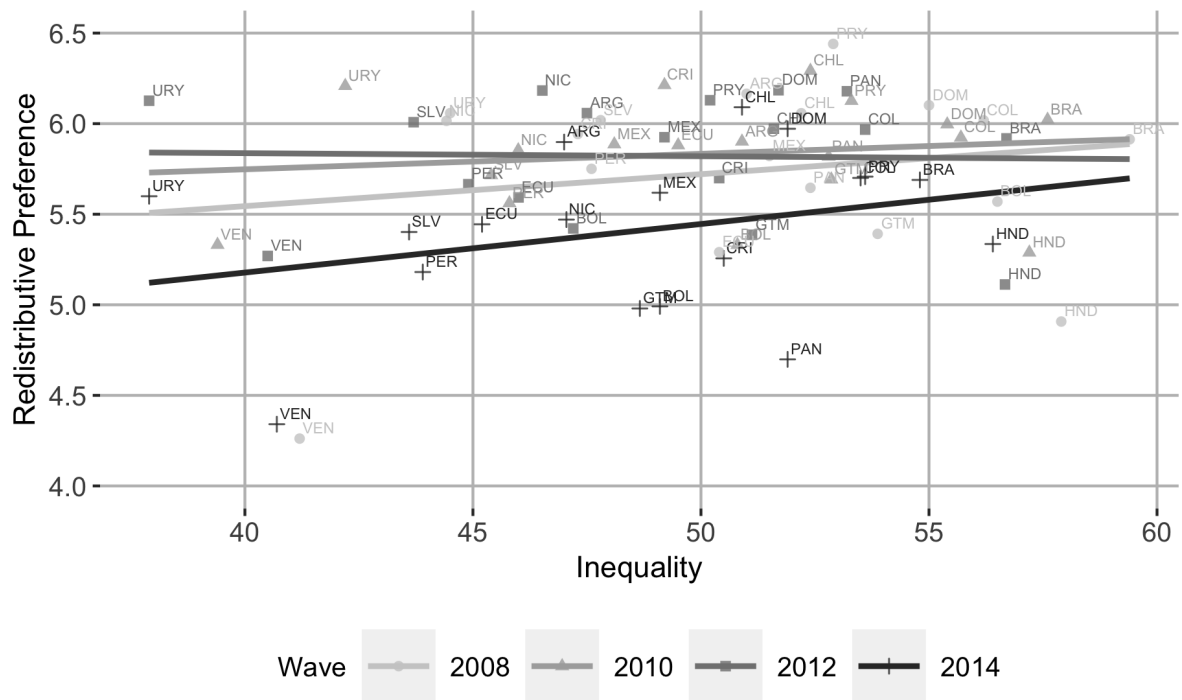


Figure 3: Redistributive Preference by Gini.

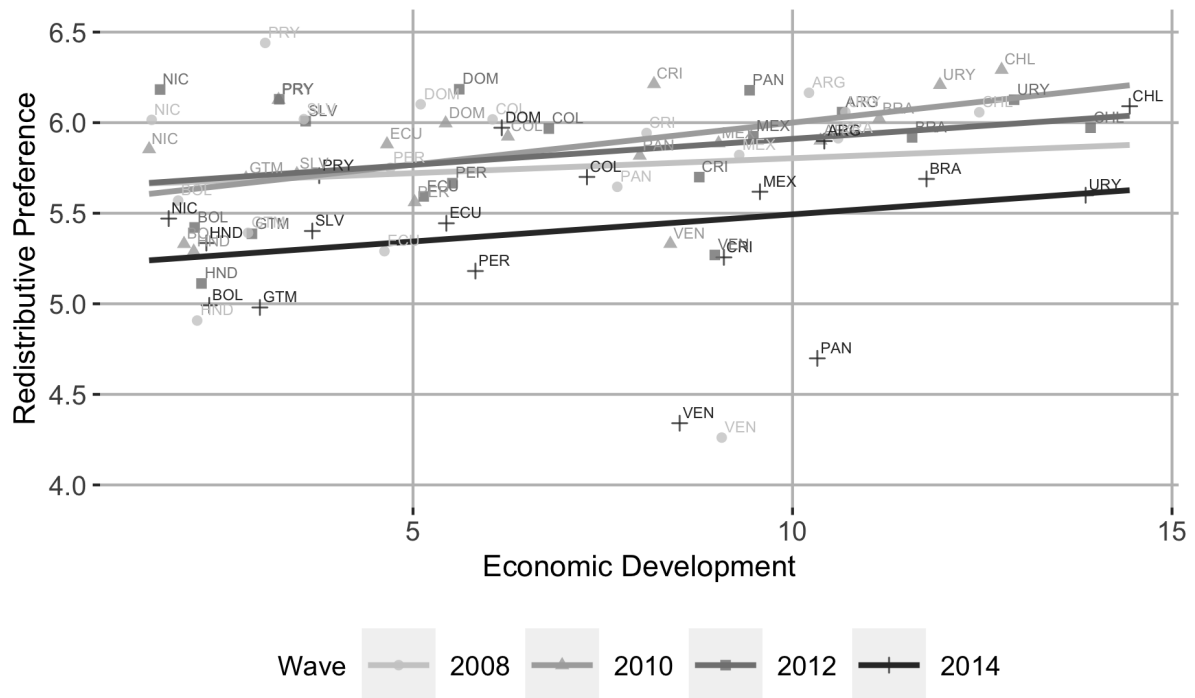


Figure 4: Redistributive Preference by GDP.

Otra manera:

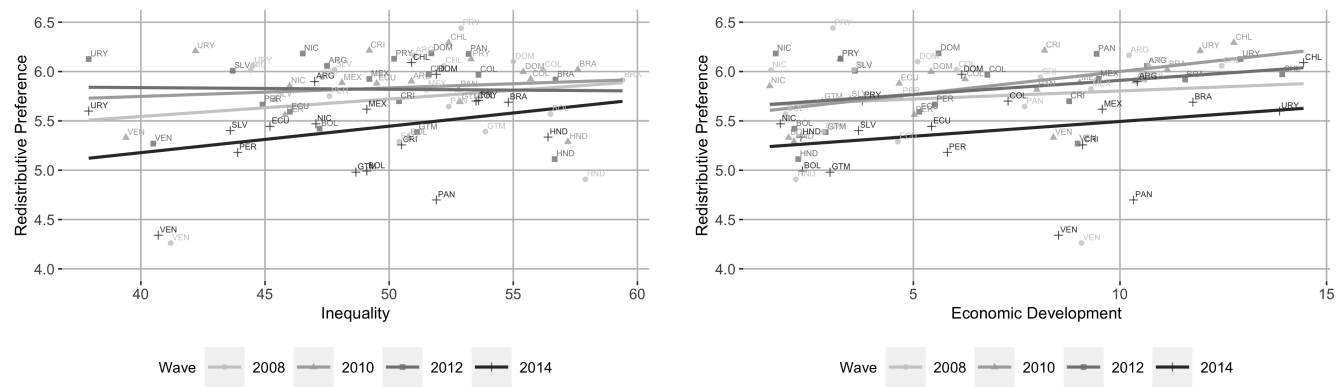


Figure 5: Redistributive Preference by GDP and GDP.

## 2 Multilevel estimation

Table 3: Hybrid multilevel regression models of individual redistributive preference

| <i>Individual-level variables</i> | M0 | M1                 | M2                 | M3                 | M4                 | M5                 | M6                 | M7                 | M8                 |
|-----------------------------------|----|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Income: D9-D10                    |    | -0.05***<br>(0.01) | -0.04***<br>(0.01) | -0.04***<br>(0.01) | -0.04***<br>(0.01) | -0.04***<br>(0.01) | -0.04**<br>(0.02)  | -0.19<br>(0.19)    | -0.01<br>(0.04)    |
| Man                               |    |                    | 0.03***<br>(0.01)  | 0.03***<br>(0.01)  | 0.03***<br>(0.01)  | 0.03***<br>(0.01)  | 0.03***<br>(0.01)  | 0.03***<br>(0.01)  | 0.03***<br>(0.01)  |
| Age                               |    |                    | 0.00<br>(0.00)     | 0.00<br>(0.00)     | 0.00<br>(0.00)     | 0.00<br>(0.00)     | 0.00<br>(0.00)     | 0.00<br>(0.00)     | 0.00<br>(0.00)     |
| Married                           |    |                    | 0.02**<br>(0.01)   | 0.02**<br>(0.01)   | 0.02**<br>(0.01)   | 0.02**<br>(0.01)   | 0.02**<br>(0.01)   | 0.02**<br>(0.01)   | 0.02**<br>(0.01)   |
| Political Ideology: Center        |    |                    | -0.00<br>(0.01)    | -0.00<br>(0.01)    | -0.00<br>(0.01)    | -0.00<br>(0.01)    | -0.00<br>(0.01)    | -0.00<br>(0.01)    | -0.00<br>(0.01)    |
| Political Ideology: Left          |    |                    | 0.10***<br>(0.01)  | 0.10***<br>(0.01)  | 0.10***<br>(0.01)  | 0.10***<br>(0.01)  | 0.10***<br>(0.01)  | 0.10***<br>(0.01)  | 0.10***<br>(0.01)  |
| Political Ideology: Not declared  |    |                    | 0.16***<br>(0.01)  | 0.16***<br>(0.01)  | 0.16***<br>(0.01)  | 0.16***<br>(0.01)  | 0.16***<br>(0.01)  | 0.16***<br>(0.01)  | 0.16***<br>(0.01)  |
| System Confidence                 |    |                    | 0.08***<br>(0.00)  | 0.08***<br>(0.00)  | 0.08***<br>(0.00)  | 0.08***<br>(0.00)  | 0.08***<br>(0.00)  | 0.08***<br>(0.00)  | 0.08***<br>(0.00)  |
| Unemployed                        |    |                    | 0.05***<br>(0.02)  | 0.05***<br>(0.02)  | 0.05***<br>(0.02)  | 0.05***<br>(0.02)  | 0.05***<br>(0.02)  | 0.05***<br>(0.02)  | 0.05***<br>(0.02)  |
| Employee                          |    |                    | 0.04**<br>(0.01)   | 0.04**<br>(0.01)   | 0.04**<br>(0.01)   | 0.04**<br>(0.01)   | 0.04**<br>(0.01)   | 0.04**<br>(0.01)   | 0.04**<br>(0.01)   |
| Ed. Secondary                     |    |                    | 0.03***<br>(0.01)  | 0.03***<br>(0.01)  | 0.03***<br>(0.01)  | 0.03***<br>(0.01)  | 0.03***<br>(0.01)  | 0.03***<br>(0.01)  | 0.03***<br>(0.01)  |
| Ed. Tertiary                      |    |                    | 0.01<br>(0.01)     | 0.01<br>(0.01)     | 0.01<br>(0.01)     | 0.01<br>(0.01)     | 0.01<br>(0.01)     | 0.01<br>(0.01)     | 0.01<br>(0.01)     |
| Zone Urban                        |    |                    | -0.06***<br>(0.01) | -0.06***<br>(0.01) | -0.07***<br>(0.01) | -0.07***<br>(0.01) | -0.07***<br>(0.01) | -0.07***<br>(0.01) | -0.07***<br>(0.01) |

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$



|                                 | M0                | M1                 | M2                 | M3                 | M4                 | M5                 | M6                 | M7                 | M8                 |
|---------------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| <i>Country-level variables</i>  |                   |                    |                    |                    |                    |                    |                    |                    |                    |
| Gini [BE]                       |                   |                    |                    | 0.01<br>(0.02)     | 0.02<br>(0.02)     | 0.01<br>(0.02)     | 0.01<br>(0.02)     | 0.02<br>(0.02)     | 0.01<br>(0.02)     |
| Gini [WE]                       |                   |                    |                    | -0.00<br>(0.02)    | -0.00<br>(0.02)    | -0.00<br>(0.02)    | -0.00<br>(0.02)    | -0.01<br>(0.02)    | -0.00<br>(0.02)    |
| GDP [BE]                        |                   |                    |                    |                    | 0.04<br>(0.02)     | -0.00<br>(0.05)    | 0.04*<br>(0.02)    | 0.04*<br>(0.02)    | 0.04<br>(0.02)     |
| GDP [WE]                        |                   |                    |                    |                    | -0.11<br>(0.08)    | -0.11<br>(0.08)    | -0.11<br>(0.08)    | -0.11<br>(0.08)    | -0.11<br>(0.08)    |
| E. Productivist                 |                   |                    |                    |                    |                    | 0.49<br>(0.45)     |                    |                    |                    |
| E. Protectionist                |                   |                    |                    |                    |                    | 0.23<br>(0.33)     |                    |                    |                    |
| <i>Cross-level interactions</i> |                   |                    |                    |                    |                    |                    |                    |                    |                    |
| Income:D9-D10 * Gini[BE]        |                   |                    |                    |                    |                    |                    |                    | 0.00<br>(0.00)     | -0.00<br>(0.00)    |
| Income:D9-D10 * Gini[WE]        |                   |                    |                    |                    |                    |                    |                    | 0.01*<br>(0.01)    | -0.02<br>(0.03)    |
| Income:D9-D10 * PIB[BE]         |                   |                    |                    |                    |                    |                    |                    |                    |                    |
| Income:D9-D10 * PIB[WE]         |                   |                    |                    |                    |                    |                    |                    |                    |                    |
| <i>Temporal trends</i>          |                   |                    |                    |                    |                    |                    |                    |                    |                    |
| 2010                            |                   | 0.09<br>(0.08)     | 0.07<br>(0.08)     | 0.07<br>(0.08)     | 0.08<br>(0.08)     | 0.08<br>(0.08)     | 0.09<br>(0.08)     | 0.09<br>(0.08)     | 0.09<br>(0.08)     |
| 2012                            |                   | 0.07<br>(0.08)     | 0.05<br>(0.08)     | 0.05<br>(0.09)     | 0.11<br>(0.10)     | 0.11<br>(0.10)     | 0.11<br>(0.10)     | 0.11<br>(0.10)     | 0.11<br>(0.10)     |
| 2014                            |                   | -0.34***<br>(0.08) | -0.34***<br>(0.08) | -0.35***<br>(0.10) | -0.25***<br>(0.12) | -0.25***<br>(0.12) | -0.25***<br>(0.12) | -0.25***<br>(0.12) | -0.25***<br>(0.12) |
| (Intercept)                     | 5.70***<br>(0.08) | 5.76***<br>(0.10)  | 5.38***<br>(0.10)  | 4.71***<br>(0.90)  | 4.27***<br>(0.90)  | 4.68***<br>(1.01)  | 4.38***<br>(0.87)  | 4.24***<br>(0.89)  | 4.42***<br>(0.86)  |

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$

|                            | M0         | M1         | M2         | M3         | M4         | M5         | M6         | M7         | M8         |
|----------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| <i>Adjustment/variance</i> |            |            |            |            |            |            |            |            |            |
| AIC                        | 429583.50  | 429561.56  | 428979.26  | 428994.77  | 429003.31  | 429007.03  | 429005.25  | 429022.42  | 429022.17  |
| BIC                        | 429622.07  | 429638.70  | 429172.11  | 429206.90  | 429234.72  | 429257.73  | 429275.23  | 429311.69  | 429311.43  |
| Log Likelihood             | -214787.75 | -214772.78 | -214469.63 | -214475.39 | -214477.65 | -214477.52 | -214474.63 | -214481.21 | -214481.08 |
| N Level 1                  | 113804     | 113804     | 113804     | 113804     | 113804     | 113804     | 113804     | 113804     | 113804     |
| N Level 2                  | 72         | 72         | 72         | 72         | 72         | 72         | 72         | 72         | 72         |
| N Level 3                  | 18         | 18         | 18         | 18         | 18         | 18         | 18         | 18         | 18         |
| Var: N2 (Int)              | 0.09       | 0.05       | 0.05       | 0.05       | 0.05       | 0.05       | 0.05       | 0.05       | 0.05       |
| Var: N3 (Int)              | 0.11       | 0.12       | 0.11       | 0.11       | 0.10       | 0.11       | 0.10       | 0.10       | 0.10       |
| Var: Residual              | 2.40       | 2.40       | 2.39       | 2.39       | 2.39       | 2.39       | 2.39       | 2.39       | 2.39       |
| Var: N2 D9-D10             |            |            |            |            |            |            | 0.00       | 0.00       | 0.00       |
| Cov: N2 (Int) D9-D10       |            |            |            |            |            |            | -0.00      | -0.00      | -0.00      |
| Var: N3 D9-D10             |            |            |            |            |            |            | 0.00       | 0.00       | 0.00       |
| Cov: N3 D9-D10             |            |            |            |            |            |            | 0.01       | 0.01       | 0.01       |

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$

## Random effects

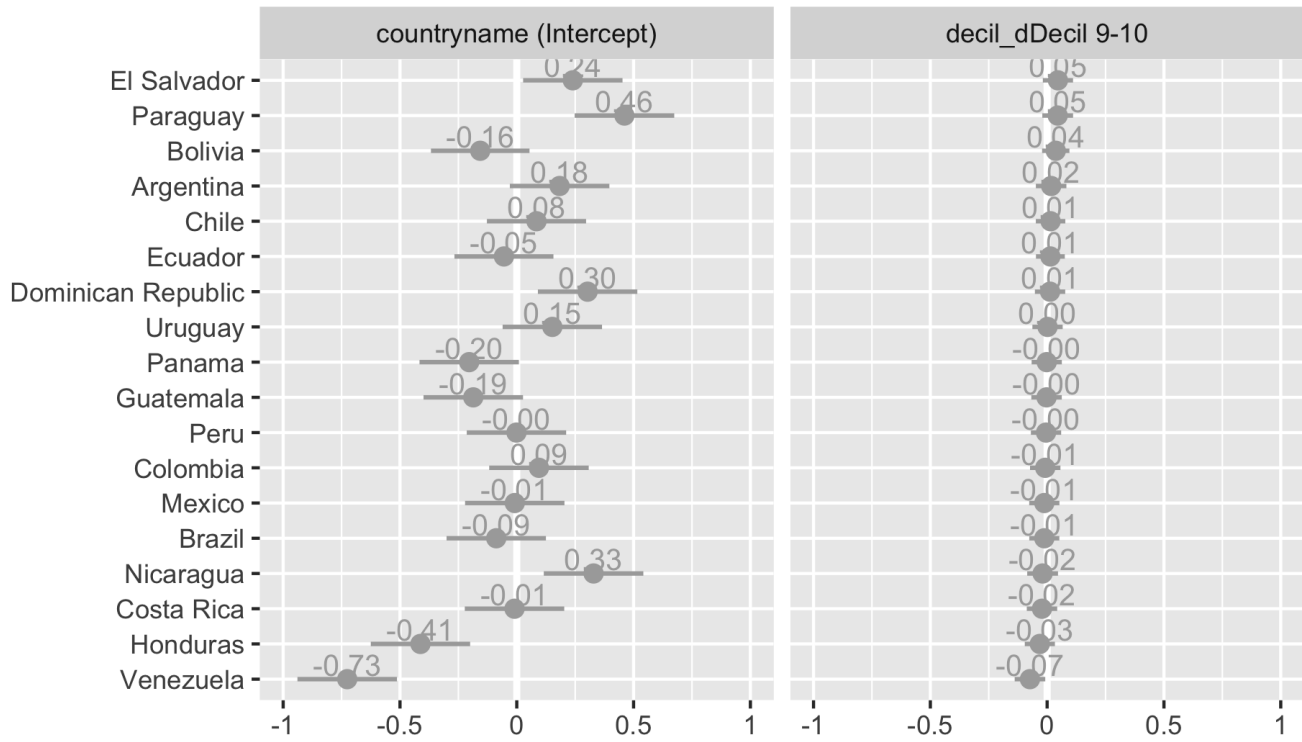


Figure 6: Random income effect on redistributive preference by country: intercept and slope.

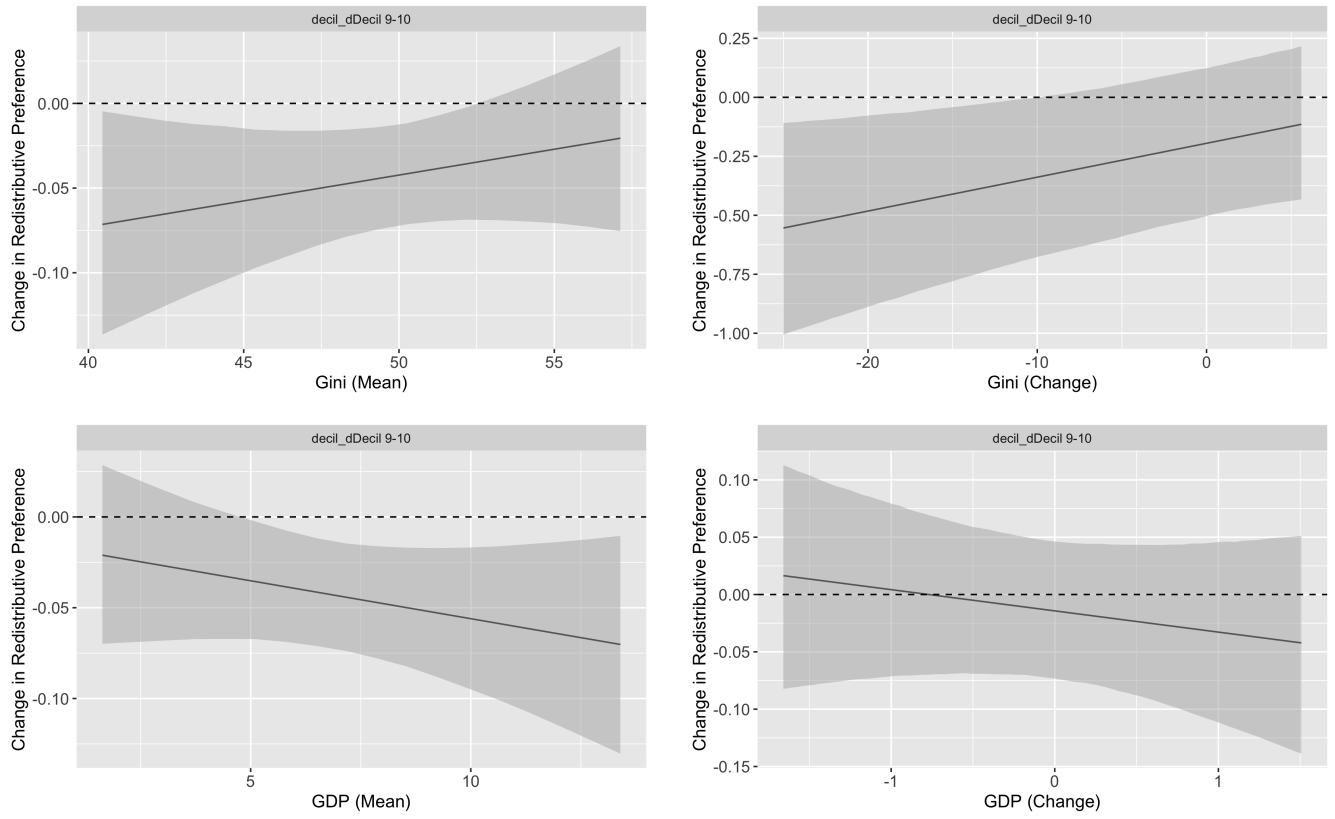


Figure 7: Income conditional effect on redistributive preference. Cross-level interaction.

### 3 Supplementary material

Table 4: Sample: Observations by country and year

|                    | <b>2008</b>  | <b>2010</b>  | <b>2012</b>  | <b>2014</b>  | <b>Total</b>  |
|--------------------|--------------|--------------|--------------|--------------|---------------|
| Argentina          | 1370         | 1340         | 1461         | 1378         | 5549          |
| Bolivia            | 2854         | 2887         | 2910         | 3003         | 11654         |
| Brazil             | 1332         | 2274         | 1439         | 1394         | 6439          |
| Chile              | 1463         | 1903         | 1502         | 1489         | 6357          |
| Colombia           | 1445         | 1470         | 1372         | 1462         | 5749          |
| Costa Rica         | 1403         | 1443         | 1424         | 1502         | 5772          |
| Dominican Republic | 1389         | 1422         | 1453         | 1492         | 5756          |
| Ecuador            | 2857         | 2934         | 1422         | 1415         | 8628          |
| El Salvador        | 1512         | 1537         | 1373         | 1503         | 5925          |
| Guatemala          | 1320         | 1372         | 1433         | 1379         | 5504          |
| Honduras           | 1428         | 1555         | 1631         | 1520         | 6134          |
| Mexico             | 1502         | 1523         | 1522         | 1471         | 6018          |
| Nicaragua          | 1287         | 1348         | 1569         | 1471         | 5675          |
| Panama             | 1471         | 1496         | 1554         | 1474         | 5995          |
| Paraguay           | 1122         | 1449         | 1454         | 1443         | 5468          |
| Peru               | 1452         | 1466         | 1475         | 1454         | 5847          |
| Uruguay            | 1448         | 1462         | 1469         | 1490         | 5869          |
| Venezuela          | 1209         | 1439         | 1376         | 1441         | 5465          |
| <b>Total</b>       | <b>27864</b> | <b>30320</b> | <b>27839</b> | <b>27781</b> | <b>113804</b> |

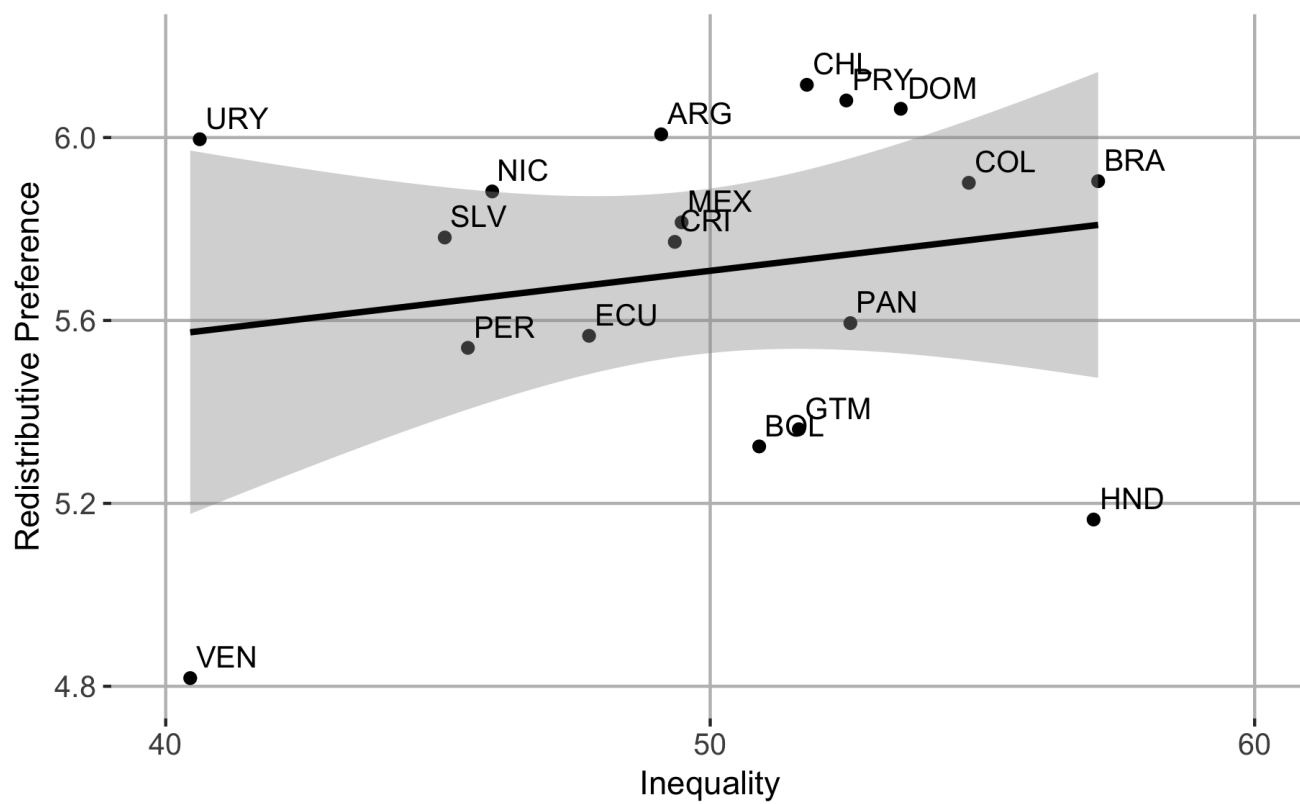


Figure 8: Agreement with redistribution and Inequality: Relationship "between" countries.

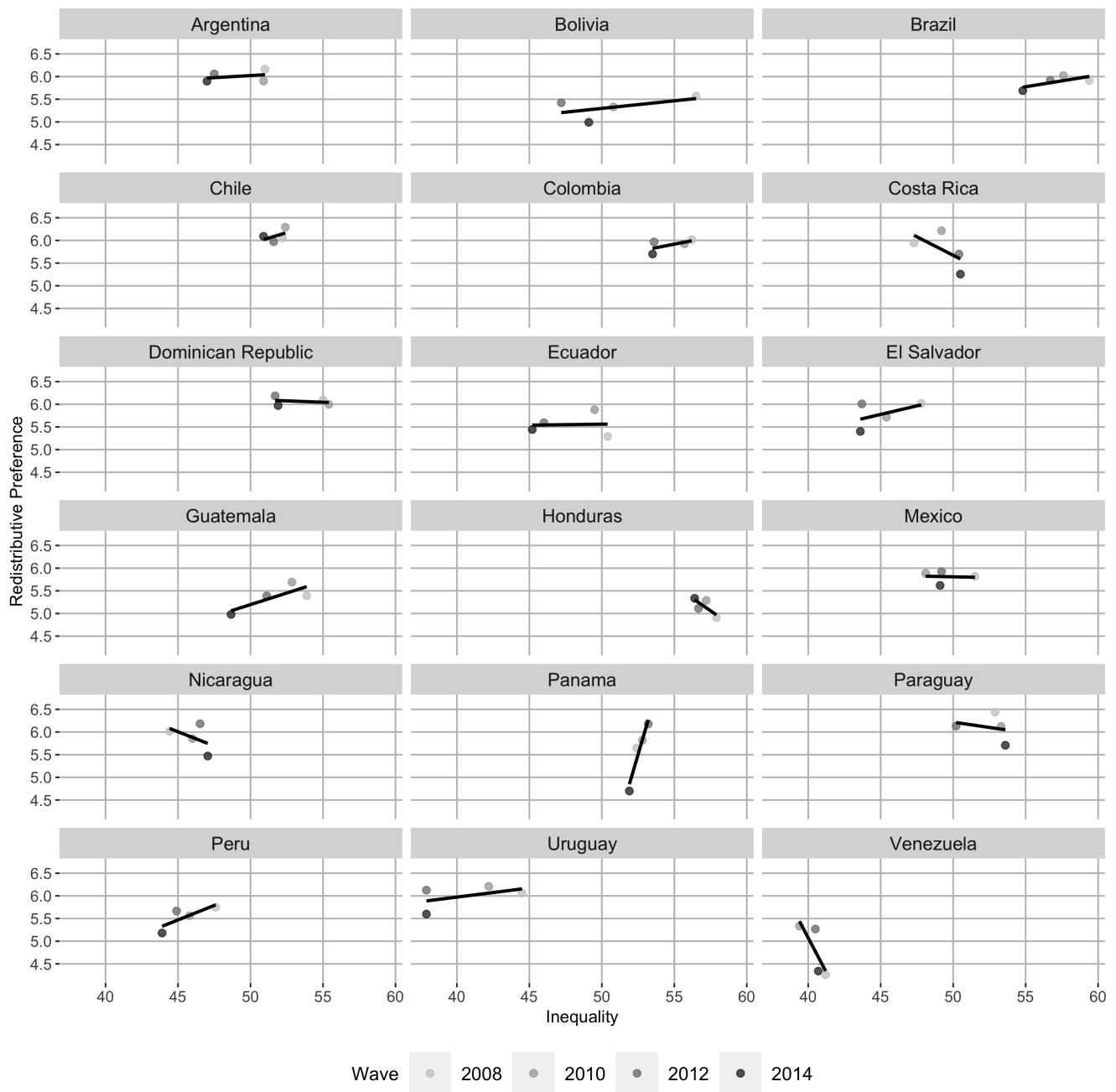


Figure 9: Agreement with redistribution and Inequality: Relationship "within" countries.

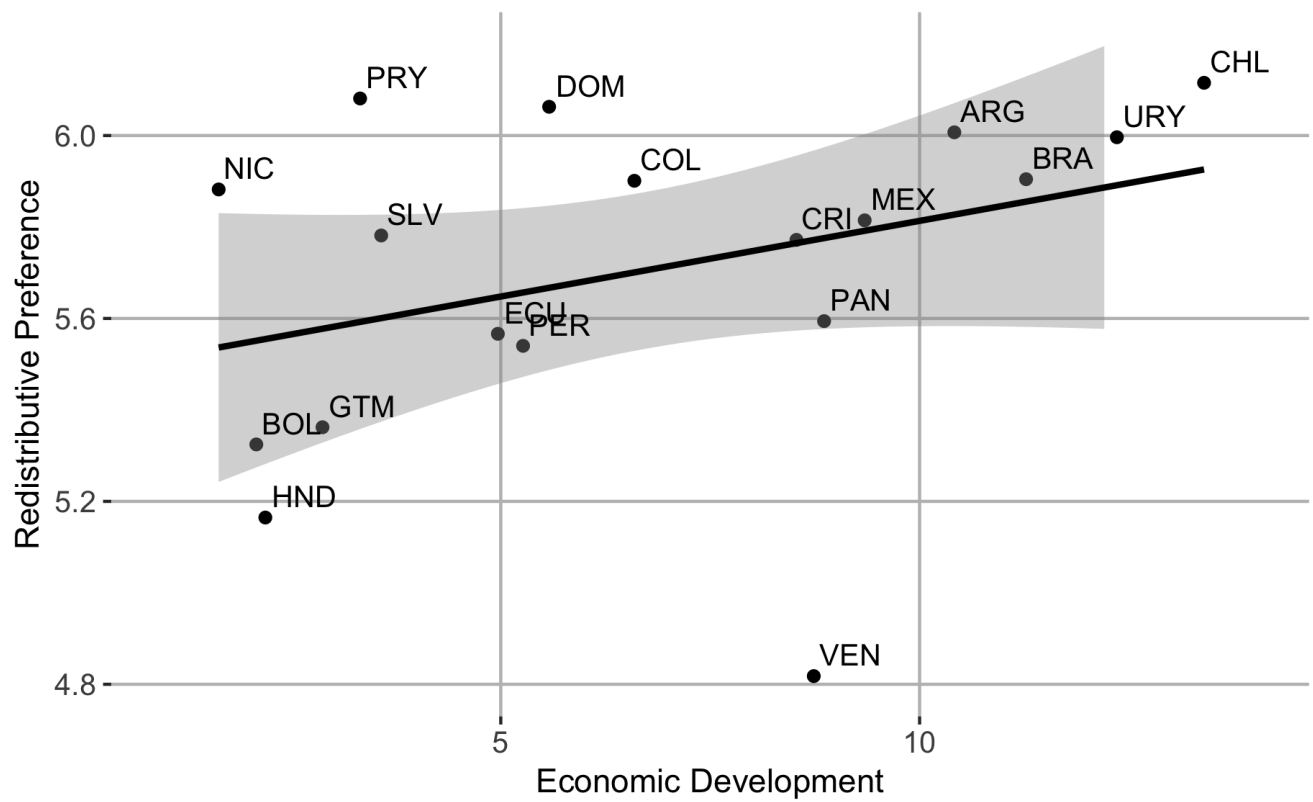


Figure 10: Agreement with redistribution and economic development: Relationship "between" countries



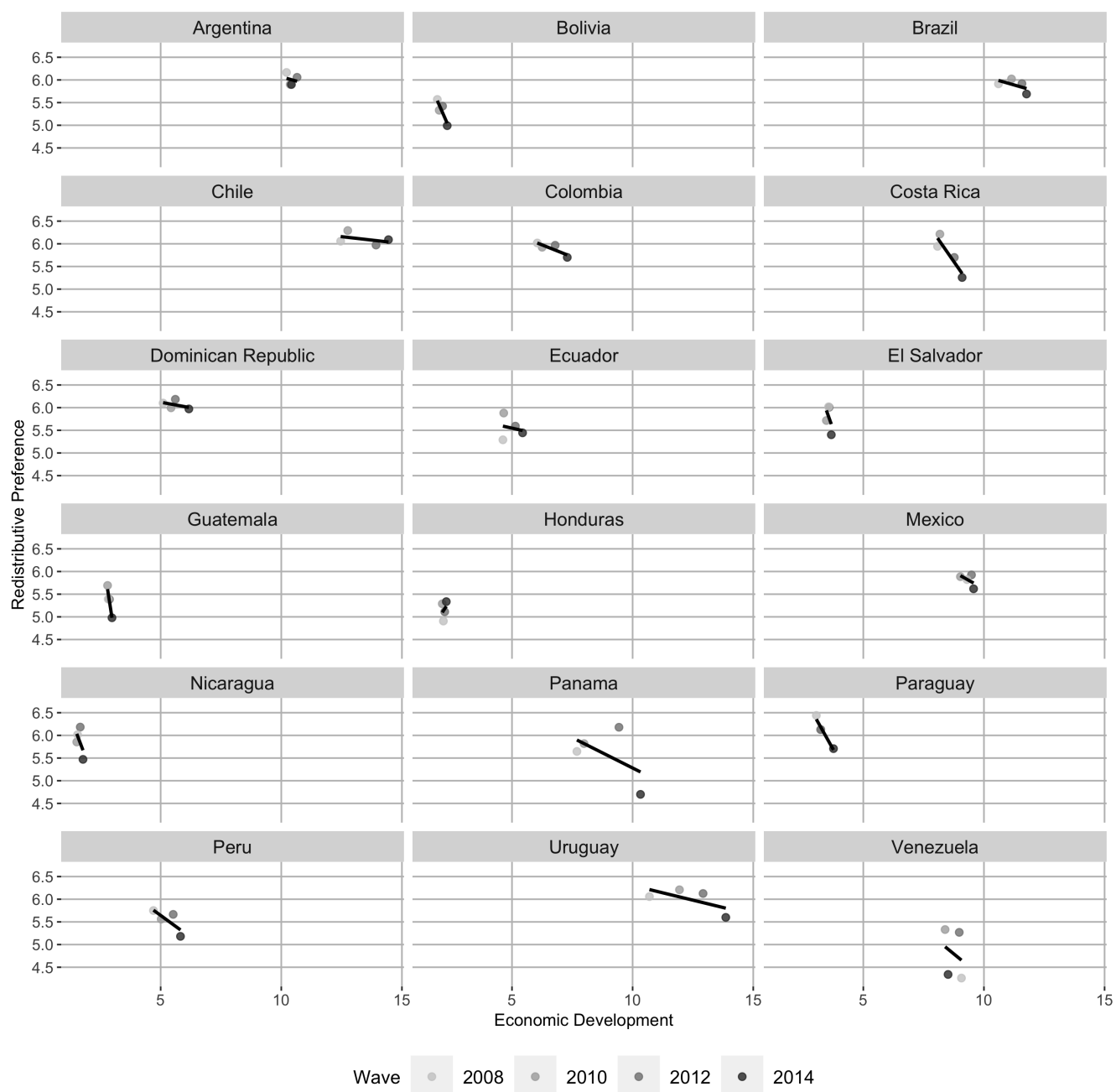


Figure 11: Agreement with redistribution and economic development: Relationship "within" countries