

Appendix for Chapter: Better Polarized than Unstructured? The Underpinnings of Political Discontent with Democracy in Four (Small) Latin American Countries

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Empirical strategy

Our measurement approach draws on data from the Americas Barometer, including indicators that examine individuals' perceptions of their access to different citizenship rights. For social citizenship, we rely on two survey questions available for each country included in LAPOP: respondents' evaluations of public health and education quality. Although we considered including other variables, such as household receipt of government transfers, the diverse nature of transfer programs across the region and their socioeconomic targeting goals might introduce biases when making cross-national comparisons, which is the objective of our study. The Cronbach's alpha for the two indicators we use is .58.

To operationalize political citizenship, we use four indicators while excluding voter registration due to the variations in laws across countries. The selected indicators capture respondents' trust in electoral processes and in the executive, congress, politicians, and political parties as the primary representatives in a democracy. The question phrasings are presented in Table 1. The Cronbach's alpha for the four indicators we use is .79. For civil citizenship, we combine three indicators of perceived access to justice with a general measure of citizens' perception regarding the extent to which the political system works to safeguard their fundamental rights. Our selected index captures both respondents' abstract sense of having equal access to justice and their perception of the functioning of the rule of law. The question-phrasings are provided in Table 1a. The Cronbach's alpha for the four indicators we use is .7.

Table 1a. Indicators for types of citizenship.

Citizenship	Dimension	Code	Question
Social Citizenship	Perceived access to Health and education (Alpha 0.58)	sd6new2	Satisfaction with Public Medical and Health Services (1 -4)
		sd3new2	Satisfaction with the quality of public schools. (1 -4)
Political Citizenship	Perceived political representation. (Alpha=0.79)	b21	To what extent do you trust the political parties? (1-7)
		B13	To what extent do you trust the National Congress? (1-7)
		b47a	To what extent do you trust elections in this country? (1-7)
		b21a	To what extent do you trust the executive (1-7)
		eff1	Those who govern this country are interested in what people like you think. (1- 7)
Civil citizenship	Perceived fairness in access to justice (Alpha=0.7)	AOJ12	If you were a victim of a robbery or assault how much faith do you have that the judicial system would punish the guilty? (1-4)
		B1	To what extent do you think the courts in country) guarantee a fair trial? (1-7)
		B10a	To what extent do you trust the Judicial System? (1-7)

Source: AmericasBarometer, 2010-2021.

Our operationalization strategy is based on a latent-variable approach that encompasses social, civil, and political citizenship types. We employ a factor analysis using the principal components algorithm to capture the shared variance among our indicators. For this analysis, we utilize a combined dataset of 113,056 observations for the four countries, covering the 2010-2012-2014-2016-2018-2021 sample of the AmericasBarometer. Table 2a shows the factor analysis results, indicating that the solution reliably produces three significant factors across all dimensions of citizenship.

Table 2a. Factor analysis for political, civil, and social citizenship.

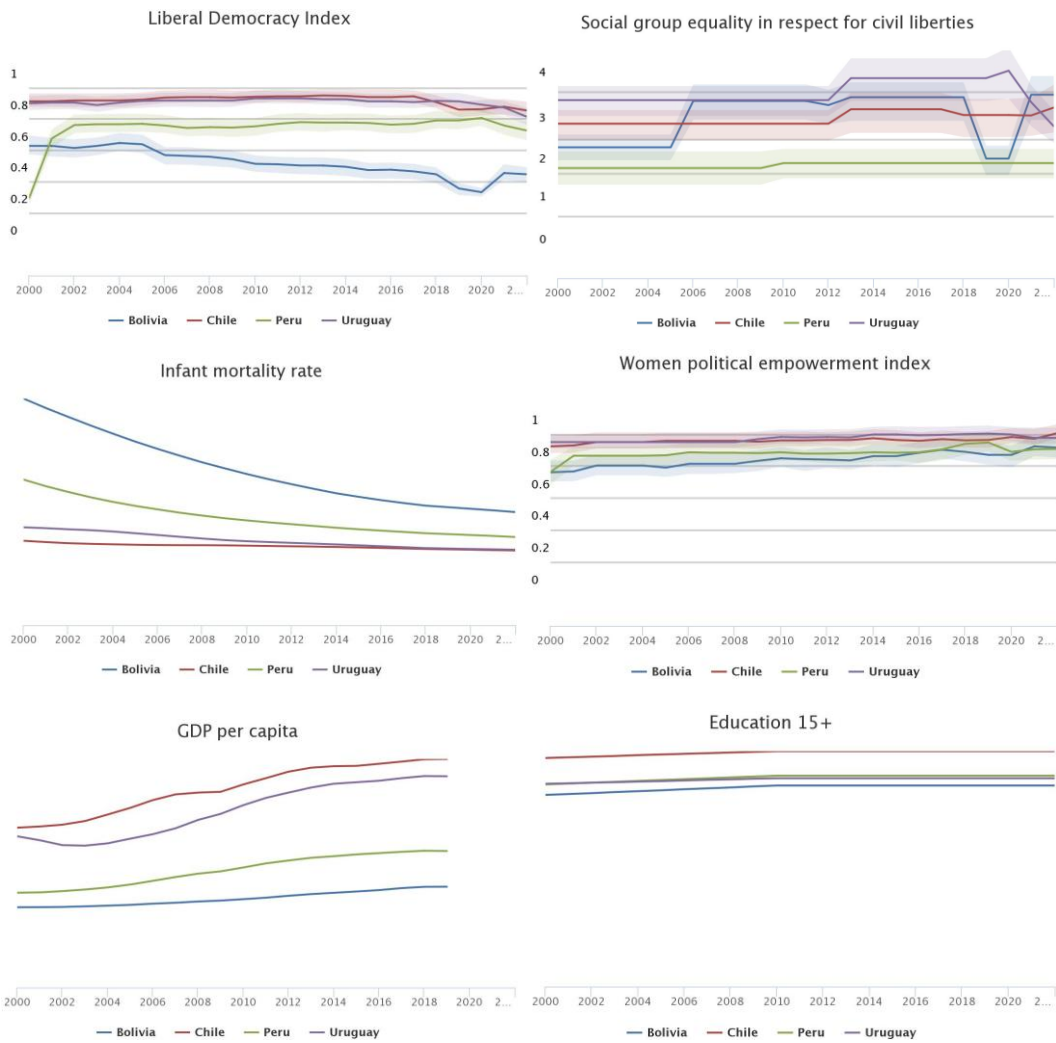
	Factor 1	Factor 2	Factor 3	<i>Communality</i>
Trust in Parties	0.58	0.34	0.11	0.46
Trust in Elections	0.59	0.26	0.09	0.42
Trust in Executive	0.69	0.16	0.14	0.53
Trust in Congress	0.64	0.40	0.12	0.58
Politicians interested in what people think	0.45	0.18	0.15	0.26
Health	0.11	0.05	0.64	0.42
Education	0.13	0.15	0.60	0.40
Free Trial	0.28	0.64	0.08	0.49
Judicial Confidence	0.16	0.43	0.15	0.24
Justice Trust	0.38	0.70	0.09	0.65
<i>Total Communalities</i>				4.44

Source: AmericasBarometer, 2010-2021.

Supplementary Figures and Tables.

Below we present the descriptive figures for the four countries analysed in the chapter. We also provide additional information related to the regression analyses, as only graphical summaries of these models were included in the chapter. The supplementary materials include a descriptive table of the variables used, as well as the full regression tables for the models explaining civil, social, and political citizenship.

Figure 1a. A sample of objective indicators of democracy and social progress in Bolivia, Chile, Peru, and Uruguay, 2000-2023.



Source: V-DEM project version 13 (2023).

Table 3a. Descriptive statistics.

Qualitative Variables		
Age	1. 18 to 29	18184 (30.5%)
	2. 30 to 44	18637 (31.2%)
	3. 45 to 64	16898 (28.3%)
	4. 65 to 110	5951 (10.0%)
Wave	1. 2010	9484 (15.9%)
	2. 2012	9122 (15.3%)
	3. 2014	9152 (15.3%)
	4. 2016	9005 (15.1%)
	5. 2018	7937 (13.3%)
	6. 2021	15007 (25.1%)
Gender	1. Male	28960 (48.5%)
	2. Female	30714 (51.5%)
Education	1. Primary	14246 (32.0%)
	2. Secondary	18286 (41.1%)
	3. Tertiary	11929 (26.8%)
Ethnicity	1. White	19676 (34.3%)
	2. Indigenous	3496 (6.1%)
	3. Mestizo	28959 (50.4%)
	4. Other	5274 (9.2%)
Urban/rural	1. Rural	10244 (21.6%)
	2. Urban	37211 (78.4%)
Quantitative Variables		
Income	Mean (sd): 8.4 (1.9)	524 distinct values
Infrac (municipal level)	Mean (sd): 3.9 (0.6)	367 distinct values
Challenger (municipal level)	Mean (sd): 2.1 (0.4)	232 distinct values
Civil Citizenship	Mean (sd): 3.3 (1.5)	13 distinct values
Social Citizenship	Mean (sd): 3.9 (1.2)	25 distinct values
Political Citizenship	Mean (sd): 3.7 (1.4)	25 distinct values

Source: Authors' construction based on American Barometer (2010-2021)

Table 4a: Predicting Civil Citizenship

	Chile	Bolivia	Uruguay	Peru
(Intercept)	-0.71 (0.55)	-0.83** (0.30)	0.40 (1.12)	-0.03 (0.27)
Age: 30 to 44 (ref: 29 or less)	0.03 (0.05)	-0.09*** (0.03)	0.01 (0.04)	-0.14** (0.05)
Age: 45 to 64 (ref: 29 or less)	0.01 (0.05)	-0.10*** (0.03)	0.16*** (0.04)	-0.13* (0.05)
Age: +65(ref: 29 or less)	0.13* (0.06)	-0.20*** (0.05)	0.31*** (0.05)	-0.13 (0.08)
Female (ref=male)	0.02 (0.03)	0.04 (0.02)	-0.05 (0.03)	0.13*** (0.04)
Education: Secondary (ref=Primary)	-0.06 (0.04)	-0.06* (0.03)	0.03 (0.04)	-0.09 (0.05)
Education: Tertiary (ref=Primary)	-0.08 (0.06)	-0.11*** (0.03)	0.13** (0.05)	-0.23*** (0.06)
Ethnic group:Indigenous (ref=White)	0.17 (0.10)	0.06 (0.06)	0.06 (0.12)	-0.17 (0.11)
Ethnic group:Mestizo (ref=White)	0.07* (0.04)	0.06 (0.05)	-0.08 (0.04)	-0.08 (0.07)
Ethnic group:Other (ref=White)	-0.50*** (0.10)	0.11 (0.12)	0.05 (0.06)	-0.09 (0.09)
Religion:Protestant/Evangelical(ref=White)	-0.04 (0.05)	-0.00 (0.03)	0.09 (0.05)	0.02 (0.06)
Religion:None(ref=Catholic)	-0.19*** (0.06)	-0.19*** (0.04)	-0.09* (0.04)	-0.35*** (0.11)
Religion:Other(ref=Catholic)	0.03 (0.08)	-0.22*** (0.07)	-0.13** (0.05)	-0.10 (0.11)
Income	0.01** (0.01)	-0.01** (0.00)	0.00 (0.00)	-0.01* (0.01)
Challengers of the state	0.04 (0.09)	0.05 (0.08)	-0.18 (0.16)	-0.00 (0.07)
Reach of state (Infrax)	0.27* (0.11)	0.27*** (0.06)	0.03 (0.20)	0.08 (0.05)
Urban/Rural	-0.33*** (0.09)	-0.05 (0.05)	0.07 (0.07)	0.00 (0.09)
Non identifiers (ref=Left)	-0.02 (0.05)	-0.08* (0.04)	-0.07 (0.08)	0.04 (0.08)
Center (ref=Left)	0.15*** (0.04)	0.10*** (0.03)	0.02 (0.04)	0.18** (0.06)
Right (ref=Left)	0.23*** (0.06)	0.08 (0.04)	-0.08 (0.05)	0.20** (0.07)
Percentage of sewers	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00* (0.00)
Electrification rate	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)
Survey Wave	-0.57*** (0.03)	-0.12*** (0.02)	-0.14*** (0.03)	-0.06 (0.04)
AIC	5043.54	8776.81	6909.07	3303.56
BIC	5185.52	8934.93	7056.83	3435.63
Log Likelihood	-2496.77	-4363.40	-3429.54	-1626.78
Num. obs.	2163	4126	2725	1455
Num. groups: municipio	94	66	18	68
Var: municipio (Intercept)	0.08	0.04	0.02	0.03
Var: Residual	0.53	0.46	0.70	0.50

***p < 0.001; **p < 0.01; *p < 0.05

Table 5a: Predicting political citizenship.

	Chile	Bolivia	Uruguay	Peru
(Intercept)	-0.88 (0.50)	0.36 (0.29)	0.39 (1.11)	0.04 (0.25)
Age: 30 to 44 (ref: 29 or less)	0.14** (0.04)	-0.10*** (0.03)	0.08 (0.04)	-0.03 (0.04)
Age: 45 to 64 (ref: 29 or less)	0.16*** (0.05)	-0.09** (0.03)	0.16*** (0.04)	0.01 (0.05)
Age: +65(ref: 29 or less)	0.31*** (0.06)	0.03 (0.05)	0.34*** (0.05)	0.02 (0.07)
Female (ref=male)	0.08* (0.03)	-0.07** (0.02)	-0.07* (0.03)	-0.05 (0.03)
Education: Secondary (ref=Primary)	0.05 (0.04)	-0.13*** (0.03)	0.06 (0.04)	-0.01 (0.05)
Education: Tertiary (ref=Primary)	0.11* (0.06)	-0.24*** (0.03)	0.09 (0.05)	0.04 (0.05)
Ethnic group:Indigenous (ref=White)	-0.01 (0.10)	0.14* (0.06)	0.15 (0.12)	-0.09 (0.10)
Ethnic group:Mestizo (ref=White)	-0.05 (0.03)	0.05 (0.05)	-0.07 (0.04)	0.07 (0.06)
Ethnic group:Other (ref=White)	-0.33*** (0.09)	0.03 (0.13)	0.09 (0.06)	-0.06 (0.08)
Religion:Protestant/Evangelical(ref=White)	0.01 (0.04)	0.09** (0.03)	-0.06 (0.05)	0.04 (0.05)
Religion:None(ref=Catholic)	-0.33*** (0.05)	-0.11* (0.05)	-0.12** (0.04)	0.02 (0.10)
Religion:Other(ref=Catholic)	-0.05 (0.07)	-0.12 (0.07)	-0.12* (0.05)	-0.07 (0.10)
Income	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.01)
Challengers of the state	0.11 (0.08)	-0.06 (0.08)	0.09 (0.16)	-0.00 (0.07)
Reach of state (Infrac)	0.18 (0.10)	-0.01 (0.06)	0.03 (0.20)	-0.06 (0.05)
Urban/Rural	-0.37*** (0.08)	-0.18*** (0.05)	0.01 (0.07)	-0.04 (0.08)
Nonideologues (ref=Left)	-0.01 (0.05)	-0.32*** (0.04)	-0.92*** (0.07)	0.02 (0.07)
Center (ref=Left)	0.13** (0.04)	-0.17*** (0.03)	-0.48*** (0.04)	0.13* (0.06)
Right (ref=Left)	0.32*** (0.06)	-0.20*** (0.04)	-0.71*** (0.05)	0.15* (0.07)
Percentage of sewers	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Electrification rate	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Survey Wave	0.14*** (0.03)	0.24*** (0.02)	-0.00 (0.03)	-0.31*** (0.04)
AIC	4766.65	9004.96	6848.62	3020.35
BIC	4908.63	9163.09	6996.37	3152.41
Log Likelihood	-2358.33	-4477.48	-3399.31	-1485.17
Num. obs.	2163	4126	2725	1455
Num. groups: municipio	94	66	18	68
Var: municipio (Intercept)	0.06	0.03	0.02	0.03
Var: Residual	0.47	0.49	0.68	0.41

***p < 0.001; **p < 0.01; *p < 0.05

Table 6a: Predicting Social Citizenship.

	Chile	Bolivia	Uruguay	Peru
(Intercept)	-1.98*** (0.53)	0.08 (0.28)	-1.39 (0.91)	0.16 (0.31)
Age: 30 to 44 (ref: 29 or less)	0.13** (0.05)	-0.05 (0.03)	0.04 (0.04)	-0.14** (0.05)
Age: 45 to 64 (ref: 29 or less)	0.12** (0.05)	-0.05 (0.03)	-0.03 (0.04)	-0.10 (0.05)
Age: +65(ref: 29 or less)	0.21*** (0.06)	-0.00 (0.05)	0.08 (0.05)	-0.15 (0.08)
Female (ref=male)	-0.02 (0.03)	-0.01 (0.02)	-0.06* (0.03)	-0.00 (0.04)
Education: Secondary (ref=Primary)	-0.01 (0.04)	-0.11*** (0.03)	-0.13*** (0.04)	-0.14* (0.05)
Education: Tertiary (ref=Primary)	-0.08 (0.06)	-0.23*** (0.03)	-0.25*** (0.04)	-0.09 (0.06)
Ethnic group:Indigenous (ref=White)	0.02 (0.10)	0.05 (0.06)	0.05 (0.11)	-0.05 (0.11)
Ethnic group:Mestizo (ref=White)	-0.06 (0.04)	-0.03 (0.05)	-0.01 (0.04)	-0.01 (0.07)
Ethnic group:Other (ref=White)	-0.06 (0.09)	0.05 (0.12)	0.03 (0.06)	-0.11 (0.09)
Religion:Protestant/Evangelical(ref=White)	0.07 (0.05)	0.01 (0.03)	0.00 (0.05)	0.02 (0.06)
Religion:None(ref=Catholic)	0.02 (0.05)	-0.02 (0.04)	-0.05 (0.04)	-0.14 (0.11)
Religion:Other(ref=Catholic)	-0.18* (0.08)	0.03 (0.07)	-0.09 (0.05)	-0.12 (0.12)
Income	-0.00 (0.00)	-0.00 (0.00)	-0.01 (0.00)	-0.01 (0.01)
Challengers of the state	0.27** (0.09)	-0.09 (0.08)	-0.08 (0.13)	-0.06 (0.09)
Reach of state (Infrax)	0.37*** (0.10)	0.10 (0.06)	0.43** (0.16)	0.02 (0.06)
Urban/Rural	-0.62*** (0.09)	0.06 (0.04)	0.02 (0.07)	0.06 (0.10)
Nonideologues (ref=Left)	0.06 (0.05)	-0.04 (0.04)	-0.11 (0.07)	0.19* (0.08)
Center (ref=Left)	0.14** (0.04)	0.03 (0.03)	-0.09* (0.04)	0.19** (0.06)
Right (ref=Left)	0.24*** (0.06)	0.01 (0.04)	-0.28*** (0.05)	0.35*** (0.07)
Percentage of sewers	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Electrification rate	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
Survey Wave	0.23*** (0.03)	-0.04 (0.02)	0.16*** (0.03)	-0.04 (0.04)
AIC	4958.50	8490.79	6545.55	3330.92
BIC	5100.48	8648.91	6693.30	3462.99
Log Likelihood	-2454.25	-4220.39	-3247.77	-1640.46
Num. obs.	2163	4126	2725	1455
Num. groups: municipio	94	66	18	68
Var: municipio (Intercept)	0.07	0.03	0.01	0.06
Var: Residual	0.51	0.43	0.61	0.50

*** p < 0.001; ** p < 0.01; * p < 0.05