

Supplementary Materials for Legislators' Religiosity and Same-Sex Marriage in Latin America

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Appendix A Figures

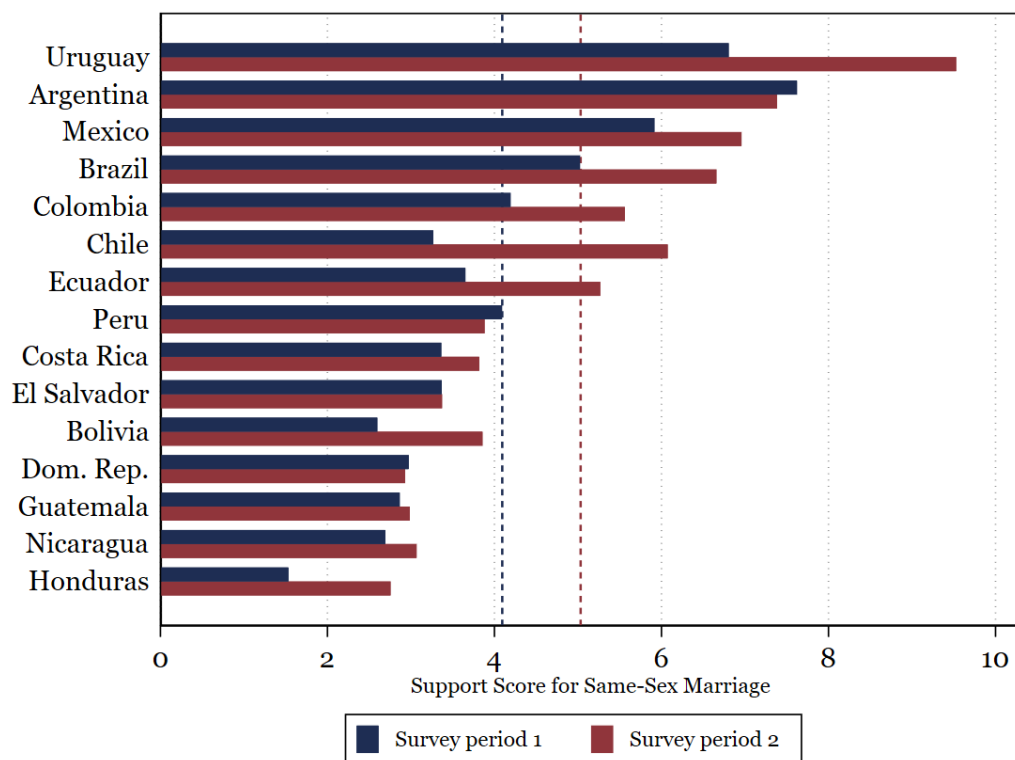
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Appendix B Tables

8

Appendix A

Figure A.1: Average support of legislators for same-sex-marriage in Latin America
2010-2017



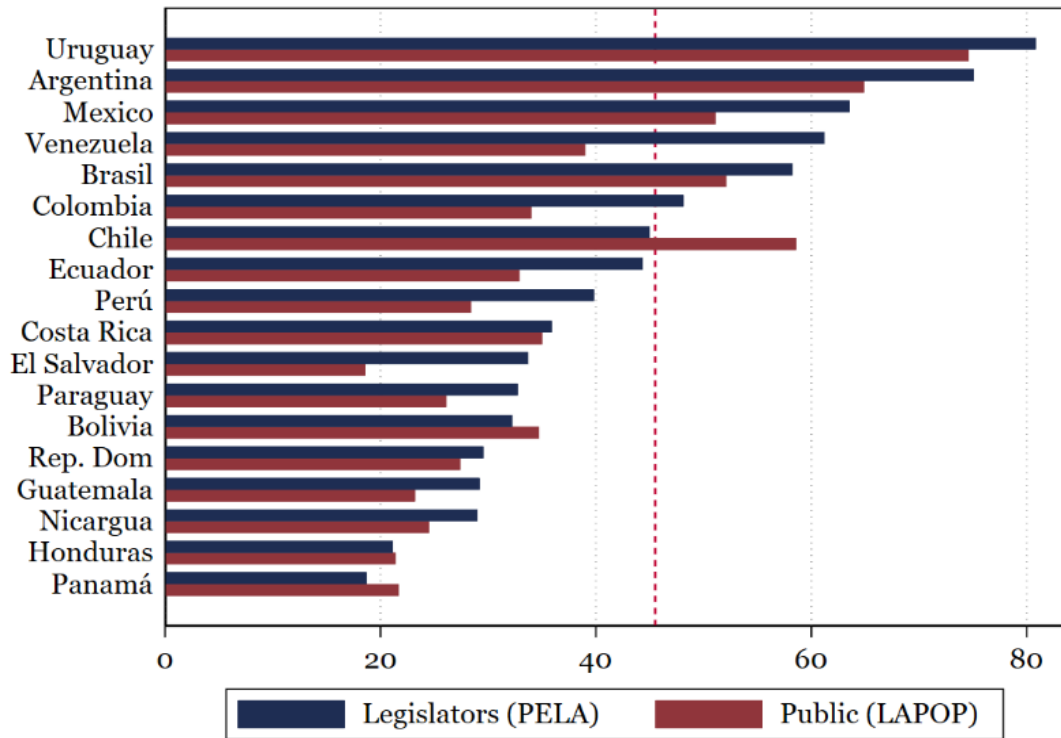


Figure A.2: Average support among legislators and citizens for same sex marriage in Latin America 2010-2017

Note: Source: The AmericasBarometer by the Latin American Public Opinion Project (LAPOP, 2016), www.LapopSurveys.org and PELA-USAL



Figure A.3: Argentinean legislators' support for same-sex marriage (2010 & 2012)

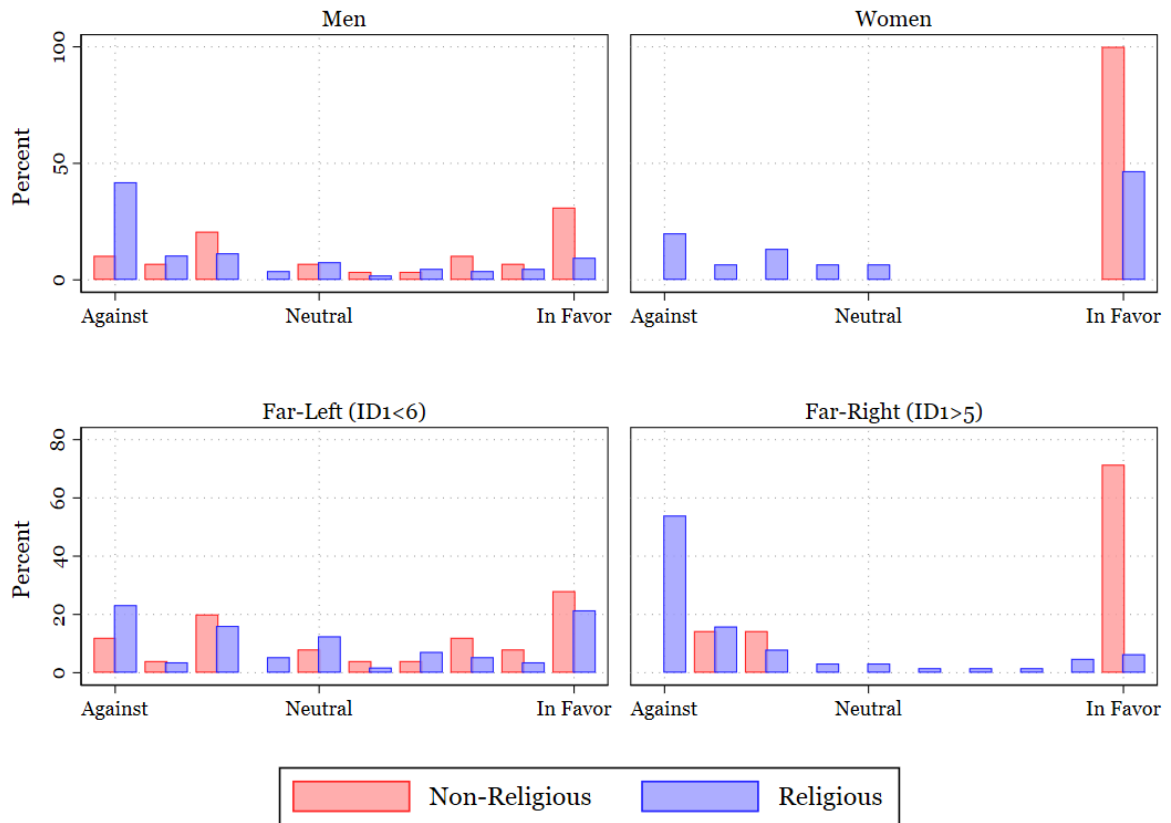


Figure A.4: Chilean legislators' support for same-sex marriage (2010 & 2014)

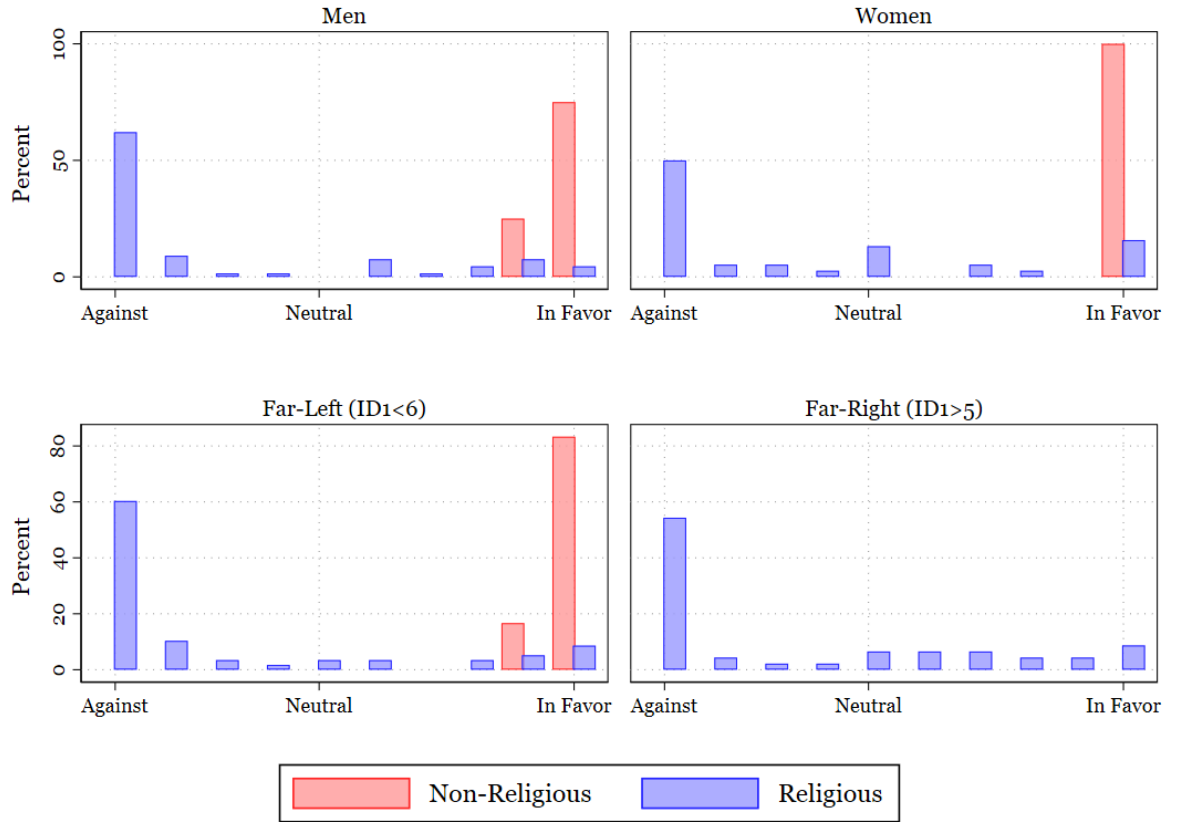


Figure A.5: Costa Rican legislators' support for same-sex marriage (2010 & 2014)

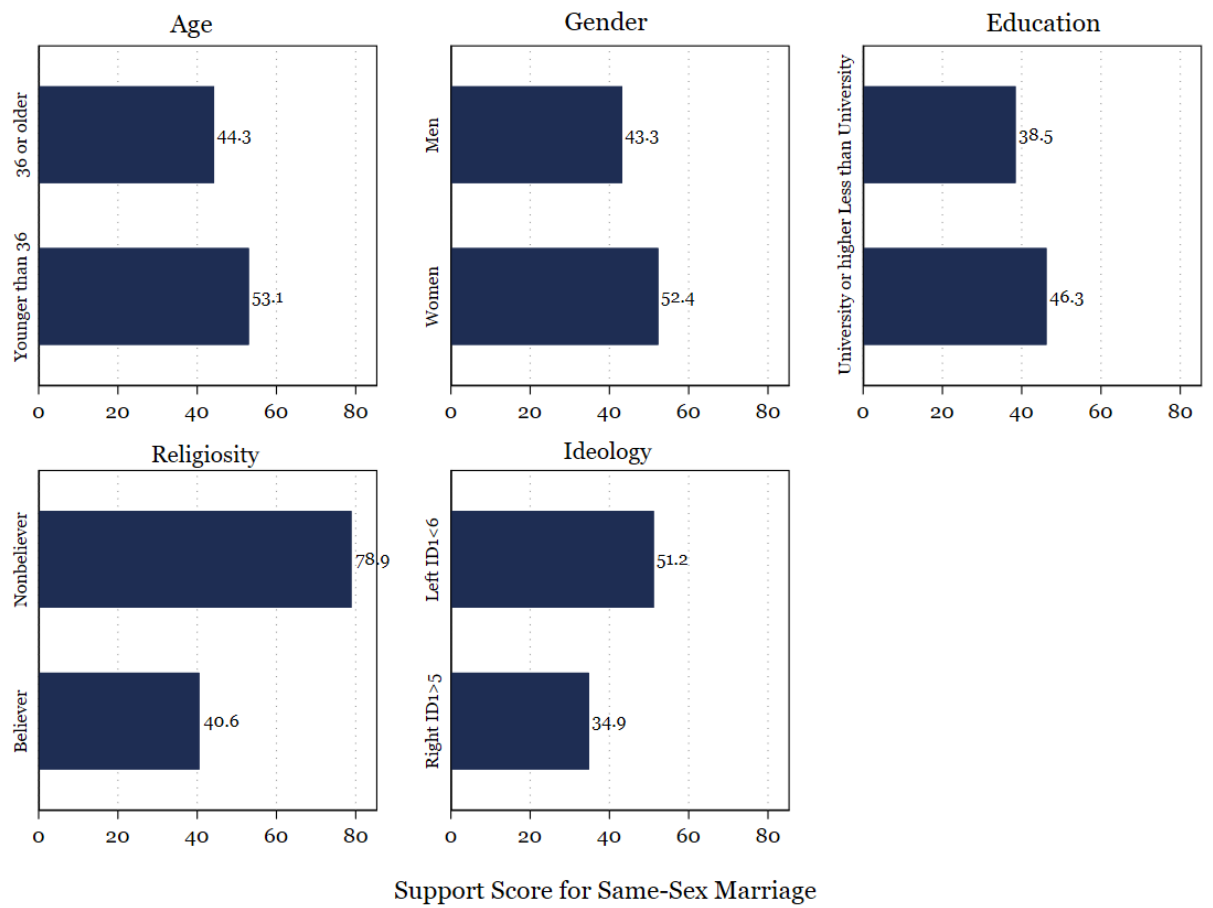


Figure A.6 Co-variates of legislators' support for same-sex marriage in Latin America

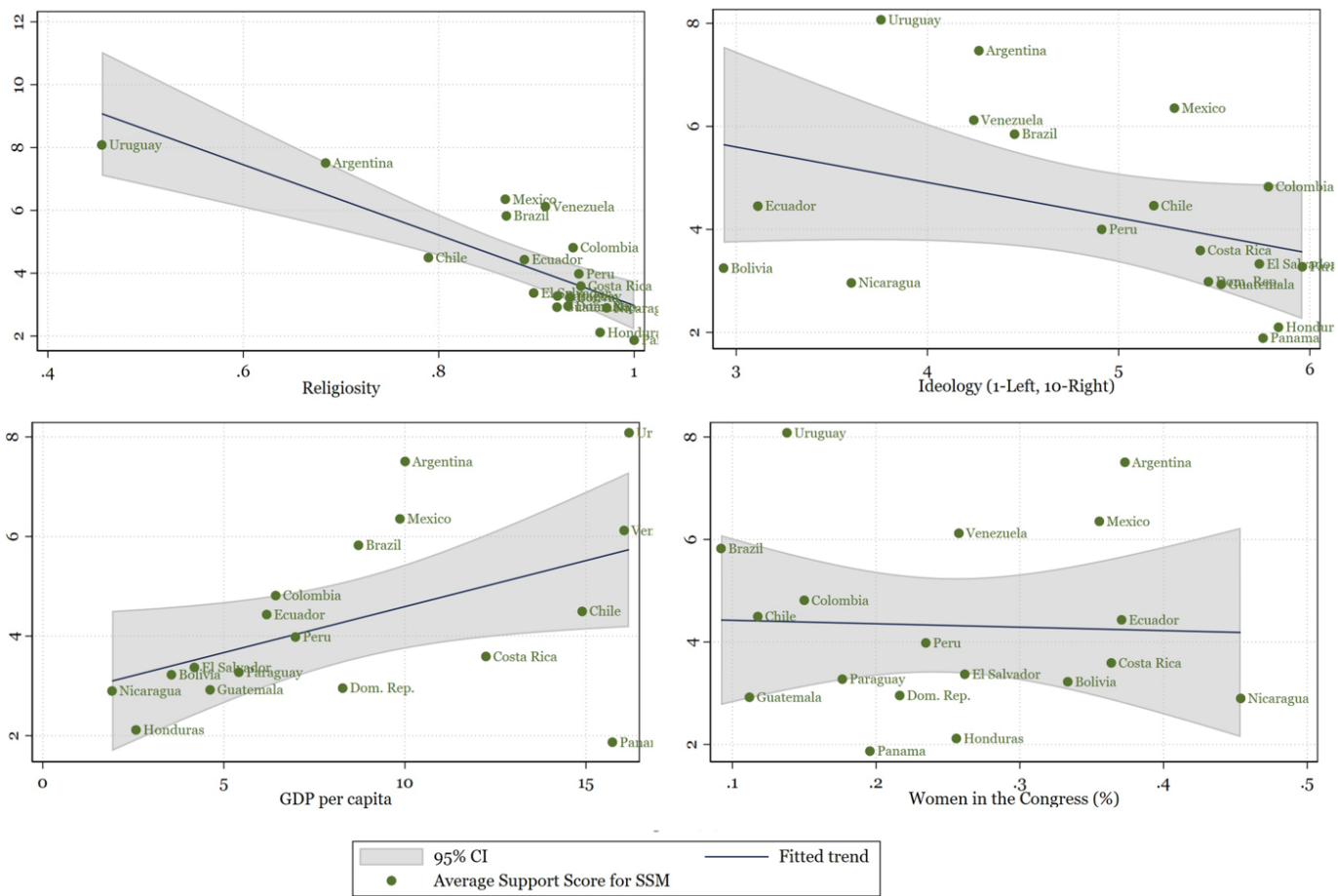


Figure A.7: Country-Level Relationships

Appendix B

Table A.1: Number of Surveys and Percent of Legislature Interviewed in PELA-USAL

<i>Country</i>	<i>Years (first and last)</i>	<i>Waves</i>	<i>Avg % of Legislature interviewed</i>
Argentina	1996-2012	1 to 6	36%
Bolivia	1995-2015	1 to 6	69%
Brazil	2005-2014	3, 5 and 6	25%
Chile	1994-2014	1 to 6	71%
Colombia	1998-2014	2 to 6	54%
Costa Rica	1994-2014	1 to 6	94%
Ecuador	1994-2017	1 to 6	94%
El Salvador	1994-2015	1 to 8	75%
Guatemala	1996-2016	1 to 6	65%
Honduras	1994-2014	1 to 6	66%
Mexico	1995-2016	1 to 7	26%
Nicaragua	1998-2017	2 to 6	67%
Panamá	2002-2014	3 to 6	86%
Paraguay	1996-2013	1 to 4 and 6	74%
Perú	1995-2011	1 to 4	76%
Rep. Dom	1995-2017	1 to 6	54%
Uruguay	1996-2015	1 to 5	76%
Venezuela	1995-2016	1, 2 and 6	38%

Table A.2: Average Support Score for Same-Sex Marriage: Temporal trends

	2010	2011	2012	2013	2014	2015	2016	2017	% change
Argentina	7.62		7.38						-3%
Bolivia	2.59					3.85			48%
Brazil	5.02				6.65				33%
Chile	3.26				6.07				86%
Colombia		41.9			5.56				33%
Costa Rica	3.36				3.81				14%
Ecuador				36.5				5.26	44%
El Salvador			3.36			3.37			0%
Guatemala			2.86				29.8		4%
Honduras	1.53				2.75				80%
Mexico	5.91			61.5			69.5		18%
Nicaragua			2.69					3.06	14%
Panamá					1.87				
Paraguay				32.7					
Perú	4.09	38.8							-5%
Rep. Dom		29.7						2.93	-1%
Uruguay	6.80					9.52			40%
Venezuela							61.2		
Total									24%

Table A.3: Variable Definitions

Variable	Pela Variable Name	Pela Question	Original outcome range	Conversion	Obs*	Mean	Std.Dev	Min	Max
<i>Age</i>	SOCD5		19-86		2,427	48.75	10.77	19	84
<i>Sex</i>	SOCD4		1 female, 2 male	1 female, 0 male	2,489	0.25	0.43	0	1
<i>Religiosity</i>	RE1	<i>Are you a believer?</i>	1 yes, 2 no	1 yes, 0 no	2,166	0.31	0.46	0	1
<i>Regular Churchgoers</i>	RE1b	<i>How often do you attend religious services?</i>	1 never, 5 more than once a week	1 yes (RE1b= 3 4 5), 0 no (RE1b= 1 2)	1,919	0.71	0.46	0	1
<i>Catholic / Evangelical</i>	RE1a	<i>What is your religion?</i>	41 categories	1 Catholic (RE1a=1 2), 0 other. 1 Evangelical (RE1a=4), 0 others.	2,086	0.04	0.21	0	1
<i>Education</i>	SOCD7	<i>Highest level of studies you have completed?</i>	1-6	1, University or higher (SOCD7 >5)	2,478	0.90	0.29	0	1
<i>Left</i>	ID1	<i>Self placement, left to right</i>	1-10,	1 to 3 far left,	2,463	0.29	0.45	0	1
<i>Right</i>	ID1			8-10 far right	2,492	0.13	0.34	0	1
<i>Ideology</i>	ID1			-	2,463	4.75	2.29	1	10
<i>Environmental Concerns</i>	PRO110	<i>Degree of Importance of the environment?</i>	1-10	-	2,492	7.48	2.11	1	10
<i>Support for Same Sex Marriage</i>	VAL1	<i>Approval of same sex partners having the right to marry?</i>	1-10	VAL 1	2,492	4.52	3.55	1	10
<i>Party</i>	partido	<i>Political Party</i>							

*Column lists observations of individuals, who are then aggregated into the 18 countries.

Table A.4: Descriptive Statistics by country

Country	Age	Sex	Religi osity	Regular Church goers	Evang elical	Education /Universit y	Ideolog y	Enviro nment	SSM score support
Argentina	53.1	0.37	0.68	0.37	0.00	0.87	4.27	6.68	7.5
Bolivia	43.7	0.33	0.93	0.71	0.05	0.65	2.93	8.13	3.2
Brazil	55.8	0.09	0.87	0.74	0.12	0.90	4.46	7.78	5.8
Chile	49.8	0.12	0.79	0.71	0.00	0.97	5.18	6.81	4.5
Colombia	46.3	0.15	0.94	0.83	0.03	0.99	5.78	8.39	4.8
Costa Rica	50.0	0.36	0.95	0.74	0.05	0.95	5.43	8.19	3.6
Ecuador	45.5	0.37	0.89	0.71	0.01	0.95	3.11	7.39	4.4
El Salvador	50.6	0.26	0.90	0.75	0.00	0.92	5.74	8.49	3.4
Guatemala	46.1	0.11	0.92	0.75	0.16	0.93	5.54	7.93	2.9
Honduras	47.2	0.26	0.97	0.84	0.16	0.85	5.84	7.40	2.1
Mexico	45.6	0.36	0.87	0.69	0.01	0.97	5.29	8.23	6.4
Nicaragua	53.4	0.45	0.97	0.77	0.05	0.93	3.60	6.51	2.9
Panama	51.0	0.20	1.00	0.72	0.00	0.85	5.76	6.63	1.9
Paraguay	45.4	0.18	0.92	0.91	0.00	0.84	5.96	9.74	3.3
Peru	50.3	0.23	0.94	0.69	0.03	0.95	4.91	8.11	4.0
Dom. Rep.	49.7	0.22	0.93	0.69	0.02	0.98	5.47	7.26	3.0
Uruguay	50.0	0.14	0.46	0.45	0.02	0.79	3.76	6.31	8.1
Venezuela	43.3	0.26	0.91	0.60	0.00	0.95	4.24	8.58	6.1

Table A.5: Description and Descriptive Statistics, Country-level Variables

Variable	Description	Variables used	Obs*	Mean	Std. Dev.	Min	Max
Average Female	Percentage of women legislators by country and year	female (SOCD4 recoded), paīs,año	2,576	0.248	0.122	0.065	0.484
Average Ideology	Percentage of legislators' ideology at the country level by year	ID1, paīs, ano	2,576	4.770	0.997	2.617	6.269
Average Far-Right	Percentage of far-right legislators at the country level by year	far_right (ID1 recoded), paīs, año	2,576	0.151	0.099	0.021	0.518
Leftist President	Dummy coded 1 when the president is leftist.	pais, año, external sources	2,576	0.543	0.498	0	1
Average Religiosity	Percentage of believer legislators at the country level by year	religious (RE1 recoded), paīs, año	2,576	0.875	0.122	0.406	1.000
GDP	GDP per capita, source: World Bank national accounts data	-	2,576	8.148	4.183	1.912	16.19
Average Environmental Concern	Percentage of Environmental Concern at the country level by year	PRO110, paīs, año	2,576				

*Column lists observations of individuals, who are then aggregated into the 18 countries.

Table A.6: Robustness checks: Dependent Variable: Support for Same-sex Marriage

	Standard						Hierarchical				
	Without Uruguay (1)	Religious Type (2)	Church Attendance (3)	Non-linear Ideology (4)	Leftist President (5)	Interactions (6)	Hierarchical +contextual (7)	Ctry Ideology (8)	Public Opinion (9)	FE-Country (10)	FE-Year Country (11)
Same-sex marriage											
Woman	0.946*** (0.143)	0.947*** (0.139)	0.928*** (0.127)	0.982*** (0.150)	0.984*** (0.150)	1.349*** (0.276)	0.903*** (0.134)	0.902*** (0.133)	0.897*** (0.140)	0.909*** (0.133)	0.904*** (0.133)
Age	-0.0196** (0.00978)	-0.0153 (0.0118)	-0.0224*** (0.00821)	-0.0175* (0.00999)	-0.0171* (0.00994)	-0.0177* (0.0106)	-0.0230*** (0.00623)	-0.0230*** (0.00622)	0.0237*** (0.00623)	0.0231*** (0.00588)	-0.0232*** (0.00602)
Believer	-2.507** (0.270)			-2.385*** (0.264)	-2.396*** (0.259)	-2.225*** (0.326)	-2.285*** (0.262)	-2.281*** (0.264)	-2.315*** (0.270)	-2.290*** (0.262)	-2.287*** (0.263)
Evangelical		-1.664*** (0.412)									
Regular Churchgoer			-1.282*** (0.195)								
Ideology	-0.272*** (0.0643)	-0.280*** (0.0690)	-0.234*** (0.0661)				-0.294*** (0.0662)	-0.297*** (0.0670)	-0.272*** (0.0654)	-0.288*** (0.0660)	-0.290*** (0.0664)
Radical Left				0.845*** (0.320)	0.816*** (0.307)	0.859*** (0.333)					
Radical Right				-1.034*** (0.334)	-1.035*** (0.339)	1.209 (1.266)					
University	1.199*** (0.318)	1.113*** (0.306)	0.999*** (0.359)	1.204*** (0.294)	1.210*** (0.295)	1.220*** (0.361)	0.948*** (0.263)	0.945*** (0.261)	0.919*** (0.255)	0.899*** (0.259)	0.905*** (0.258)
Environmental Concerns	-0.000664 (0.00968)	-0.00500 (0.00901)	0.00116 (0.00757)	0.00224 (0.00971)	0.000285 (0.00855)	0.00194 (0.0108)	-0.0114* (0.00634)	-0.0115** (0.00634)	-0.0129* (0.00708)	-0.0114* (0.00644)	-0.0110* (0.00633)
GDP per capita	0.108 (0.0710)	0.0874 (0.0692)	0.0964 (0.0626)	0.108 (0.0725)	0.116* (0.0684)	0.109 (0.0828)	0.0784 (0.0497)	0.0789* (0.0445)	-0.572 (0.493)	-0.491 (0.571)	-0.416 (0.301)
Average Far Right	0.574 (2.507)	0.441 (2.554)	1.941 (2.241)	0.158 (2.638)	0.294 (2.756)	0.212 (2.804)	-0.508 (2.161)		-0.368 (1.106)	2.173 (2.515)	2.797* (1.512)
Ctry Ideology								0.133 (0.273)			
Ctry Women	0.0799 (2.262)	0.141 (2.184)	1.868 (2.016)	0.911 (2.224)	0.678 (2.047)	0.865 (2.761)	1.548 (1.856)	1.919 (2.134)	1.404* (0.809)	2.209** (1.120)	-1.334* (0.700)
Ctry Religiosity	-9.681*** (3.480)	-8.296*** (2.242)	-7.308*** (2.018)	-6.077*** (1.882)	-5.508*** (1.835)	-6.135*** (1.882)	-9.107*** (1.595)	-9.333*** (1.676)	-4.431** (1.979)	-10.05*** (2.945)	-8.363*** (1.877)
Leftist President					0.328 (0.475)		-0.207 (0.468)	-0.101 (0.529)	-1.039*** (0.206)	-1.121*** (0.288)	-0.126 (0.398)

Woman & Believer							-0.332 (0.311)					
Believer & Radical Right							-2.169** (1.082)					
Woman & Radical Right							-0.565* (0.292)					
Ctry Environment							0.627*** (0.216)	0.568*** (0.216)	0.255* (0.146)	0.295* (0.155)	-0.189 (0.199)	
Public Opinion Religiosity									-1.416 (1.717)			
Public Opinion SSM									0.629*** (0.127)			
Constant	15.290** (3.573)	11.686*** (2.341)	10.921*** (2.077)	10.185*** (1.989)	9.492** (2.170)	10.068*** (2.082)	10.252*** (1.727)	10.042*** (1.977)	15.251** (6.774)	20.524*** (6.837)	21.722*** (3.651)	
σ^2_ε	3.08***	3.08***	2.97***	3.07***	3.09***	2.84***	2.83***	2.84***	2.83***	2.83***	2.82***	
σ^2_μ							0.98***	0.99***	.75e-12***	.52e-08***	5.07e-11***	
N	2250	2008	1851	2386	2386	2386	2386	2386	2310	2386	2386	

Standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table A.7: Robustness checks for interactive relationships.

	Without Uruguay (1)	Religious Type (2)	Church Attendance (3)	Non-linear Ideology (4)	Leftist President (5)	Interactions (6)	Hierarchical +contextual (7)	Ctry Ideology (8)	Public Opinion (9)	FE-Country (10)	FE-Year Country (11)
Woman	0.970*** (0.145)	0.947*** (0.137)	0.928*** (0.127)	0.914*** (0.139)	0.914*** (0.139)		0.909*** (0.132)	0.909*** (0.132)	0.899*** (0.139)	0.913*** (0.132)	0.908*** (0.132)
Age	-0.0191** (0.00971)	-0.0155 (0.0117)	-0.0221*** (0.00821)	-0.0228*** (0.00617)	-0.0227*** (0.00619)	-0.0182 (0.0105)	-0.0225*** (0.00619)	-0.0226*** (0.00618)	-0.0232*** (0.00618)	-0.0227*** (0.00586)	-0.0228*** (0.00598)
Believer	7.416*** (2.458)			1.662 (1.193)	1.646 (1.187)		1.457 (1.180)	1.461 (1.176)	1.268 (1.169)	0.996 (1.146)	1.378 (1.174)
Evangelical		-1.663*** (0.412)									
Regular Churchgoer			-1.274*** (0.193)								
Ideology	-0.268*** (0.0637)	-0.278*** (0.0690)	-0.234** (0.0661)				-0.297*** (0.0654)	-0.300*** (0.06663)	-0.281*** (0.0656)	-0.292*** (0.0654)	-0.294*** (0.0657)
Radical Left				1.175*** (0.304)	1.175*** (0.304)	0.869*** (0.327)					
Radical Right				-0.936***	-0.936***						

University	1.213*** (0.319)	1.106*** (0.305)	0.995*** (0.359)	0.921*** (0.257)	0.922*** (0.257)	1.169*** (0.365)	0.916*** (0.273)	0.912*** (0.271)	0.900*** (0.265)	0.872*** (0.268)	0.877*** (0.267)
Environmental Concerns	-0.00207 (0.00958)	-0.00522 (0.00904)	0.00111 (0.00759)	-0.00983 (0.00616)	-0.0101 (0.00615)	0.00174 (0.0105)	-0.0127** (0.00633)	-0.0128** (0.00634)	-0.0142** (0.00701)	-0.0124* (0.00639)	-0.0122* (0.00630)
GDP per capita	0.105 (0.0684)	0.0871 (0.0689)	0.0962 (0.0626)	0.0725 (0.0724)	0.0752 (0.0649)	0.106 (0.0814)	0.0783 (0.0483)	0.0781* (0.0435)	-0.440 (0.457)	-0.486 (0.589)	-0.502* (0.301)
Average Far Right	0.533 (2.472)	0.382 (2.528)	1.909 (2.227)	-1.309 (2.563)	-1.955 (2.469)	0.246 (2.756)	-0.401 (2.098)		-1.637 (1.092)	1.891 (2.580)	2.913** (1.485)
Ctry Ideology								0.126 (0.265)			
Ctry Women	0.148 (2.209)	0.0876 (2.163)	1.817 (2.000)	1.718 (2.223)	1.662 (2.144)	0.988 (2.724)	1.432 (1.814)	1.778 (2.061)	1.814** (0.736)	2.100* (1.156)	-1.863*** (0.666)
Ctry Religiosity	-0.213 (3.521)	-5.612** (2.758)	-4.589* (2.385)	-4.387** (1.715)	-3.791** (1.621)	-3.832** (1.726)	-6.056*** (1.517)	-6.267*** (1.561)	-4.430* (2.506)	-7.515** (3.572)	-5.919*** (1.973)
Believer & Religiosity	-11.50*** (2.891)	-2.659* (1.596)	-2.662*** (0.626)	-4.856*** (1.419)	-4.837*** (1.415)	-3.328** (0.296)	-4.639*** (1.411)	-4.638*** (1.407)	-4.444*** (1.403)	-4.072*** (1.369)	-4.543*** (1.402)
Leftist President					0.465 (0.453)		-0.221 (0.460)	-0.123 (0.516)	-1.132*** (0.175)	-1.162*** (0.292)	-0.0518 (0.400)
Woman & Believer						1.016*** (0.182)					
Woman & Radical Right						-0.503* (0.276)					
Believer & Radical Right						-0.941** (0.394)					
Ctry Environment							0.614*** (0.211)	0.562*** (0.207)	0.388*** (0.144)	0.338** (0.165)	-0.199 (0.204)
Public Opinion Religiosity									0.614 (1.428)		
Public Opinion SSM									0.689*** (0.121)		
Constant	7.162** (3.373)	11.692*** (2.339)	10.870*** (2.701)	8.298*** (1.676)	7.093** (2.208)	8.795*** (1.949)	8.088*** (1.407)	7.887*** (1.685)	9.521 (6.121)	18.224** (7.354)	20.715*** (3.537)
σ^2_ϵ	3.07***	3.08***	2.97***	3.07***	3.06***	3.06***	2.83***	2.83***	2.82***	2.83***	2.81***
σ^2_μ							0.98***	0.97***	1.63e-12***	0.13***	4.61e-11***
N	2250	2008	1851	2386	2386	2386	2386	2386	2310	2386	2386

Standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table A.8: Robustness checks: using views only before SSM implementation

	Standard			Hierarchical				
	Base	Non-linear Ideology	Interactions	Base	+Contextual	Religiosity and Believer	FE- Country	Public Opinion
Same-sex marriage								
Woman	0.895*** (0.148)	0.907*** (0.159)	1.579*** (0.435)	0.849*** (0.138)	0.850*** (0.137)	0.848*** (0.137)	0.850*** (0.137)	0.848*** (0.137)
Believer	-2.576*** (0.311)	-2.593*** (0.317)	-2.391*** (0.383)	-2.543*** (0.307)	-2.538*** (0.308)	0.545 (1.647)	-2.533*** (0.306)	-2.538*** (0.307)
Ideology	-0.267*** (0.0684)			-0.282*** (0.0713)	-0.285*** (0.0724)	-0.285*** (0.0722)	-0.285*** (0.0725)	-0.285*** (0.0725)
Radical Left		0.913** (0.369)	0.921** (0.427)					
Radical Right		-0.919*** (0.345)	1.437 (1.816)					
Age	-0.0254*** (0.00857)	-0.0254*** (0.00875)	-0.0258*** (0.00844)	-0.0268*** (0.00659)	-0.0263*** (0.00659)	-0.0263*** (0.00650)	-0.0262*** (0.00654)	-0.0273*** (0.00664)
University	1.154*** (0.320)	1.148*** (0.315)	1.155*** (0.362)	0.900*** (0.289)	0.908*** (0.292)	0.893*** (0.299)	0.865*** (0.290)	0.864*** (0.291)
Environmental Concerns	0.00413 (0.00963)	0.00592 (0.00979)	0.00542 (0.00927)	-0.00746 (0.00705)	-0.00901 (0.00684)	-0.00971 (0.00681)	-0.00876 (0.00688)	-0.00894 (0.00688)
GDP per capita	0.0888 (0.0654)	0.0892 (0.0659)	0.0911 (0.0660)	0.0782 (0.0607)	0.0565 (0.0499)	0.0573 (0.0491)	0.117 (0.572)	0.339 (0.549)
Average Far Right	-0.151 (2.309)	-0.450 (2.353)	-0.369 (1.700)	0.323 (1.924)	-1.777 (2.301)	-1.791 (2.286)	-4.060* (2.217)	-7.347*** (2.757)
Ctry Women	0.133 (1.858)	0.356 (1.878)	0.330 (1.913)	0.285 (1.717)	1.838 (1.998)	1.850 (1.976)	2.855*** (0.778)	1.801** (0.695)
Ctry Religiosity	-4.316* (2.302)	-4.150* (2.385)	-4.189* (2.398)	-5.194** (2.349)	-7.341*** (2.247)	-4.618** (2.091)	-7.645* (4.618)	-13.30*** (4.385)
Leftist President					0.0532 (0.514)	0.0758 (0.517)	-1.512*** (0.437)	-2.154*** (0.641)
Ctry Environment					0.466*** (0.176)	0.444** (0.174)	0.499** (0.196)	0.872*** (0.312)
Ctry Ideology					0.265 (0.356)	0.280 (0.357)	0.761** (0.318)	0.352 (0.317)
Woman & Radical Right			-0.541* (0.326)					
Woman & Believer			-0.656 (0.433)					
Believer & Radical Right			-2.275 (1.757)					
Believer & Religiosity						-3.695* (1.933)		
Public Religiosity								6.159 (3.910)
Public Opinion SSM								0.852*** (0.296)
σ_{2e}^2	3.00***	3.00***	3.00***	2.84***	2.84***	2.84***	2.83***	2.83***
σ_{2u}^2				0.93***	0.83***	0.83***	1.18e-11***	1.18e-11***
N	1989	1989	1989		1989	1989	1989	1989

Standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table A.9: Correlation Coefficients

	Support SSM	Woman	Age	Believer	Ideology	University	Environmental concerns	GDP	Average Far Right	Ctry Women	Ctry Religiosity
Support SSM	1.00										
Female	0.11	1.00									
Age	-0.03	-0.07	1.00								
Believer	-0.36	0.01	-0.05	1.00							
Ideology	-0.25	-0.08	-0.03	0.28	1.00						
University	0.06	-0.01	-0.08	0.02	0.04	1.00					
Environmental concerns	-0.04	0.03	-0.01	0.04	0.02	-0.03	1.00				
GDP	0.30	-0.02	0.06	-0.16	-0.01	0.05	-0.04	1.00			
Average Far Right	-0.17	-0.03	-0.02	0.12	0.23	0.06	0.05	-0.21	1.00		
Ctry Women	-0.01	0.27	0.00	-0.01	-0.12	-0.01	0.00	-0.08	-0.10	1.00	
Ctry Religiosity	-0.37	-0.01	-0.06	0.32	0.16	0.04	0.07	-0.50	0.38	-0.03	1.00