Re-Assessing Governmental Corruption of Religion: Where Political Theory Meets Empirical Evidence

Ethnicities (2026)

Supplementary Appendix

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Table A1. Country-Level Respondents to WVS, Christian Majority States, 1990-2014.

	Wave 2 1990-1993			***Wave 3 1994-1998***			***Wave 4 1999-2004***			***Wave 5 2005-2009***			***Wave 6 2010-2014***		
Country	Year	Maj	Min	Year	Maj	Min	Year	Maj	Min	Year	Maj	Min	Year	Min	Min
Andorra										2005	545	44			
Argentina	1991	761	83	1995	835	91	1999	1002	110	2006	742	91	2013	675	124
Armenia				1997	1654	41							2011	992	37
Australia				1995	1561	78				2005	800	53	2012	772	64
Belarus				1996	1145	165							2011	1127	194
Brazil	1991	1246	162	1997	799	205				2006	904	408	2014	784	483
Bulgaria				1997	560	149				2006	736	106			
Canada	1990	1198	66				2000	1283	117	2006	1213	317			
Chile	1990	1016	207	1996	712	163	2000	644	145	2006	603	171	2012	638	114
Colombia				1997	2468	266	*1998*	*2586*	*196*	2005	2243	383	2012	927	257
Croatia				1996	989	38									
Cyprus										2006	519	483	2011	463	471
Czech Republic	1991	391	1	1998	481	0									
Dominican Republic				1996	245	66									
Ecuador													2013	753	166
El Salvador							1999	738	316						
Estonia				1996	265								2011	507	4
Ethiopia										2007	971	503			
Finland				1996	800	66				2005	837	24			
France										2006	411	86			
Georgia				1996	1704	171				2009	1402	74	2014	1126	65
Germany				1997	1003	7				2006	1113	57	2013	980	105
Ghana										2007	1168	327	2012	1231	249
Guatemala							2004	560	344						
Hungary				1998	366	136				2009	471	231			

Italy										2005	885	5			
Latvia				1996	672										
Lithuania				1997	778	67									
Macedonia				1998	457	250	2001	627	276						
Mexico	1990	1206	86	1996	959	182	2000	1110	102	2005	1127	151	2012	1391	246
Moldova				1996	817	7	2002	880	55	2006	965	58			
Montenegro				1996	152	71	2001	732	285						
Netherlands										2006	129	392	2012	201	481
New Zealand				1998	920	52	2004	590	51				2011	501	47
Norway				1996	990	28									
Peru				1996	999	122	2001	1236	172	2006	1066	249	2012	883	185
Philippines				1996	1017	182	2001	858	204				2012	836	241
Poland				1997	1078	28				2005	944	32	2012	889	12
Romania				1998	1091	103				2005	1536	227	2012	1285	194
Russia	1990	547	123	1995	978	112				2006	1123	129	2011	1531	242
Rwanda										2007	788	689	2012	851	505
Serbia				1996	839	164	2001	949	161	2006	1063	97			
Slovakia	1990	325	40	1998	801	149									
Slovenia				1995	715	46				2005	675	61	2011	695	55
South Africa	1990	2045	478	1996	2052	493	2001	2207	383	2006	2148	337	2013	1933	637
Spain	1990	1239	21	1995	1006	27	2000	980	26	2007	956	10	2011	861	38
Sweden	1990	797	59	1996	893	29	1999	704	54	2006	681	36	2011	716	60
Switzerland				1996	1068	33				2007	916	73			
Tanzania							2001	607	535						
Trinidad & Tobago										2006	650	286	2010	612	304
United Kingdom										2005	298	197			
United States	1990	697	681	1995	545	670	1999	314	585	2006	401	479	2011	610	899
Ukraine				1996	1569	188				2006	603	84	2011	1103	182
Uruguay				1996	422	100				2006	338	112	2011	237	150
Venezuela				1996	990	91	2000	787	84						
Zambia										2007	694	724			
Zimbabwe							2001	407	443				2012	1063	344

Table A2. Primary Models, Standard Coefficients (not Odds Ratios).

Mixed Effects Ologits	Majority Religionists			Minority Religionists		
	(1)	(2)	(3)	(4)	(5)	(6)
Gen. Religious Funding	**0.028***			**-0.100*****		
(yr lag)	**(0.014)**			**(0.026)**		
Excl. Religious Funding		**-0.254*****			**-0.452*****	
(yr lag)		**(0.054)**			**(0.076)**	
Religious Entanglement			**-0.093*****			**0.275****
(yr lag)			**(0.027)**			**(0.085)**
Religious Discrimination	0.006	0.007*	0.005	-0.017*	-0.010	-0.021**
(yr lag)	(0.003)	(0.003)	(0.003)	(0.008)	(0.008)	(0.008)
Church Attendance	0.289***	0.289***	0.289***	0.214***	0.213***	0.215***
	(0.004)	(0.004)	(0.004)	(0.008)	(0.008)	(0.008)
Self-Report Religious	0.878***	0.876***	0.877***	0.638***	0.638***	0.639***
	(0.020)	(0.020)	(0.020)	(0.044)	(0.044)	(0.044)
Self-Report Atheist	-0.636***	-0.642***	-0.646***	-0.220	-0.228	-0.222
	(0.070)	(0.070)	(0.070)	(0.155)	(0.155)	(0.155)
Life Satisfaction	0.031***	0.031***	0.031***	0.044***	0.044***	0.045***
	(0.003)	(0.003)	(0.003)	(0.007)	(0.007)	(0.007)

Education	-0.091***	-0.091***	-0.092***	-0.073***	-0.073***	-0.072***
	(0.004)	(0.004)	(0.004)	(0.008)	(0.008)	(0.008)
Social Class	-0.013	-0.014	-0.014	0.001	0.000	0.002
	(0.008)	(0.008)	(0.008)	(0.016)	(0.016)	(0.016)
Political Views (L-R)	0.047***	0.047***	0.047***	0.049***	0.049***	0.050***
	(0.003)	(0.003)	(0.003)	(0.007)	(0.007)	(0.007)
Log GDP per capita	0.163*	0.162*	0.224**	-0.124	-0.381*	-0.211
	(0.077)	(0.077)	(0.076)	(0.143)	(0.154)	(0.137)
Polity2 score	0.003	0.004	0.002	-0.038**	-0.039**	-0.041***
	(0.005)	(0.005)	(0.005)	(0.012)	(0.012)	(0.012)
Regime Durability	-0.008**	-0.007**	-0.007**	0.003	0.008	-0.002
	(0.003)	(0.003)	(0.003)	(0.004)	(0.005)	(0.004)
Religious Majority %	-0.018***	-0.018***	-0.016***	-0.002	-0.011	0.006
	(0.005)	(0.005)	(0.005)	(0.010)	(0.011)	(0.010)
Log Population	-0.245*	-0.230*	-0.281**	-0.024	0.014	0.002
	(0.096)	(0.099)	(0.099)	(0.119)	(0.127)	(0.111)
Religious Diversity	-3.084***	-3.290***	-3.195***	-2.915**	-4.418***	-1.593
	(0.418)	(0.412)	(0.417)	(1.091)	(1.151)	(1.026)
1.Post-Soviet	-0.684	-0.424	-0.458	0.181	0.104	-0.331
	(0.385)	(0.392)	(0.382)	(0.516)	(0.539)	(0.495)
2.Asia	1.392	1.464	1.650	0.702	0.231	0.173
	(0.995)	(1.041)	(1.003)	(1.150)	(1.240)	(1.091)
3.Sub-Saharan Africa	0.944*	0.674	1.207*	0.732	0.056	0.157
	(0.465)	(0.489)	(0.469)	(0.638)	(0.676)	(0.616)
4.Latin America	0.125	0.307	0.213	-0.454	-0.225	-0.623
	(0.393)	(0.410)	(0.395)	(0.484)	(0.519)	(0.462)
Constant cuts 1-3	Included	Included	Included	Included	Included	Included
Observations	78,132	78,132	78,132	15,879	15,879	15,879
Log Likelihood	-82430.750	-82421.188	-82426.741	-18074.033	-18061.468	-18076.480

Standard errors are in parentheses
**** p<0.001, ** p<0.01, * p<0.05*

Discussion of Marginal Effects Analysis

The main text of this article discusses the considerable extent to which our hypotheses regarding the influence of distinct forms of governmental support for religion (GRS) influence confidence in the Church by members of Christian-majority countries' religious majority and religious minorities. Statistical analyses describe the results of our multilevel ordered logit regressions via odds ratios, matching data from the Religion and State project, round 3 (RAS3) to country-level surveys conducted by the World Values Survey between 1990 and 2014.

The odds ratio approach allows us to estimate the probability that increasing scores in each form of GRS should increase or decrease the degree of confidence reported by majority or minority participants in the Church. This statistic offers an *overall* estimate of how changes in values of our key independent variables, namely levels of general religious funding, exclusive religious funding for the majority religion, and entanglement between religious institutions and the state relate to popularly expressed confidence in the Church.

We are able to provide an even more refined estimates using marginal effects analyses. These analyses tell us the likelihood that increasing levels of each time of GRS measured will result in participants reporting confidence in the Church at *each* possible level, from the lowest degree of confidence at 1 to the highest at 4. This degree of detail offers further empirical support for the hypotheses presented in the main text. We have however relegated these discussions to the Appendix so as not to overwhelm non-statistically minded readers with technical details. Results for each of our six models, counterposing predicted effects between majority and minority religionists, are visually presented in Figure A1, with all plots presented with 95% confidence intervals. Specific marginal effects for each level of confidence in the Church for each model are found in Table A3.

Regarding general religious funding, we confirm the analysis presented in the main text that while increasing general funding for religion increases majority religionist confidence in the Church, it decreases minority religionist confidence. As in the main text, the substantive strength of these tests is not considerable, but they remain statistically significant. For members of the religious majority, increasing levels of general funding predict decreasing probability of about 0.2% of reporting the lowest possible level of confidence in the Church (score 1), but increasing probability of reporting the highest possible confidence in the Church (score 4) by about 0.5%. By contrast, for members of religious minorities, each increasing level of general funding predicts an increasing probability of the lowest possible level of confidence in the Church by about 0.9% but a decreasing probability of reporting the highest possible confidence in the Church by about 1.7%.

Regarding exclusive religious funding, we offer even stronger confirmation of the magnitude of the hypothesized effect, namely that increasing religious funding exclusivity leads to greater disenchantment by both religious majorities and minorities in the Church. For members of the religious majority, this translates to an increasing probability of about 1.4% of reporting the lowest level of confidence in the Church and a decreasing probability of about 4.2% of reporting the highest level of confidence in the Church given increased religious funding exclusivity. Minorities follow the same pattern with even more substantive effect, with an increasing probability of about 3.7% of reporting the lowest level of confidence in the Church and a decreasing probability of about 7.5% of reporting the highest level of confidence given increased religious funding exclusivity.

Finally, we confirm the opposing trends of confidence in the Church for religious majorities and minorities discussed in the main text, given increasing religious institutional entanglement. This effect is not particularly substantively strong, but still quite significant for the majority, with an increasing probability of about 0.5% in expressing the lowest level confidence in the Church and an decreasing probability of about 1.5% given increased religion-state entanglement. For members of religious minorities, this effect is quite a bit stronger, with decreasing probabilities of about 2.6% of expressing the lowest confidence in the Church and with increasing probabilities of about 4.5% of expressing the highest confidence in the Church given increased religion-state entanglement.

Table A3. Average Marginal Effects on Confidence in the Church

Model	Majority/ Minority?	Independent Variable	Confidence in the Church			
			1	2	3	4
1	Majority	General Religious Funding	-0.0016 *	-0.0026 *	-0.0005	0.0047 *
4	Minority		0.0090 ***	.0071 ***	0.0007	-0.0167 ***
2	Majority	Exclusive Religious Funding	0.0141 ***	0.0236 ***	0.0039	-0.0416 ***
5	Minority		0.0368 ***	0.0312 ***	0.0072	-0.0752 ***
3	Majority	Religious Entanglement	0.0051 ***	0.0086 ***	0.0016	-0.0153 ***
6	Minority		-0.0259 **	-0.0193 **	-0.0002	0.0454 ***

**** p<0.001, ** p<0.01, * p<0.05*
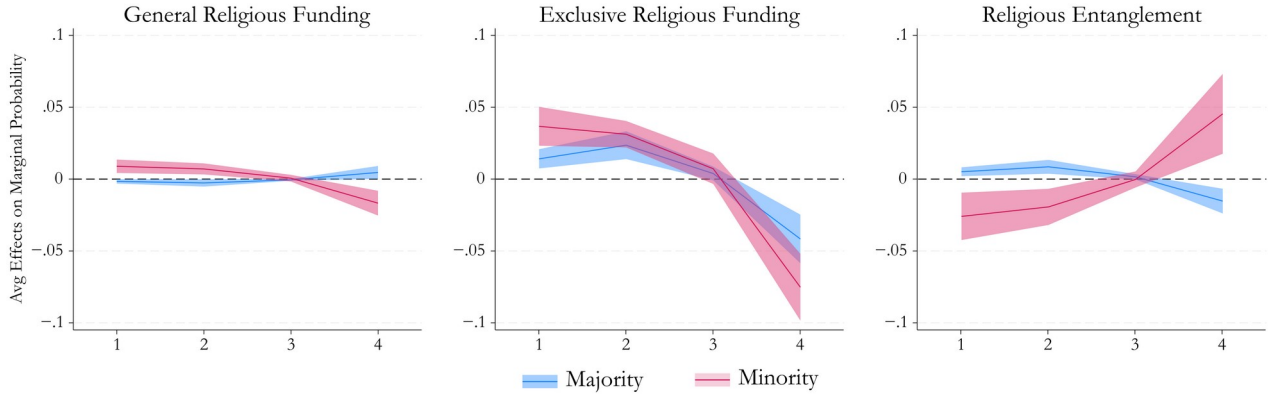
Figure A1. Average Marginal Effects on Confidence in the Church, 95% CIs