

# Tables, Figures, and Supplementary Material

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**Tables (paper)**

## Table 1 (paper)

Table 1: Main results (logit regression with robust standard errors clustered by country)

	(1)	(2)	(3)	(4)
fund	0.40* (0.05)	0.42* (0.05)		
fund_contribution mandatory all			-1.56* (0.32)	
fund_contribution mandatory some			0.85* (0.24)	
fund_contribution voluntary			1.07* (0.10)	
fund_usage few benefit				0.94* (0.08)
fund_usage all benefit				0.14* (0.06)
subject_energy	0.24* (0.09)	0.24* (0.09)	-2.39* (0.51)	0.24* (0.09)
subject_freshwater	-0.31* (0.12)	-0.31* (0.12)		-0.41* (0.11)
subject_habitat	0.62* (0.07)	0.62* (0.07)	-15.62* (0.56)	0.67* (0.07)
subject_nature	0.35* (0.06)	0.34* (0.06)	1.29* (0.32)	0.32* (0.06)
subject_ocean	-0.62* (0.06)	-0.61* (0.06)	-0.72* (0.13)	-0.63* (0.07)
subject_pollution	0.88* (0.07)	0.87* (0.07)	1.86* (0.42)	0.90* (0.07)
subject_species	0.11* (0.05)	0.11* (0.05)	0.63* (0.21)	0.11* (0.05)
subject_weapons	0.06 (0.11)	0.05 (0.12)	1.29* (0.31)	0.17 (0.11)
obligations	-0.21* (0.05)	-0.21* (0.05)	-2.18* (0.37)	-0.26* (0.04)
mon_and_enf	0.39* (0.03)	0.38* (0.03)	-0.65* (0.23)	0.34* (0.04)
dispute_settlement	0.52* (0.05)	0.51* (0.05)	1.34* (0.20)	0.44* (0.05)
public_good_global	-0.37* (0.06)	-0.37* (0.05)	-0.17 (0.20)	-0.42* (0.05)
public_good_mixed	-0.61* (0.06)	-0.61* (0.06)		-0.62* (0.06)
trade_openness	0.05 (0.06)	0.05 (0.06)	0.08 (0.07)	0.05 (0.06)
igo_membership_count	0.02* (0.004)	0.02* (0.004)	0.02* (0.01)	0.02* (0.004)
polity	0.03* (0.01)	0.03* (0.01)	0.01 (0.01)	0.03* (0.01)
gdppc	0.13* (0.04)	0.16* (0.04)	0.05 (0.06)	0.13* (0.04)
gdppc_squared	-0.05* (0.02)	-0.05* (0.02)	-0.07* (0.03)	-0.05* (0.02)
gdp	0.04 (0.04)	0.04 (0.04)	0.01 (0.05)	0.04 (0.04)
legislative_approval	0.10 (0.11)	0.10 (0.11)	0.14 (0.13)	0.10 (0.11)
ratification_global	0.05* (0.002)	0.05* (0.002)	0.04* (0.003)	0.05* (0.002)
ratification_in_region	0.02* (0.002)	0.02* (0.002)	0.002 (0.002)	0.02* (0.002)
t1	-0.25* (0.02)	-0.25* (0.02)	-0.30* (0.04)	-0.25* (0.02)
t2	0.01* (0.001)	0.01* (0.001)	0.01* (0.001)	0.01* (0.001)
t3	-0.0001* (0.0000)	-0.0001* (0.0000)	-0.0001* (0.0000)	-0.0001* (0.0000)
fund:gdppc		-0.13* (0.04)		
Constant	-3.45* (0.29)	-3.44* (0.28)	-0.96 (0.75)	-3.27* (0.29)
Treaties	178	178	26	178
Countries	154	154	154	154
Years	62	62	59	62
Observations	612,429	612,429	73,293	612,429
Log Likelihood	-25,271.16	-25,260.64	-4,669.38	-25,207.26

Note:

\*p&lt;0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified

## Table 2 (paper)

Table 2: Interaction effects of contributions and benefits, logit regression with robust standard errors clustered by country (Model 5, logit regression with robust standard errors clustered by country)

fund_included: mandatory contributions for all - all benefit	-0.17* (0.08)
fund_included: mandatory contributions for all - few benefit	1.02* (0.45)
fund_included: remaining combinations	0.56* (0.07)
fund_included: voluntary contributions only - all benefit	0.53* (0.20)
fund_included: voluntary contributions only - few benefit	1.10* (0.08)
subject_energy	0.18* (0.09)
subject_freshwater	-0.36* (0.11)
subject_habitat	0.59* (0.07)
subject_nature	0.34* (0.06)
subject_ocean	-0.68* (0.06)
subject_pollution	0.85* (0.07)
subject_species	0.10* (0.04)
subject_weapons	0.03 (0.11)
obligations	-0.25* (0.04)
mon_and_enf	0.31* (0.04)
dispute_settlement	0.49* (0.05)
public_good_global	-0.41* (0.06)
public_good_mixed	-0.64* (0.06)
trade_openness	0.05 (0.06)
igo_membership_count	0.02* (0.004)
polity	0.03* (0.01)
gdppc	0.13* (0.04)
gdppc_squared	-0.05* (0.02)
gdp	0.04 (0.04)
legislative_approval	0.10 (0.11)
ratification_global	0.05* (0.002)
ratification_in_region	0.02* (0.002)
t1	-0.25* (0.02)
t2	0.01* (0.001)
t3	-0.0001* (0.0000)
Constant	-3.25* (0.29)
Treaties	178
Countries	154
Years	62
Observations	612,429
Log Likelihood	-25,186.13

Note:

\*p<0.05

Reference categories: fund-included: no fund  
Remaining combinations:  
fund contribution: unspecified or mandatory for some  
fund usage: all or few

## Figures (paper)



**Figure 1 (paper)**

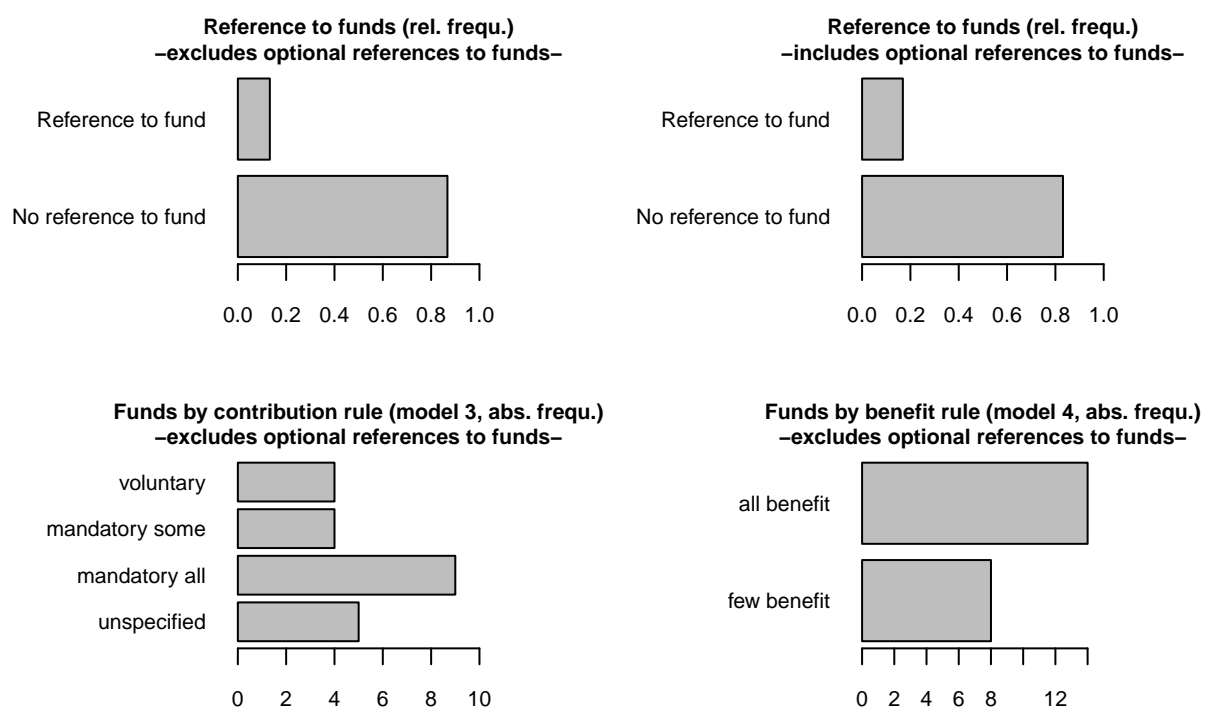


Figure 1: Frequency distributions of fund-related variables

Figure 2a) (paper)

```
##
## =====
##                               Median  2.5th quantile 97.5th quantile
## -----
##   ratification_global      0.081      0.056      0.113
## ratification_in_region    0.045      0.026      0.067
##   subject_pollution      0.039      0.020      0.062
## igo_membership_count      0.039      0.018      0.070
##   subject_habitat         0.024      0.009      0.042
##         fund              0.014      0.0004     0.030
##   mon_and_enf              0.014      0.0003     0.028
##   polity                   0.013      0.002      0.025
##   subject_nature           0.012     -0.002      0.027
## dispute_settlement        0.012      0.003      0.022
##         gdppc              0.011      0.0001     0.023
##   subject_energy           0.008     -0.004      0.020
##         gdp                 0.007     -0.008      0.021
##   subject_species          0.003     -0.008      0.015
##   trade_openness           0.003     -0.010      0.015
## legislative_approval       0.003     -0.010      0.015
##   subject_weapons          0.002     -0.010      0.014
##   obligations              -0.007     -0.020      0.006
## subject_freshwater        -0.008     -0.019      0.004
## public_good_global        -0.009     -0.019     -0.0005
## public_good_mixed         -0.013     -0.023     -0.005
##   subject_ocean            -0.013     -0.023     -0.005
## -----
## Sat Jul 13 22:10:18 2019, probabilities rounded to 3 digits
```

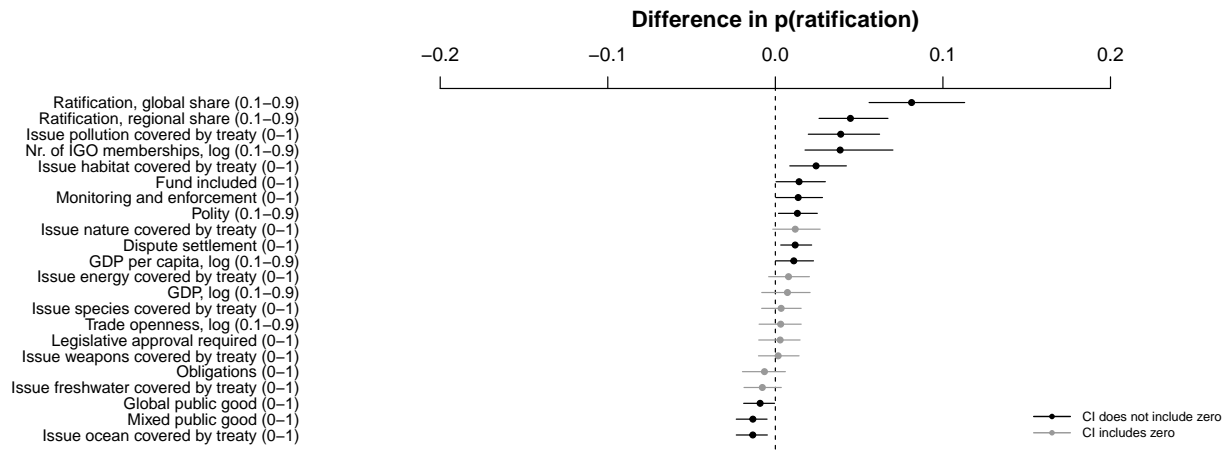


Figure 2: Simulated differences in the probability of treaty ratification when input variables of model 1 are, one by one, changed from a low to a high value, that is, from 0 to 1 for dummy variables (indicated below as 0-1) and from the 10th to the 90th percentile for the other variables. Time variables are set to the year 1960, the public good variables indicate that no public good is addressed, and the remaining variables are held constant at their median. Each confidence interval summarizes 20,000 simulations (median, 2.5th and 97.5th quantile).

Figure 2b) (paper)

```
##
## =====
##                               Median  2.5th quantile 97.5th quantile
## -----
##   ratification_global      0.078      0.052      0.110
## ratification_in_region     0.048      0.027      0.071
## fund_usage few benefit     0.046      0.024      0.072
##   subject_pollution       0.042      0.022      0.067
## igo_membership_count       0.041      0.018      0.075
##   subject_habitat         0.028      0.011      0.048
##      polity               0.014      0.002      0.026
##   mon_and_enf             0.012     -0.002      0.027
##      gdppc               0.012     0.0002      0.024
##   subject_nature          0.011     -0.003      0.027
## dispute_settlement         0.011      0.001      0.022
##   subject_energy          0.008     -0.005      0.021
##      gdp                 0.007     -0.010      0.022
##   subject_weapons         0.006     -0.007      0.020
## fund_usage all benefit     0.005     -0.008      0.019
##   trade_openness          0.004     -0.010      0.016
##   subject_species         0.003     -0.009      0.016
## legislative_approval       0.003     -0.011      0.016
##   gdppc_squared          -0.005     -0.017      0.005
##   obligations            -0.009     -0.024      0.005
## subject_freshwater        -0.010     -0.022      0.001
## public_good_global        -0.011     -0.021     -0.001
## public_good_mixed        -0.014     -0.025     -0.005
##   subject_ocean          -0.014     -0.025     -0.005
## -----
## Sat Jul 13 22:10:46 2019, probabilities rounded to 3 digits
```

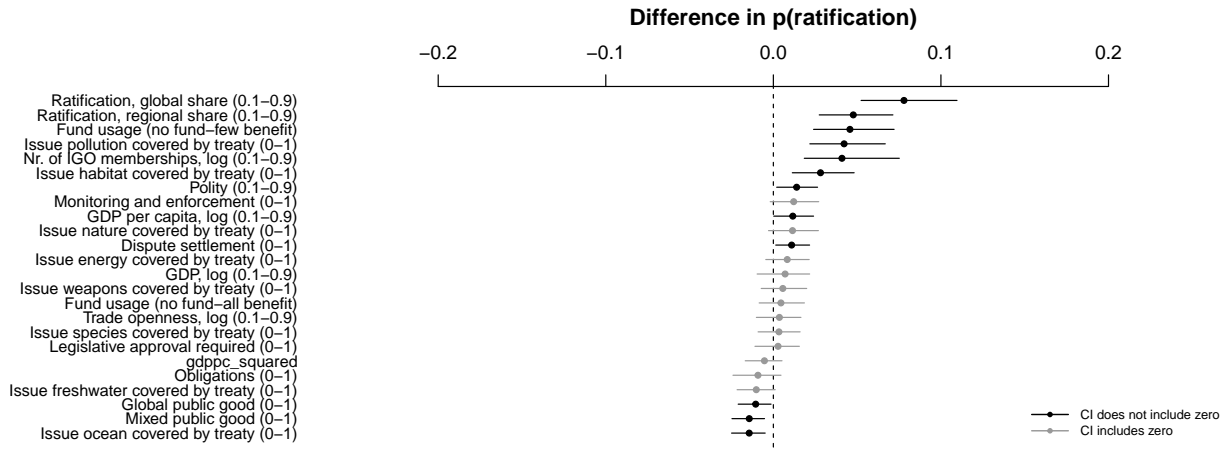


Figure 3: Simulated differences in the probability of treaty ratification when input variables of model 4 are, one by one, changed from a low to a high value, that is, from 0 to 1 for dummy variables (indicated below as 0-1) and from the 10th to the 90th percentile for the other variables. Time variables are set to the year 1960, the public good variables indicate that no public good is addressed, and the remaining variables are held constant at their median. Each confidence interval summarizes 20,000 simulations (median, 2.5th and 97.5th quantile).

Figure 2c) (paper)

```
##
## =====
##                               Median 2.5th quantile 97.5th quantile
## -----
## fund_contribution voluntary    0.115    0.022    0.227
## fund_contribution mandatory some 0.081    -0.007    0.198
## subject_pollution            0.080    0.026    0.180
## subject_weapons               0.041    0.009    0.089
## subject_nature                0.041    0.003    0.117
## ratification_global           0.034    0.006    0.083
## igo_membership_count           0.024    0.002    0.075
## subject_species               0.014    -0.008    0.039
## dispute_settlement            0.012    0.001    0.030
## polity                       0.003    -0.016    0.024
## trade_openness                0.003    -0.017    0.023
## legislative_approval           0.002    -0.016    0.021
## gdppc                         0.002    -0.013    0.020
## ratification_in_region         0.001    -0.018    0.022
## gdp                           0.001    -0.024    0.019
## public_good_global            -0.002    -0.021    0.013
## mon_and_enf                  -0.008    -0.026    0.010
## subject_ocean                 -0.008    -0.026    0.005
## subject_energy                -0.015    -0.033    -0.006
## subject_habitat               -0.017    -0.035    -0.008
## fund_contribution mandatory all -0.057    -0.117    -0.020
## obligations                   -0.113    -0.189    -0.060
## -----
## Sat Jul 13 22:11:09 2019, probabilities rounded to 3 digits
```

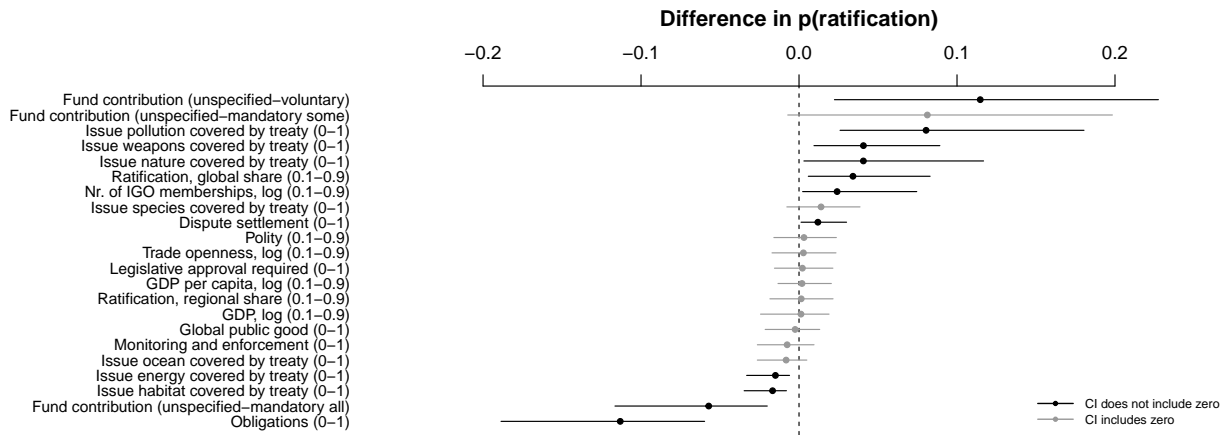


Figure 4: Simulated differences in the probability of treaty ratification when input variables of model 3 are, one by one, changed from a low to a high value, that is, from 0 to 1 for dummy variables (indicated below as 0-1) and from the 10th to the 90th percentile for the other variables. Time variables are set to the year 1960, the public good variables indicate that no public good is addressed, and the remaining variables are held constant at their median. Each confidence interval summarizes 20,000 simulations (median, 2.5th and 97.5th quantile).



### **Figure 3 (paper)**

This figure looks differently in the paper, i.e. the confidence intervals shown in the published paper are wider. The reason is that the figure in the paper summarizes simulations using robust standard-errors clustered by country. As of the compilation of this PDF-file, the R-Code that was used to produce the simulation and the figure included in the publication does not work any more. Most likely, this is due to changes in the required R-libraries. The version of this figure shown here in the PDF-file at hand is, in contrast to the published version, based on simulations of the regression model using normal (non-robust and non-clustered) standard errors.

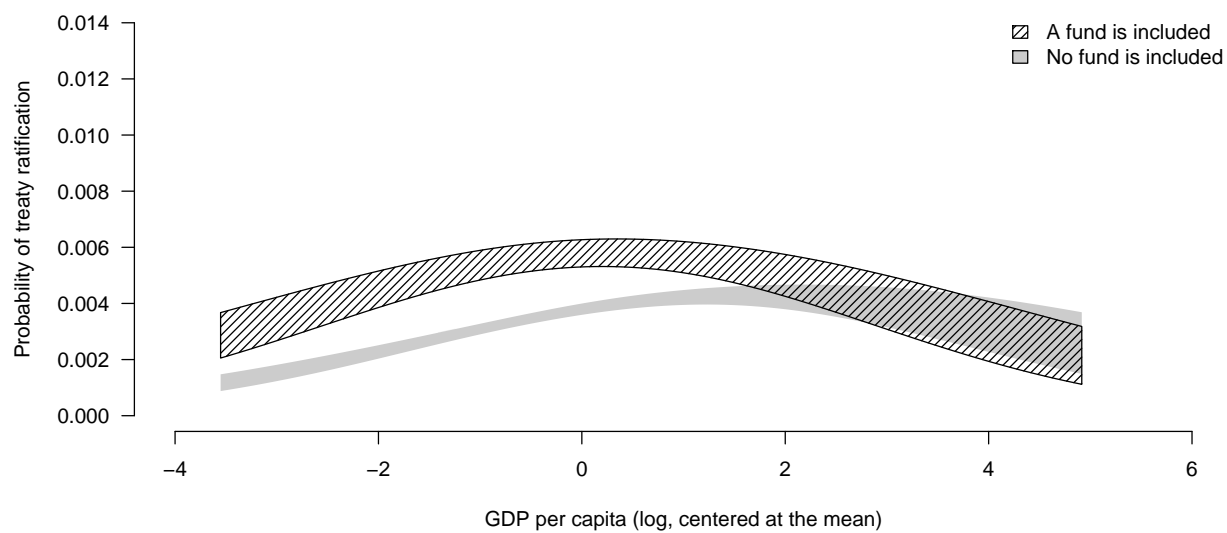


Figure 5: Interaction effect of per capita GDP and whether an agreements includes a fund and per capita GDP. The plotted intervals visualize expected probabilities of treaty ratification with 95 percent confidence (based on model 2).

## Supplementary Material

This supplementary material contains additional simulations and analyses that are mentioned in the paper, but not referred to as a particular Table, Figure, or Appendix.

## Descriptive Analyses

Table 3: Descriptive Statistics

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
action	907,304	0.01	0.09	0	0	0	1
obligations	907,168	0.68	0.47	0.00	0.00	1.00	1.00
mon_and_enf	773,884	0.23	0.42	0.00	0.00	0.00	1.00
dispute_settlement	806,810	0.56	0.50	0.00	0.00	1.00	1.00
assistance_all	907,168	0.09	0.29	0.00	0.00	0.00	1.00
assistance_developing	907,168	0.06	0.24	0.00	0.00	0.00	1.00
public_good_global	907,168	0.67	0.47	0.00	0.00	1.00	1.00
public_good_mixed	907,168	0.09	0.28	0.00	0.00	0.00	1.00
trade_openness	803,382	-1.08	0.94	-8.87	-1.64	-0.43	1.81
igo_membership_count	903,335	51.45	21.62	0.00	36.00	66.00	129.00
polity	784,469	1.00	7.24	-10.00	-7.00	8.00	10.00
gdppc	891,272	-0.09	1.25	-3.55	-1.09	0.82	4.92
gdp	891,272	-0.08	2.23	-6.74	-1.48	1.51	6.39
lnso2pc	511,215	2.41	1.56	-2.40	1.32	3.66	6.06
legislative_approval	903,833	0.73	0.44	0.00	0.00	1.00	1.00
negotiation_party	895,379	0.03	0.18	0.00	0.00	0.00	1.00
ratification_global	907,127	8.89	11.42	0.00	1.89	11.11	91.59
ratification_same_income_group	856,658	8.65	14.15	0.00	0.00	10.81	97.44
ratification_in_region	907,127	5.92	14.40	0.00	0.00	0.00	100.00
t1	907,304	43.21	13.12	0	35	53	61
t2	907,304	2,039.29	1,010.03	0	1,225	2,809	3,721
t3	907,304	101,088.20	65,675.15	0	42,875	148,877	226,981
fund	907,304	0.13	0.33	0	0	0	1

Table 4: Correlation Matrix, part I/IV

	action	obligations	mon_and_enf	dispute_settlement	assistance_all	assistance_developing
action	1.00					
obligations	-0.00	1.00				
mon_and_enf	0.01	0.22	1.00			
dispute_settlement	0.02	0.10	0.20	1.00		
assistance_all	0.03	-0.03	0.06	0.08	1.00	
assistance_developing	0.07	0.04	0.24	0.24	-0.08	1.00
public_good_global	-0.00	0.18	-0.12	-0.12	0.15	0.11
public_good_mixed	-0.01	0.16	0.09	0.22	-0.10	0.02
trade_openness	0.01	0.03	0.02	0.02	0.01	0.03
igo_membership_count	0.02	0.07	0.04	0.03	0.02	0.05
polity	0.03	0.04	0.03	0.03	0.01	0.04
gdppc	0.02	0.03	0.02	0.02	0.01	0.02
gdp	0.02	0.02	0.01	0.01	-0.00	0.01
lnso2pc	0.02	0.02	0.01	0.01	0.01	0.00
legislative_approval	0.01	-0.00	-0.00	0.00	-0.00	0.00
negotiation_party	0.15	0.01	0.01	0.05	0.02	0.07
ratification_global	0.15	-0.14	-0.03	0.01	0.06	0.12
ratification_same_income_group	0.11	-0.12	-0.02	0.01	0.04	0.09
ratification_in_region	0.13	-0.08	-0.01	0.01	0.06	0.10
t1	-0.02	0.14	0.09	0.06	0.05	0.12
t2	-0.02	0.12	0.08	0.06	0.03	0.11
t3	-0.02	0.11	0.07	0.06	0.02	0.11
fund	0.03	0.03	-0.10	0.03	-0.01	0.05
fund_contribution	0.11	0.05	0.40	0.34	0.09	0.02
fund_usage	0.01	0.02	-0.12	0.01	-0.01	-0.02

Table 5: Correlation Matrix, part II/IV

	public_good_global	public_good_mixed	trade_openness	igo_membership_count	polity	gdppc
action						
obligations						
mon_and_enf						
dispute_settlement						
assistance_all						
assistance_developing						
public_good_global	1.00					
public_good_mixed	-0.43	1.00				
trade_openness	0.02	-0.00	1.00			
igo_membership_count	0.06	0.00	0.18	1.00		
polity	0.04	-0.00	0.27	0.47	1.00	
gdppc	0.01	0.01	0.50	0.26	0.35	1.00
gdp	0.01	0.01	-0.08	0.61	0.28	0.41
lnso2pc	0.00	0.01	0.39	0.12	0.18	0.68
legislative_approval	0.00	-0.00	-0.24	0.25	-0.02	-0.19
negotiation_party	0.00	0.00	0.03	0.11	0.07	0.07
ratification_global	-0.06	-0.06	0.00	-0.07	-0.04	-0.04
ratification_same_income_group	-0.05	-0.05	0.13	-0.04	0.03	0.23
ratification_in_region	-0.03	-0.05	0.04	-0.03	0.02	0.07
t1	0.12	0.00	0.26	0.39	0.27	0.14
t2	0.10	-0.01	0.27	0.38	0.28	0.14
t3	0.09	-0.01	0.27	0.36	0.28	0.14
fund	0.03	-0.02	-0.02	-0.02	-0.01	-0.00
fund_contribution	-0.40	0.31	-0.03	-0.04	-0.02	-0.03
fund_usage	0.03	-0.02	-0.02	-0.02	-0.02	-0.00

Table 6: Correlation Matrix, part III/IV

	gdp	lnso2pc	legislative_approval	negotiation_party	ratification_global	ratification_same_income_group
action						
obligations						
mon_and_enf						
dispute_settlement						
assistance_all						
assistance_developing						
public_good_global						
public_good_mixed						
trade_openness						
igo_membership_count						
polity						
gdppc						
gdp	1.00					
lnso2pc	0.28	1.00				
legislative_approval	0.25	-0.21	1.00			
negotiation_party	0.09	0.05	0.04	1.00		
ratification_global	-0.07	-0.04	-0.02	0.08	1.00	
ratification_same_income_group	0.03	0.16	-0.09	0.10	0.79	1.00
ratification_in_region	-0.02	0.05	0.00	0.19	0.54	0.61
t1	0.05	0.03	-0.04	-0.03	0.08	0.04
t2	0.06	0.01	-0.03	-0.03	0.09	0.05
t3	0.07	0.00	-0.03	-0.03	0.09	0.06
fund	-0.00	0.01	-0.00	0.02	0.03	0.03
fund_contribution	-0.02	-0.00	0.00	0.07	0.25	0.20
fund_usage	-0.00	0.01	-0.00	0.00	0.00	0.01

Table 7: Correlation Matrix, part IV/IV

	ratification_in_region	t1	t2	t3	fund	fund_contribution	fund_usage
action							
obligations							
mon_and_enf							
dispute_settlement							
assistance_all							
assistance_developing							
public_good_global							
public_good_mixed							
trade_openness							
igo_membership_count							
polity							
gdppc							
gdp							
lnso2pc							
legislative_approval							
negotiation_party							
ratification_global							
ratification_same_income_group							
ratification_in_region	1.00						
t1	0.02	1.00					
t2	0.02	0.98	1.00				
t3	0.02	0.94	0.99	1.00			
fund	0.04	-0.05	-0.05	-0.05	1.00		
fund_contribution	0.21	-0.02	-0.03	-0.04		1.00	
fund_usage	0.02	-0.06	-0.06	-0.06	0.98	-0.16	1.00



Table 8: This table lists all treaties coded as referring to a fund as of 2011.

iea_id	iea_agreement_name	fund	fund_contribution	fund_usage
1	3149 Convention On The Prohibition Of The Development, Production, Stockpiling And Use Of Chemical Weapons And On Their Destruction	1	voluntary	all benefit
2	3273 Protocol To The United Nations Framework Convention On Climate Change	1	voluntary	few benefit
3	3193 Agreement Relating To The Implementation Of Part XI Of The United Nations Convention On The Law Of The Sea	1	voluntary	few benefit
4	3126 United Nations Framework Convention On Climate Change	1	voluntary	few benefit
5	2965 International Tropical Timber Agreement	1	voluntary	few benefit
6	2855 Protocol To Amend The International Convention On The Establishment Of An International Fund For Compensation For Oil Pollution Damage	1	mandatory some	all benefit
7	2800 International Convention On The Establishment Of An International Fund For Compensation For Oil Pollution Damage	1	mandatory some	all benefit
8	2785 International Convention On Civil Liability For Oil Pollution Damage	1	mandatory some	all benefit
9	2708 Convention On The Liability Of Operators Of Nuclear Ships	1	mandatory some	all benefit
10	3128 Convention On Biological Diversity	1	mandatory some	few benefit
11	3021 Montreal Protocol On Substances That Deplete The Ozone Layer	1	mandatory some	few benefit
12	3334 Agreement For The Establishment Of A Commission For Controlling The Desert Locust In The Western Region	1	mandatory all	all benefit
13	3309 Agreement For The Establishment Of The Regional Commission For Fisheries	1	mandatory all	all benefit
14	3174 Agreement For The Establishment Of The Indian Ocean Tuna Commission	1	mandatory all	all benefit
15	2975 Protocol On Long-Term Financing Of The Cooperative Programme For Monitoring And Evaluation Of The Long-Range Transmissions Of Air Pollutants In Europe To The Convention On Long-Range Transboundary Air Pollution	1	mandatory all	all benefit
16	2812 Convention For The Protection Of The World Cultural And Natural Heritage	1	mandatory all	all benefit
17	2791 Agreement For The Establishment Of A Commission For Controlling The Desert Locust In Northwest Africa	1	mandatory all	all benefit

18	2744	Agreement For The Establishment Of A Commission For Controlling The Desert Locust In The Near East (Central Region)	1	mandatory all	all benefit
19	2731	Agreement for the Establishment of a Commission for Controlling the Desert Locust in Southwest Asia	1	mandatory all	all benefit
20	2648	Constitution Of The European Commission For The Control Of Foot And Mouth Disease	1	mandatory all	all benefit
21	2624	Agreement For The Establishment Of The Indo-Pacific Fisheries Commission	1	mandatory all	all benefit
22	2602	International Agreement For The Creation Of An International Office For Dealing With Contagious Diseases Of Animals	1	mandatory all	all benefit
23	3255	Inter-American Convention For The Protection And Conservation Of Sea Turtles	1	mandatory all	few benefit
24	3100	Convention On Fisheries Cooperation Among African States Bordering The Atlantic Ocean	1	unspecified	all benefit
25	2821	Convention Establishing A Permanent Inter-State Drought Control Committee For The Sahel	1	unspecified	all benefit
26	2783	Convention On The Conservation Of The Living Resources Of The Southeast Atlantic	1	unspecified	all benefit
27	2751	International Convention For The Conservation Of Atlantic Tunas	1	unspecified	all benefit
28	3321	Convention on the Conservation and Management of the Highly Migratory Fish Stocks of the Western and Central Pacific Ocean	1	unspecified	few benefit
29	2947	United Nations Convention On The Law Of The Sea	1	unspecified	few benefit

Table 9: Missing Values

	Variable	missing (%)	most recent obs.	Note
1	fund_contribution	87.3	2011	missing values indicate treaties without references to a fund
2	lnso2pc	43.7	2005	no information for 2006-2011
3	polity	13.5	2011	
4	trade_openness	11.5	2011	
5	dispute_settlement	11.1	2000	observation from 2000 carried over to 2001-2011
6	ratification_same_income_group	5.6	2011	
7	gdppc	1.8	2011	
8	gdp	1.8	2011	
9	negotiation_party	1.3	2000	Assumption: time invariance of observed treaty-country dyads
10	igo_membership_count	0.4	2005	observed every 5 years, gaps interpolated, 2005 obs. carried over
11	legislative_approval	0.4	2007	Only observed in 2007, assumption: time invariance
12	action	0.0	2011	
13	obligations	0.0	2000	observation from 2000 carried over to 2001-2011
14	assistance_all	0.0	2000	observation from 2000 carried over to 2001-2011
15	assistance_developing	0.0	2000	observation from 2000 carried over to 2001-2011
16	public_good_global	0.0	2000	observation from 2000 carried over to 2001-2011
17	public_good_mixed	0.0	2000	observation from 2000 carried over to 2001-2011
18	ratification_global	0.0	2011	observation from 2000 carried over to 2001-2011
19	ratification_in_region	0.0	2011	
23	fund	0.0	2011	
24	fund_usage	0.0	2011	

## Simulating Ratification Probabilities Over Time

In what we refer to as “second set of simulations” in the paper, we calculated annual expected ratification probabilities for the 1950–1970 period. This refers to ratification behavior by an average hypothetical country of hypothetical average agreements, with the exception of whether funds of any type are included (Figure 1 in this appendix), or whether funds are included providing assistance to all or only to some members (Figure 2), and if a fund is included whether contributions to this fund are mandatory or voluntary (Figure 3).

The ratification probabilities plotted in these three figures have been simulated based on the results of models 1, 3, and 4 (presented in Table 1 in the paper) following the suggestions of King, Tomz, and Wittenberg (2000) for “expected values”. We simulate these expected values keeping all regressors fixed at their median except for the time variables and one fund-related variable. The plotted uncertainty bounds are limited by the 2.5th and the 97.5th percentile summarizing 5,000 simulated probabilities. We simulated annual expected probabilities of treaty ratification from 1950 to 1969; after 1969 the confidence intervals become indistinguishable both from each other and from zero.

What we find is that these annual ratification probabilities tend to be highest in the years directly after an agreement is open for ratification and, over time, trend against a very small probability, as others have reported before (Spilker and Koubi 2016). Over time, MEAs including a fund are ratified with a higher probability than MEAs without a fund, however, the confidence bands mostly overlap to a small degree (Figure 1). Ratification probability is also higher if a fund is included, which is only used to assist some and not all treaty members (Figure 2). Finally, if agreements include a fund, their annual ratification probability is higher if contributions to the fund are voluntary compared to mandatory for all members (Figure 3).

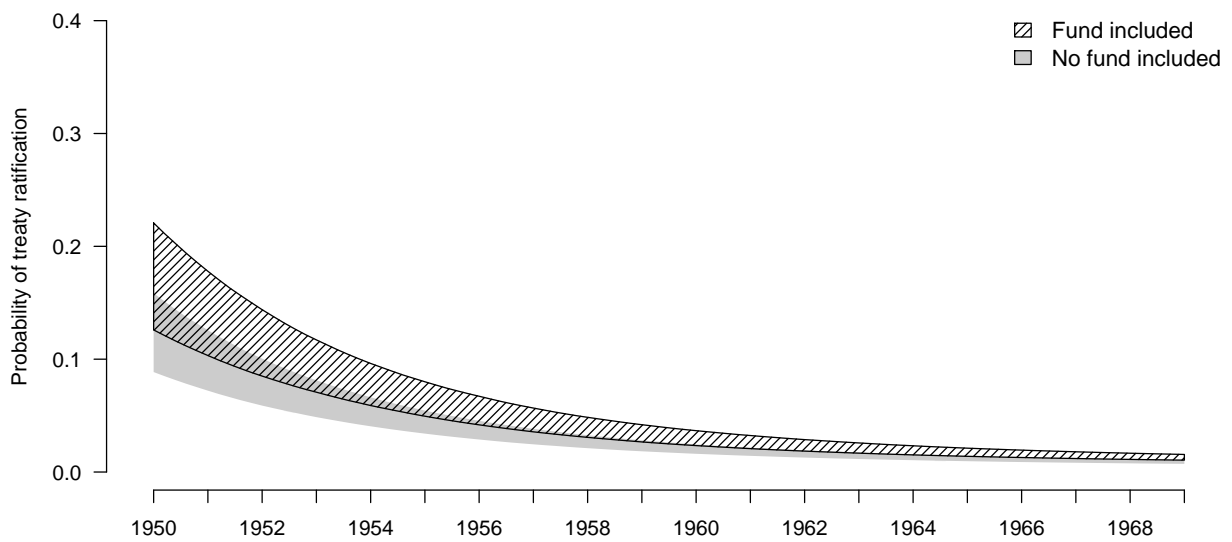


Figure 6: Probability of treaty ratification over time according to simulations based on model 1. Across the scenarios, the variable fund (dummy) differs while all other variables are set to the median. For each scenario, the bands indicate 95-percent confidence intervals based on 5,000 simulated expected values. While the two confidence intervals around the expected probabilities overlap to a large degree, the expected ratification probability is higher if a fund is referred to.

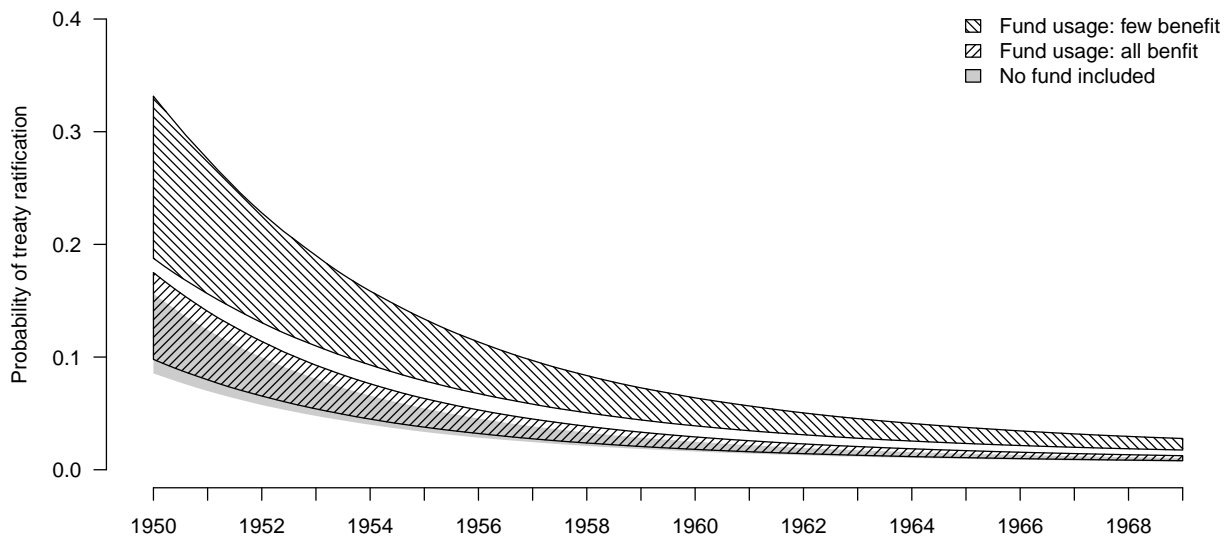


Figure 7: Probability of treaty ratification over time according to simulations based on model 4. Across the scenarios, the variable measuring a fund’s usage scheme (all benefit vs. few benefit) differs while all other variables are set to the median. For each scenario, the bands indicate 95-percent confidence intervals based on 5,000 simulated expected values. Countries ratify an agreement with a higher probability if it includes a fund based on voluntary contributions as opposed to mandatory contributions.

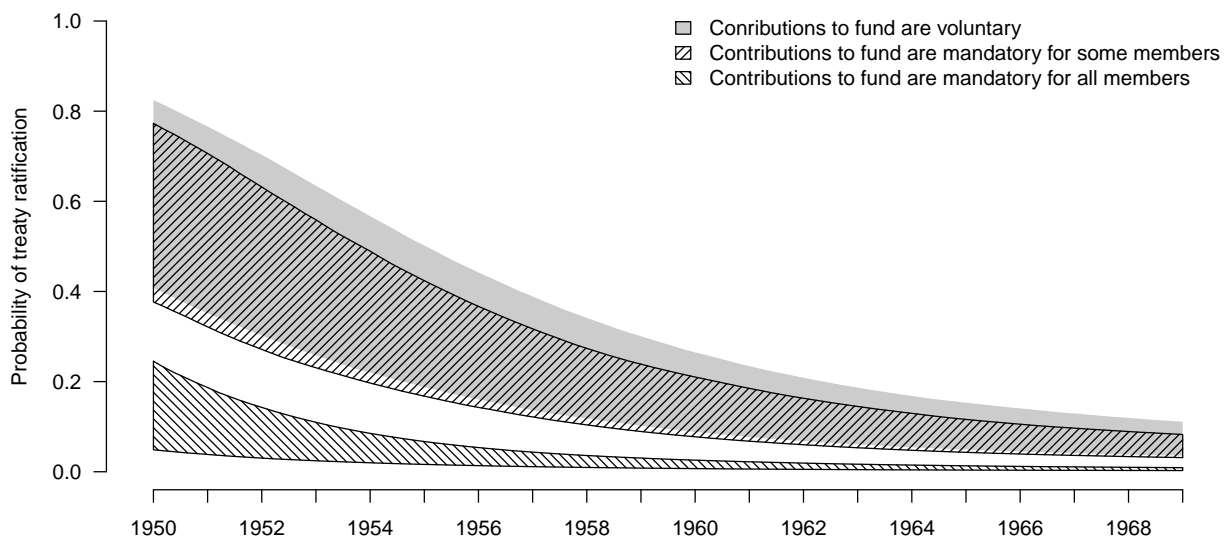


Figure 8: Probability of treaty ratification over time according to simulations based on model 3. Across the scenarios, the variable measuring a fund's contribution scheme (voluntary vs. mandatory) differs while all other variables are set to the median. For each scenario, the bands indicate 95-percent confidence intervals based on 5,000 simulated expected values. Countries ratify an agreement with a higher probability if it includes a fund based on voluntary contributions as opposed to mandatory contributions.

## Additional Simulations



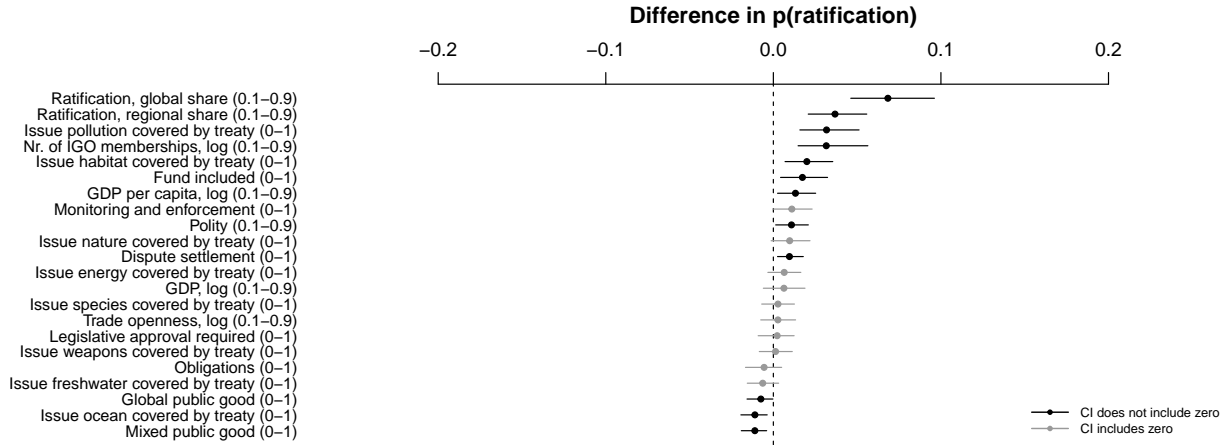


Figure 9: Simulated differences in the probability of treaty ratification by a poor country when input variables of model 2 are, one by one, changed from a low to a high value, that is, from 0 to 1 for dummy variables (indicated below as 0-1) and from the 10th to the 90th percentile for the other variables. GDP per capita set to the 1st quartile, time variables are set to the year 1960, the public good variables indicate that no public good is addressed, and the remaining variables are held constant at their median. Each confidence interval summarizes 20,000 simulations (median, 2.5th and 97.5th quantile).

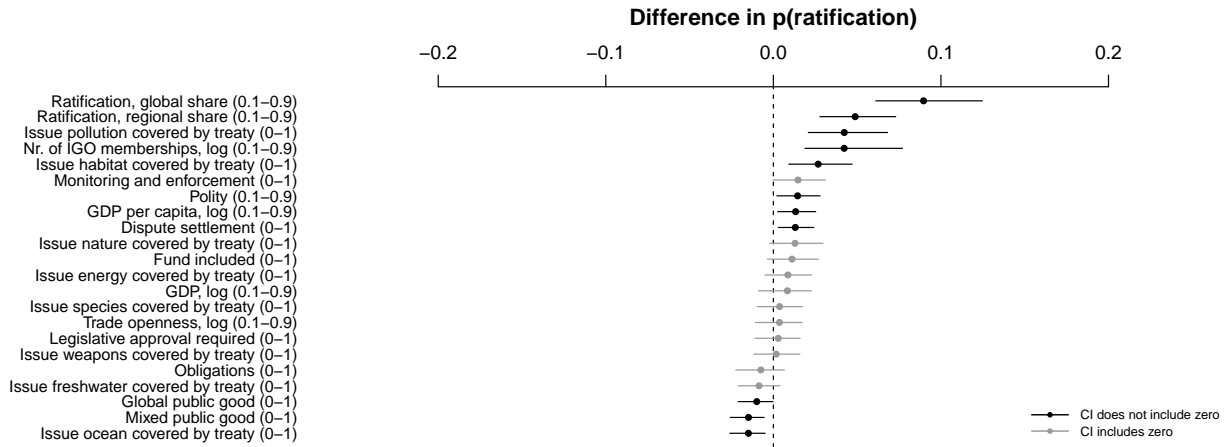


Figure 10: Simulated differences in the probability of treaty ratification by a rich country when input variables of model 2 are, one by one, changed from a low to a high value, that is, from 0 to 1 for dummy variables (indicated below as 0-1) and from the 10th to the 90th percentile for the other variables. GDP per capita set to the 3rd quartile, time variables are set to the year 1960, the public good variables indicate that no public good is addressed, and the remaining variables are held constant at their median. Each confidence interval summarizes 20,000 simulations (median, 2.5th and 97.5th quantile).

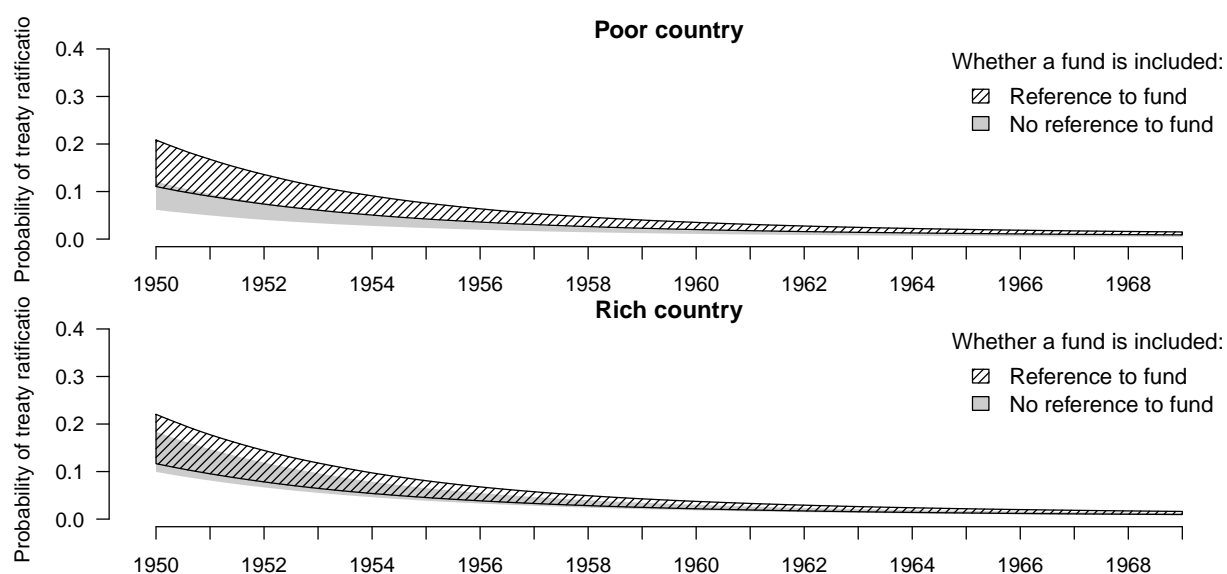


Figure 11: Probability of treaty ratification over time for a poor and a rich country (simulations based on model 2). Across the scenarios, the variable fund differs, logged GDP per capita is fixed at the 25th (poor) or the 95th percentile (rich), while all other variables are set to the median. For each scenario, the bands indicate 95-percent confidence intervals based on 5,000 simulated expected values. For the rich country, references to a fund do hardly affect ratification probability. The poor country ratifies an MEA with a fund with a higher expected probability.

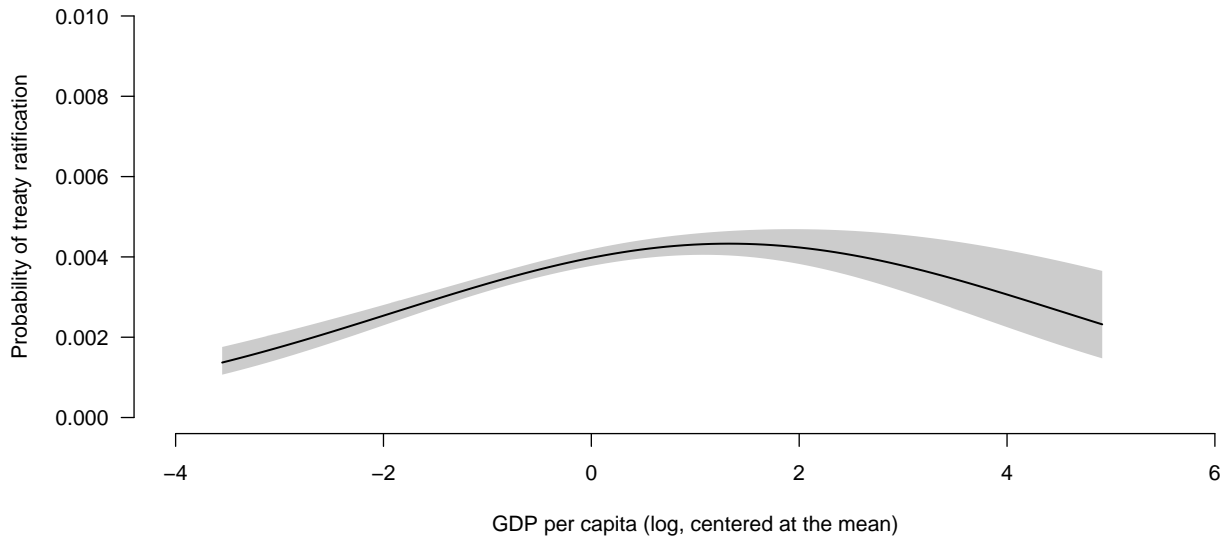


Figure 12: Simulating the effect of per capita GDP (included linearly and squared) on ratification probabilities. The plotted intervals visualize simulated expected probabilities of treaty ratification with 95 percent confidence (based on model 1 estimated with normal standard errors - due to the technical reasons explained above). Per capita GDP is positively associated with ratification probability from very small to about average GDP per capita values. If per capita GDP is about average or higher, a negative association with ratification probability is expected but ratification probability could also remain constant at a high level or slightly increase even further (judging from the confidence interval).

*Important note:* As of the compilation of this PDF-file, the R-Code that was used to produce this figure prior to the publication of the paper does not work any more. Most likely, this is due to changes in the required R-libraries. The figure shown here in the PDF-file at hand is based on simulations of the regression model using normal (non-robust and non-clustered) standard errors.

## Robustness Checks

Unless specified differently, the following tables summarize logistic regression models with robust standard errors clustered by country.

## Controlling for an Interaction of the Fund-Related Variables

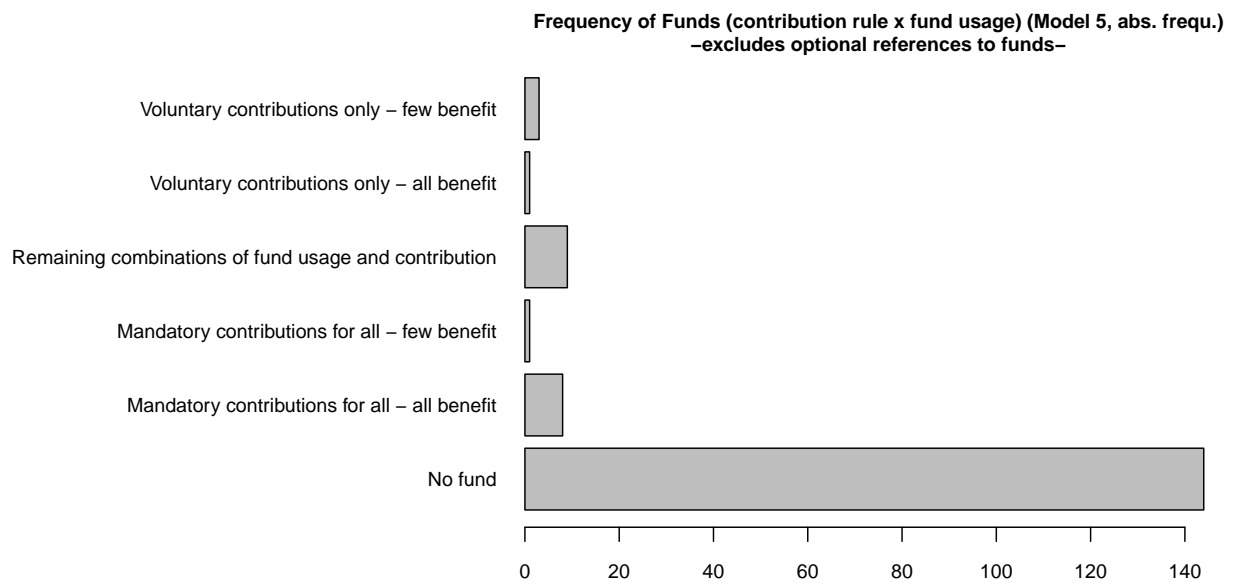


Figure 13: Frequency distributions of fund-included (Model 5)

```

##
## =====
##                                     Median 2.5th quantile 97.5th quantile
## -----
##          ratification_global          0.086      0.058      0.120
##          ratification_in_region        0.050      0.028      0.076
##          igo_membership_count          0.043      0.019      0.079
##          subject_pollution            0.042      0.021      0.068
## fund_included: voluntary contributions only - all benefit 0.027      0.004      0.060
##          subject_habitat              0.025      0.008      0.045
##          polity                       0.015      0.002      0.029
##          gdppc                       0.013      0.00005     0.026
##          dispute_settlement           0.013      0.003      0.024
##          subject_nature               0.013      -0.003     0.030
##          mon_and_enf                  0.011      -0.003     0.027
##          gdp                         0.007      -0.011     0.023
## fund_included: voluntary contributions only - few benefit 0.007      -0.094     0.065
##          subject_energy               0.006      -0.007     0.020
##          trade_openness              0.004      -0.011     0.018
##          subject_species              0.003      -0.010     0.017
##          legislative_approval          0.003      -0.012     0.017
##          subject_weapons              0.001      -0.013     0.015
##          gdppc_squared                -0.006      -0.018     0.006
##          obligations                  -0.009      -0.025     0.006
##          subject_freshwater           -0.010      -0.022     0.003
##          public_good_global           -0.011      -0.022    -0.001
##          public_good_mixed            -0.015      -0.027    -0.006
##          subject_ocean                -0.016      -0.027    -0.006
## -----
## Sat Jul 13 22:20:27 2019, probabilities rounded to 3 digits

```

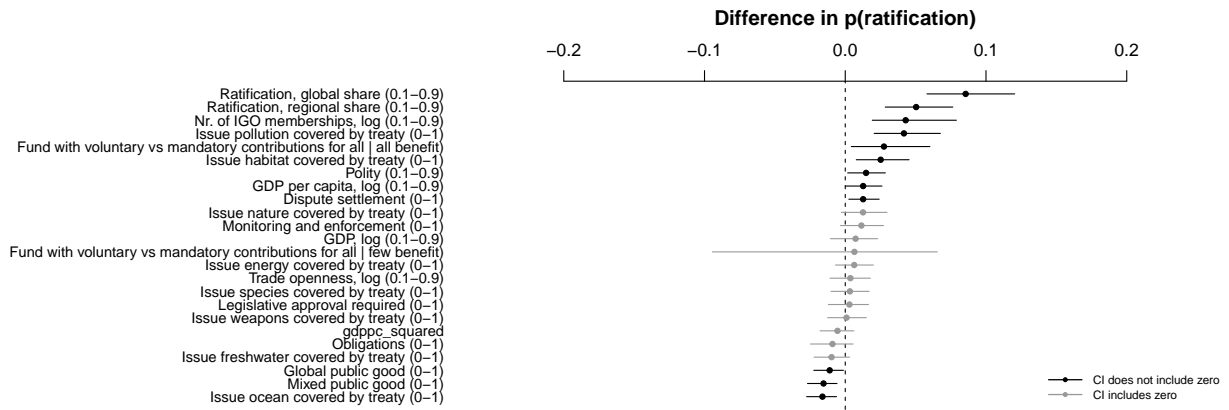


Figure 14: Simulated differences in the probability of treaty ratification when input variables of model 5 are, one by one, changed from a low to a high value, that is, from 0 to 1 for dummy variables (indicated below as 0-1) and from the 10th to the 90th percentile for the other variables. Time variables are set to the year 1960, the public good variables indicate that no public good is addressed, and the remaining variables are held constant at their median. Each confidence interval summarizes 20,000 simulations (median, 2.5th and 97.5th quantile).



## Controlling for Additional Covariates

Table 10: Controlling for whether a country participated in agreement negotiations before the agreement was opened for ratification

	(1)	(2)	(3)
fund	0.39* (0.05)		
fund_contribution mandatory all		−0.73* (0.33)	
fund_contribution mandatory some		0.73* (0.24)	
fund_contribution voluntary		1.48* (0.15)	
fund_usage few benefit			0.70* (0.08)
fund_usage all benefit			0.23* (0.07)
negotiation_party	1.82* (0.07)	1.67* (0.14)	1.79* (0.07)
subject_energy	0.001 (0.09)	−1.10* (0.51)	0.01 (0.09)
subject_freshwater	0.02 (0.10)		−0.04 (0.10)
subject_habitat	0.69* (0.07)	−14.97* (0.58)	0.73* (0.07)
subject_nature	0.29* (0.07)	1.52* (0.31)	0.27* (0.07)
subject_ocean	−0.56* (0.06)	−0.68* (0.12)	−0.57* (0.07)
subject_pollution	0.89* (0.08)	2.17* (0.38)	0.92* (0.08)
subject_species	0.14* (0.06)	0.99* (0.20)	0.14* (0.06)
subject_weapons	−0.54* (0.13)	0.32 (0.32)	−0.45* (0.12)
obligations	−0.11* (0.05)	−2.10* (0.37)	−0.15* (0.05)
mon_and_enf	0.41* (0.04)	0.07 (0.22)	0.40* (0.04)
dispute_settlement	0.33* (0.05)	0.72* (0.20)	0.28* (0.05)
public_good_global	−0.50* (0.06)	0.12 (0.21)	−0.53* (0.06)
public_good_mixed	−0.56* (0.07)		−0.55* (0.07)
trade_openness	0.03 (0.06)	0.09 (0.07)	0.03 (0.06)
igo_membership_count	0.01* (0.004)	0.02* (0.01)	0.01* (0.004)
polity	0.02* (0.01)	0.01 (0.01)	0.02* (0.01)
gdppc	0.13* (0.05)	0.03 (0.06)	0.13* (0.05)
gdppc_squared	−0.07* (0.02)	−0.09* (0.03)	−0.07* (0.02)
gdp	0.03 (0.04)	0.01 (0.05)	0.03 (0.04)
legislative_approval	0.11 (0.12)	0.14 (0.12)	0.11 (0.12)
ratification_global	0.05* (0.002)	0.04* (0.003)	0.05* (0.002)
ratification_in_region	0.01* (0.002)	0.002 (0.002)	0.01* (0.002)
t1	−0.23* (0.02)	−0.30* (0.04)	−0.23* (0.02)
t2	0.01* (0.001)	0.01* (0.001)	0.01* (0.001)
t3	−0.0001* (0.0000)	−0.0001* (0.0000)	−0.0001* (0.0000)
Constant	−3.44* (0.29)	−1.74* (0.76)	−3.33* (0.30)
Treaties	178	26	178
Countries	154	153	154
Years	62	59	62
Observations	610,152	73,033	610,152
Log Likelihood	−23,866.21	−4,512.65	−23,844.85

Note:

\*p<0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified

Table 11: Controlling for sulfur dioxide emissions per capita as a proxy for a country's environmental quality. Adding this variable reduces the number of countries and years included in the analysis.

	(1)	(2)	(3)
fund	0.47* (0.06)		
fund_contribution mandatory all		-1.61* (0.35)	
fund_contribution mandatory some		0.89* (0.28)	
fund_contribution voluntary		1.21* (0.12)	
fund_usage few benefit			1.09* (0.08)
fund_usage all benefit			0.20* (0.07)
lnso2pc	0.12* (0.04)	0.08 (0.05)	0.12* (0.04)
subject_energy	0.29* (0.09)	-2.26* (0.56)	0.30* (0.09)
subject_freshwater	-0.26* (0.13)		-0.35* (0.13)
subject_habitat	0.69* (0.08)	-15.75* (0.67)	0.75* (0.08)
subject_nature	0.41* (0.06)	1.47* (0.35)	0.38* (0.06)
subject_ocean	-0.66* (0.07)	-0.79* (0.14)	-0.67* (0.07)
subject_pollution	0.94* (0.08)	2.17* (0.41)	0.96* (0.08)
subject_species	0.05 (0.05)	0.70* (0.23)	0.04 (0.05)
subject_weapons	0.08 (0.13)	1.57* (0.32)	0.20 (0.13)
obligations	-0.29* (0.05)	-2.41* (0.44)	-0.35* (0.05)
mon_and_enf	0.45* (0.04)	-0.70* (0.23)	0.38* (0.04)
dispute_settlement	0.49* (0.05)	1.41* (0.20)	0.40* (0.05)
public_good_global	-0.39* (0.06)	-0.14 (0.26)	-0.43* (0.06)
public_good_mixed	-0.58* (0.07)		-0.58* (0.07)
trade_openness	-0.005 (0.06)	0.02 (0.08)	-0.002 (0.06)
igo_membership_count	0.02* (0.004)	0.02* (0.01)	0.02* (0.004)
polity	0.03* (0.01)	0.01 (0.01)	0.03* (0.01)
gdppc	0.02 (0.05)	-0.02 (0.07)	0.02 (0.05)
gdppc_squared	-0.004 (0.02)	-0.01 (0.03)	-0.005 (0.02)
gdp	0.02 (0.04)	-0.003 (0.06)	0.02 (0.04)
legislative_approval	0.11 (0.14)	0.18 (0.15)	0.11 (0.13)
ratification_global	0.05* (0.002)	0.04* (0.004)	0.05* (0.002)
ratification_in_region	0.02* (0.002)	-0.001 (0.002)	0.02* (0.002)
t1	-0.23* (0.02)	-0.33* (0.05)	-0.23* (0.02)
t2	0.01* (0.001)	0.01* (0.002)	0.01* (0.001)
t3	-0.0001* (0.0000)	-0.0001* (0.0000)	-0.0001* (0.0000)
Constant	-4.07* (0.36)	-1.10 (0.88)	-3.86* (0.36)
Treaties	178	26	178
Countries	126	126	126
Years	56	53	56
Observations	394,237	48,708	394,237
Log Likelihood	-20,228.23	-3,597.05	-20,165.98

Note:

\*p<0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified

Table 12: Controlling for an alternative measure for sulfur dioxide emissions per capita as a proxy for a country's environmental quality. Adding this variable limits the analysis to 1950-2000.

	(1)	(2)	(3)
fund	0.61* (0.06)		
fund_contribution mandatory all		-2.09* (0.25)	
fund_contribution mandatory some		1.17* (0.34)	
fund_contribution voluntary		1.31* (0.15)	
fund_usage few benefit			1.44* (0.08)
fund_usage all benefit			0.30* (0.07)
lnso2pc_stern2005	0.06 (0.03)	0.02 (0.04)	0.06 (0.03)
subject_energy	0.27* (0.11)	-3.04* (0.66)	0.31* (0.11)
subject_freshwater	-0.24 (0.12)		-0.34* (0.12)
subject_habitat	0.88* (0.07)	-17.46* (0.57)	0.96* (0.07)
subject_nature	0.41* (0.06)	0.43 (0.34)	0.39* (0.06)
subject_ocean	-0.50* (0.07)	-0.45* (0.17)	-0.53* (0.07)
subject_pollution	0.97* (0.08)	0.52 (0.46)	1.04* (0.08)
subject_species	-0.06 (0.05)	0.05 (0.23)	-0.09 (0.05)
subject_weapons	0.29* (0.12)	1.55* (0.31)	0.42* (0.12)
obligations	-0.35* (0.05)	-3.30* (0.30)	-0.44* (0.05)
mon_and_enf	0.18* (0.04)	-0.71* (0.17)	0.09 (0.05)
dispute_settlement	0.58* (0.06)	1.33* (0.20)	0.45* (0.06)
public_good_global	-0.57* (0.07)	0.41 (0.26)	-0.62* (0.07)
public_good_mixed	-0.62* (0.06)		-0.58* (0.06)
trade_openness	0.07 (0.06)	0.12 (0.08)	0.07 (0.06)
igo_membership_count	0.02* (0.003)	0.02* (0.004)	0.02* (0.003)
polity	0.03* (0.01)	0.01 (0.01)	0.03* (0.01)
gdppc	0.08 (0.05)	0.02 (0.07)	0.08 (0.05)
gdppc_squared	-0.05* (0.02)	-0.07* (0.03)	-0.05* (0.02)
gdp	0.10* (0.03)	0.10* (0.04)	0.10* (0.03)
legislative_approval	-0.001 (0.12)	0.08 (0.12)	-0.01 (0.12)
ratification_global	0.05* (0.002)	0.05* (0.004)	0.05* (0.002)
ratification_in_region	0.02* (0.002)	0.001 (0.002)	0.02* (0.002)
t1	-0.28* (0.02)	-0.41* (0.06)	-0.27* (0.02)
t2	0.01* (0.001)	0.01* (0.002)	0.01* (0.001)
t3	-0.0001* (0.0000)	-0.0002* (0.0000)	-0.0001* (0.0000)
Constant	-2.12* (0.44)	1.76* (0.76)	-1.87* (0.44)
Treaties	178	23	178
Countries	147	147	147
Years	51	48	51
Observations	373,162	48,209	373,162
Log Likelihood	-18,510.94	-3,391.25	-18,417.50

Note:

\*p<0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified

Table 13: Controlling for an additional lag of the dependent variable: lagged share of ratifications by income bracket (quintiles).

	(1)	(2)	(3)
fund	0.41* (0.05)		
fund_contribution mandatory all		-1.52* (0.31)	
fund_contribution mandatory some		0.83* (0.23)	
fund_contribution voluntary		1.01* (0.11)	
fund_usage few benefit			0.90* (0.07)
fund_usage all benefit			0.18* (0.06)
subject_energy	0.36* (0.09)	-2.64* (0.49)	0.35* (0.09)
subject_freshwater	-0.28* (0.11)		-0.37* (0.11)
subject_habitat	0.60* (0.08)	-15.65* (0.54)	0.64* (0.08)
subject_nature	0.38* (0.06)	1.18* (0.31)	0.35* (0.06)
subject_ocean	-0.59* (0.07)	-0.59* (0.13)	-0.60* (0.07)
subject_pollution	0.89* (0.08)	1.63* (0.40)	0.90* (0.08)
subject_species	0.19* (0.05)	0.57* (0.21)	0.18* (0.05)
subject_weapons	0.10 (0.12)	1.03* (0.32)	0.21 (0.11)
obligations	-0.24* (0.05)	-2.10* (0.36)	-0.29* (0.05)
mon_and_enf	0.42* (0.03)	-0.54* (0.22)	0.37* (0.04)
dispute_settlement	0.45* (0.05)	1.21* (0.20)	0.39* (0.05)
public_good_global	-0.34* (0.05)	-0.29 (0.20)	-0.39* (0.05)
public_good_mixed	-0.56* (0.06)		-0.58* (0.06)
trade_openness	0.05 (0.06)	0.08 (0.07)	0.05 (0.06)
igo_membership_count	0.02* (0.004)	0.02* (0.01)	0.02* (0.004)
polity	0.02* (0.01)	0.01 (0.01)	0.02* (0.01)
gdppc	0.31* (0.05)	0.16* (0.06)	0.30* (0.05)
gdppc_squared	-0.05* (0.02)	-0.08* (0.03)	-0.05* (0.02)
gdp	0.04 (0.04)	0.03 (0.05)	0.04 (0.04)
legislative_approval	0.13 (0.11)	0.18 (0.12)	0.13 (0.11)
ratification_global	0.08* (0.003)	0.06* (0.004)	0.08* (0.003)
ratification_in_region	0.03* (0.002)	0.01* (0.003)	0.03* (0.002)
ratification_same_income_group	-0.04* (0.003)	-0.03* (0.004)	-0.04* (0.003)
t1	-0.24* (0.02)	-0.31* (0.05)	-0.24* (0.02)
t2	0.01* (0.001)	0.01* (0.001)	0.01* (0.001)
t3	-0.0001* (0.0000)	-0.0001* (0.0000)	-0.0001* (0.0000)
Constant	-3.54* (0.30)	-0.54 (0.77)	-3.38* (0.30)
Treaties	178	26	178
Countries	153	153	153
Years	61	58	61
Observations	601,899	71,579	601,899
Log Likelihood	-24,222.97	-4,499.67	-24,173.49

Note:

\*p<0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified

Table 14: Controlling for replacing the global and regional lag of the dependent variable by its lag within income brackets (quintiles).

	(1)	(2)	(3)
fund	0.81* (0.04)		
fund_contribution mandatory all		-1.89* (0.30)	
fund_contribution mandatory some		1.65* (0.22)	
fund_contribution voluntary		1.19* (0.11)	
fund_usage few benefit			1.82* (0.08)
fund_usage all benefit			0.36* (0.05)
subject_energy	-0.07 (0.08)	-3.37* (0.52)	-0.01 (0.08)
subject_freshwater	-0.25* (0.10)		-0.39* (0.10)
subject_habitat	0.65* (0.07)	-15.20* (0.44)	0.74* (0.07)
subject_nature	0.30* (0.06)	2.30* (0.28)	0.26* (0.06)
subject_ocean	-0.67* (0.06)	-1.23* (0.14)	-0.70* (0.06)
subject_pollution	0.88* (0.06)	2.79* (0.44)	0.91* (0.07)
subject_species	-0.06 (0.04)	0.81* (0.22)	-0.07 (0.04)
subject_weapons	0.33* (0.11)	1.99* (0.30)	0.57* (0.11)
obligations	-0.44* (0.04)	-2.42* (0.32)	-0.52* (0.04)
mon_and_enf	0.37* (0.03)	-1.21* (0.25)	0.24* (0.03)
dispute_settlement	0.70* (0.04)	2.16* (0.19)	0.54* (0.04)
public_good_global	-0.58* (0.05)	-0.72* (0.18)	-0.58* (0.05)
public_good_mixed	-0.93* (0.06)		-0.92* (0.06)
trade_openness	0.06 (0.06)	0.08 (0.07)	0.07 (0.06)
igo_membership_count	0.02* (0.004)	0.02* (0.01)	0.02* (0.004)
polity	0.03* (0.01)	0.01 (0.01)	0.03* (0.01)
gdppc	-0.08 (0.04)	-0.04 (0.06)	-0.06 (0.04)
gdppc_squared	-0.07* (0.02)	-0.06 (0.03)	-0.07* (0.02)
gdp	0.02 (0.03)	0.01 (0.05)	0.02 (0.03)
legislative_approval	0.27* (0.12)	0.20 (0.11)	0.24* (0.11)
ratification_same_income_group	0.04* (0.001)	0.02* (0.002)	0.04* (0.001)
t1	-0.28* (0.02)	-0.38* (0.04)	-0.27* (0.02)
t2	0.01* (0.001)	0.01* (0.001)	0.01* (0.001)
t3	-0.0001* (0.0000)	-0.0001* (0.0000)	-0.0001* (0.0000)
Constant	-2.93* (0.27)	-0.09 (0.69)	-2.68* (0.27)
Treaties	178	26	178
Countries	153	153	153
Years	61	58	61
Observations	601,899	71,579	601,899
Log Likelihood	-26,160.17	-4,660.14	-25,937.07

Note:

\*p<0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified

Table 15: Controlling for adding dummies indicating whether a treaty provides any assistance for all members or only for members which are developing countries.

	(1)	(2)	(3)
fund	0.15* (0.05)		
fund_contribution mandatory all		−0.26 (0.25)	
fund_contribution mandatory some		−0.16 (0.15)	
fund_contribution voluntary		0.95* (0.10)	
fund_usage few benefit			0.27* (0.08)
fund_usage all benefit			0.08 (0.06)
assistance_all	0.56* (0.06)	1.07* (0.25)	0.57* (0.06)
assistance_developing	1.33* (0.08)	3.66* (0.24)	1.29* (0.08)
subject_energy	0.35* (0.08)	−0.70 (0.48)	0.34* (0.08)
subject_freshwater	−0.33* (0.12)		−0.35* (0.12)
subject_habitat	0.49* (0.07)	−17.50* (0.30)	0.50* (0.07)
subject_nature	0.39* (0.06)	−1.33* (0.23)	0.39* (0.06)
subject_ocean	−0.67* (0.06)	0.21 (0.13)	−0.68* (0.06)
subject_pollution	0.92* (0.07)	0.20 (0.33)	0.93* (0.07)
subject_species	0.29* (0.04)	0.47* (0.20)	0.29* (0.04)
subject_weapons	0.42* (0.12)	1.86* (0.27)	0.43* (0.12)
obligations	−0.10* (0.04)	−1.42* (0.39)	−0.11* (0.04)
mon_and_enf	0.13* (0.04)	−0.07 (0.16)	0.13* (0.04)
dispute_settlement	0.23* (0.04)	−1.73* (0.24)	0.22* (0.04)
public_good_global	−0.54* (0.06)		−0.55* (0.06)
public_good_mixed	−0.60* (0.06)		−0.60* (0.06)
trade_openness	0.04 (0.06)	0.07 (0.07)	0.04 (0.06)
igo_membership_count	0.02* (0.004)	0.02* (0.005)	0.02* (0.004)
polity	0.03* (0.01)	0.01 (0.01)	0.03* (0.01)
gdppc	0.13* (0.04)	0.04 (0.06)	0.13* (0.04)
gdppc_squared	−0.05* (0.02)	−0.07* (0.03)	−0.05* (0.02)
gdp	0.04 (0.04)	0.003 (0.05)	0.04 (0.04)
legislative_approval	0.10 (0.11)	0.14 (0.12)	0.10 (0.11)
ratification_global	0.04* (0.002)	0.04* (0.003)	0.04* (0.002)
ratification_in_region	0.02* (0.002)	0.002 (0.002)	0.02* (0.002)
t1	−0.24* (0.02)	−0.29* (0.04)	−0.24* (0.02)
t2	0.01* (0.001)	0.01* (0.002)	0.01* (0.001)
t3	−0.0001* (0.0000)	−0.0001* (0.0000)	−0.0001* (0.0000)
Constant	−3.23* (0.29)	0.07 (0.63)	−3.20* (0.29)
Treaties	178	26	178
Countries	154	154	154
Years	62	59	62
Observations	612,429	73,293	612,429
Log Likelihood	−24,919.00	−4,545.44	−24,915.93

Note:

\*p<0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified

## Using Different Subsamples of the Overall Sample

We re-estimate our main model using different subsets of our originally used data in order to show that our findings are no artifacts of the limits of our universe of multilateral environmental treaties or due to specific countries.

First, we show that our main findings remain unchanged if we study only observations including a treaty that can be considered global. We therefore, limit our observations to those involving treaties that all UN-member countries are free to join, as coded by Spilker and Koubi (2016).

Second, we drop all observations of treaties of the type “protocol” as defined by the IEA Database (see: <http://iea.uoregon.edu/page.php?query=static&file=definitions.htm>). Usually, international agreements entitled “protocol” are an addition to another international agreement and tend to be of a less formal nature than agreements entitled, for example, “treaty” or “convention”.

Third, we exclude three “limitation funds” from the analysis. The reason is that these funds limit the liability of ship owners and, therefore, differ from the remaining funds in that they explicitly receive contributions from non-state actors (e.g. ship owners). Moreover, we drop five treaties for which Mitchell (2014) reports multiple entries into force within a short period of time (e.g. due to repeated withdrawal and renewed acceptance of the treaty). For these treaties, the value of our dependent variable (ratification) was difficult to determine for particular years. Using this sub-sample does not change our main findings.

Fourth, we exclude 97 countries from our analysis which experienced either democratic regime change (Merkel 2010) or adverse regime change (“Armed Conflict and Intervention (ACI) Datasets: Regime Changes” 2015, downloaded Oct. 20 2016). Our main findings remain unchanged, which is important for two reasons. First, countries experiencing such a regime change are more likely than other countries to change the legislative and constitutional rules for treaty ratification. Our assumption that the variable *legislative\_approval* remains constant throughout the period under study although it has only been observed in 2007 appears least plausible for this group of regime change countries. Second, among such regime change countries there are many states that we consider the continuation of another state, e.g. we treat the Russian Federation as the Soviet Union’s successor state. Such a succession of states leads to difficulties when data from multiple sources is merged by country.

Fifth, we limit our analysis to 1950-2000 since we have not observed some of our variables after 2000 or 2005 but carried forward the last observed value. Results from this robustness test show that our main findings are not due to this naive imputation.



Table 16: Controlling for a subset of the original sample containing only treaties that Spilker and Koubi (2016) identify as allowing all UN-member countries to join

	(1)	(2)	(3)
fund	0.49* (0.07)		
fund_contribution mandatory all		−0.47 (1.50)	
fund_contribution mandatory some		4.18* (1.43)	
fund_contribution voluntary		0.72* (0.12)	
fund_usage few benefit			1.43* (0.11)
fund_usage all benefit			0.25* (0.08)
subject_energy	0.80* (0.13)		0.89* (0.13)
subject_freshwater	−0.06 (0.14)		−0.31* (0.13)
subject_habitat	0.86* (0.12)		1.18* (0.13)
subject_nature	0.39* (0.09)	3.03 (2.29)	0.42* (0.09)
subject_ocean	−0.51* (0.07)	0.25 (0.43)	−0.76* (0.08)
subject_pollution	0.91* (0.10)	0.30 (1.47)	1.23* (0.11)
subject_species	−0.17* (0.07)	0.56 (0.54)	−0.18* (0.08)
subject_weapons	0.14 (0.15)	1.87* (0.61)	0.55* (0.15)
obligations	−0.23* (0.06)	−2.49* (0.51)	−0.38* (0.06)
mon_and_enf	0.86* (0.06)	1.35 (3.40)	0.91* (0.06)
dispute_settlement	0.65* (0.05)	2.13* (0.53)	0.39* (0.06)
public_good_global	−0.45* (0.06)	−0.45 (1.97)	−0.33* (0.06)
public_good_mixed	0.58* (0.16)		1.07* (0.16)
trade_openness	0.03 (0.06)	0.05 (0.08)	0.03 (0.06)
igo_membership_count	0.02* (0.004)	0.02* (0.004)	0.02* (0.004)
polity	0.03* (0.01)	0.01 (0.01)	0.03* (0.01)
gdppc	0.07 (0.04)	0.01 (0.07)	0.08 (0.04)
gdppc_squared	−0.03 (0.02)	−0.08* (0.04)	−0.03 (0.02)
gdp	0.06 (0.04)	0.02 (0.05)	0.05 (0.04)
legislative_approval	0.03 (0.10)	0.07 (0.13)	0.02 (0.10)
ratification_global	0.05* (0.002)	0.03* (0.003)	0.05* (0.002)
ratification_in_region	0.002 (0.002)	−0.003 (0.002)	0.002 (0.002)
t1	−0.30* (0.02)	−0.72* (0.13)	−0.29* (0.02)
t2	0.01* (0.001)	0.02* (0.004)	0.01* (0.001)
t3	−0.0001* (0.0000)	−0.0002* (0.0000)	−0.0001* (0.0000)
Constant	−2.61* (0.31)	2.66 (4.04)	−2.51* (0.31)
Treaties	53	16	53
Countries	154	154	154
Years	62	48	62
Observations	166,432	45,337	166,432
Log Likelihood	−13,593.47	−3,239.12	−13,505.88

Note:

\*p<0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified

Table 17: Controlling for a subset of the original sample containing only agreements and no protocols

	(1)	(2)	(3)
fund	0.49* (0.06)		
fund_contribution mandatory all		-0.97* (0.34)	
fund_contribution mandatory some		3.29* (0.36)	
fund_contribution voluntary		0.74* (0.10)	
fund_usage few benefit			1.40* (0.09)
fund_usage all benefit			0.22* (0.07)
subject_energy	0.23* (0.09)	-7.33* (0.94)	0.30* (0.09)
subject_freshwater	-0.28* (0.11)		-0.41* (0.11)
subject_habitat	0.75* (0.07)	-15.17* (0.58)	0.87* (0.07)
subject_nature	0.40* (0.05)	0.51 (0.41)	0.38* (0.05)
subject_ocean	-0.50* (0.06)	1.02* (0.33)	-0.64* (0.06)
subject_pollution	0.90* (0.07)	-2.43* (0.91)	1.05* (0.07)
subject_species	-0.06 (0.05)	-0.31 (0.30)	-0.06 (0.05)
subject_weapons	0.27* (0.11)	0.91* (0.34)	0.44* (0.11)
obligations	-0.34* (0.05)	-1.74* (0.44)	-0.43* (0.05)
mon_and_enf	0.31* (0.04)	-0.24 (0.15)	0.32* (0.04)
dispute_settlement	0.61* (0.05)	0.95* (0.29)	0.48* (0.05)
public_good_global	-0.42* (0.06)	-1.24* (0.32)	-0.45* (0.06)
public_good_mixed	-0.39* (0.07)		-0.32* (0.07)
trade_openness	0.04 (0.06)	0.07 (0.08)	0.04 (0.06)
igo_membership_count	0.02* (0.004)	0.02* (0.004)	0.02* (0.004)
polity	0.03* (0.01)	0.01 (0.01)	0.03* (0.01)
gdppc	0.11* (0.04)	0.04 (0.07)	0.11* (0.04)
gdppc_squared	-0.05* (0.02)	-0.07* (0.03)	-0.05* (0.02)
gdp	0.05 (0.04)	0.01 (0.05)	0.04 (0.04)
legislative_approval	0.12 (0.12)	0.12 (0.13)	0.11 (0.12)
ratification_global	0.05* (0.002)	0.03* (0.003)	0.04* (0.002)
ratification_in_region	0.02* (0.002)	0.001 (0.002)	0.02* (0.002)
t1	-0.28* (0.02)	-0.36* (0.05)	-0.28* (0.02)
t2	0.01* (0.001)	0.01* (0.002)	0.01* (0.001)
t3	-0.0001* (0.0000)	-0.0001* (0.0000)	-0.0001* (0.0000)
Constant	-3.10* (0.27)	0.97 (0.72)	-2.86* (0.28)
Treaties	132	23	132
Countries	154	154	154
Years	62	59	62
Observations	461,289	68,987	461,289
Log Likelihood	-19,646.63	-3,863.10	-19,541.37

Note:

\*p&lt;0.05

Table 18: Controlling for a subset of the original sample excluding funds limiting the liability of ship owners in case of accidents from the analysis.

	(1)	(2)	(3)
fund	0.40* (0.05)		
fund_contribution mandatory all		-1.95* (0.79)	
fund_contribution mandatory some		1.19* (0.49)	
fund_contribution voluntary		0.98* (0.13)	
fund_usage few benefit			0.92* (0.08)
fund_usage all benefit			0.05 (0.07)
subject_energy	0.26* (0.09)		0.23* (0.09)
subject_freshwater	-0.33* (0.12)		-0.43* (0.12)
subject_habitat	0.62* (0.07)	-15.71* (0.50)	0.66* (0.07)
subject_nature	0.34* (0.06)	0.44 (0.41)	0.32* (0.06)
subject_ocean	-0.59* (0.06)	-0.01 (0.32)	-0.63* (0.07)
subject_pollution	0.88* (0.07)	2.91* (1.30)	0.89* (0.07)
subject_species	0.11* (0.05)	0.39 (0.52)	0.10* (0.05)
subject_weapons	0.05 (0.11)	1.11 (0.62)	0.17 (0.11)
obligations	-0.19* (0.04)	-1.76* (0.54)	-0.25* (0.04)
mon_and_enf	0.39* (0.03)	-2.04 (1.06)	0.34* (0.04)
dispute_settlement	0.48* (0.04)	1.17* (0.58)	0.43* (0.04)
public_good_global	-0.36* (0.05)	-1.60* (0.52)	-0.42* (0.05)
public_good_mixed	-0.58* (0.06)		-0.63* (0.06)
trade_openness	0.05 (0.06)	0.05 (0.07)	0.05 (0.06)
igo_membership_count	0.02* (0.004)	0.02* (0.01)	0.02* (0.004)
polity	0.03* (0.01)	0.02 (0.01)	0.03* (0.01)
gdppc	0.13* (0.04)	0.03 (0.06)	0.13* (0.04)
gdppc_squared	-0.05* (0.02)	-0.07 (0.03)	-0.05* (0.02)
gdp	0.04 (0.04)	0.01 (0.05)	0.04 (0.04)
legislative_approval	0.10 (0.11)	0.12 (0.13)	0.09 (0.11)
ratification_global	0.05* (0.002)	0.04* (0.003)	0.05* (0.002)
ratification_in_region	0.02* (0.002)	0.001 (0.002)	0.02* (0.002)
t1	-0.25* (0.02)	-0.34* (0.05)	-0.25* (0.02)
t2	0.01* (0.001)	0.01* (0.002)	0.01* (0.001)
t3	-0.0001* (0.0000)	-0.0001* (0.0000)	-0.0001* (0.0000)
Constant	-3.46* (0.29)	1.05 (1.11)	-3.26* (0.29)
Treaties	178	23	178
Countries	154	154	154
Years	62	59	62
Observations	612,429	60,568	612,429
Log Likelihood	-25,279.19	-4,008.17	-25,211.08

Note:

\*p<0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified

Table 19: Controlling for a subset of the original sample dropping treaties for which Mitchell (2014) reports multiple instances of entry into force

	(1)	(2)	(3)
fund	0.41* (0.05)		
fund_contribution mandatory all		-1.64* (0.37)	
fund_contribution mandatory some		0.69* (0.28)	
fund_contribution voluntary		1.15* (0.11)	
fund_usage few benefit			0.96* (0.08)
fund_usage all benefit			0.12 (0.06)
subject_energy	0.10 (0.09)	-1.49 (0.77)	0.10 (0.09)
subject_freshwater	-0.26* (0.11)		-0.36* (0.11)
subject_habitat	0.65* (0.07)	-15.30* (0.49)	0.69* (0.07)
subject_nature	0.36* (0.06)	1.78* (0.39)	0.32* (0.06)
subject_ocean	-0.63* (0.07)	-0.71* (0.13)	-0.64* (0.07)
subject_pollution	0.90* (0.07)	2.44* (0.62)	0.91* (0.08)
subject_species	0.08 (0.05)	1.28* (0.47)	0.06 (0.05)
subject_weapons	0.07 (0.12)	1.98* (0.53)	0.18 (0.11)
obligations	-0.26* (0.05)	-2.31* (0.43)	-0.32* (0.05)
mon_and_enf	0.43* (0.04)	-0.67* (0.25)	0.37* (0.04)
dispute_settlement	0.60* (0.05)	1.25* (0.20)	0.52* (0.05)
public_good_global	-0.37* (0.06)	0.03 (0.22)	-0.42* (0.05)
public_good_mixed	-0.58* (0.06)		-0.60* (0.06)
trade_openness	0.05 (0.06)	0.09 (0.07)	0.05 (0.06)
igo_membership_count	0.02* (0.004)	0.02* (0.01)	0.02* (0.004)
polity	0.03* (0.01)	0.01 (0.01)	0.03* (0.01)
gdppc	0.13* (0.04)	0.04 (0.06)	0.13* (0.04)
gdppc_squared	-0.05* (0.02)	-0.07 (0.03)	-0.05* (0.02)
gdp	0.04 (0.04)	0.01 (0.06)	0.04 (0.04)
legislative_approval	0.09 (0.12)	0.13 (0.13)	0.08 (0.12)
ratification_global	0.05* (0.002)	0.04* (0.003)	0.05* (0.002)
ratification_in_region	0.02* (0.002)	0.001 (0.002)	0.02* (0.002)
t1	-0.29* (0.02)	-0.29* (0.05)	-0.29* (0.02)
t2	0.01* (0.001)	0.01* (0.002)	0.01* (0.001)
t3	-0.0001* (0.0000)	-0.0001* (0.0000)	-0.0001* (0.0000)
Constant	-3.07* (0.31)	-1.71* (0.71)	-2.82* (0.31)
Treaties	173	25	173
Countries	154	154	154
Years	60	59	60
Observations	588,090	68,000	588,090
Log Likelihood	-24,125.03	-4,407.21	-24,057.22

Note:

\*p<0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified

Table 20: Dropping observations of regime change countries

	(1)	(2)	(3)
fund	0.34* (0.08)		
fund_contribution mandatory all		-1.81* (0.24)	
fund_contribution mandatory some		0.22 (0.26)	
fund_contribution voluntary		1.11* (0.16)	
fund_usage few benefit			1.09* (0.12)
fund_usage all benefit			0.01 (0.09)
subject_energy	0.40* (0.12)	-2.94* (1.06)	0.41* (0.11)
subject_freshwater	-0.27 (0.15)		-0.38* (0.14)
subject_habitat	0.57* (0.11)	-14.89* (0.72)	0.64* (0.11)
subject_nature	0.40* (0.08)	1.11* (0.50)	0.37* (0.08)
subject_ocean	-0.73* (0.09)	-0.65* (0.17)	-0.74* (0.09)
subject_pollution	0.98* (0.11)	2.58* (0.56)	1.01* (0.11)
subject_species	0.08 (0.07)	0.84* (0.32)	0.06 (0.07)
subject_weapons	-0.03 (0.17)	1.41* (0.39)	0.10 (0.17)
obligations	-0.18* (0.07)	-2.47* (0.34)	-0.25* (0.06)
mon_and_enf	0.41* (0.05)	-0.95* (0.26)	0.35* (0.05)
dispute_settlement	0.46* (0.07)	1.58* (0.28)	0.35* (0.06)
public_good_global	-0.26* (0.07)	-0.22 (0.33)	-0.32* (0.07)
public_good_mixed	-0.59* (0.10)		-0.59* (0.10)
trade_openness	0.28* (0.09)	0.35* (0.11)	0.28* (0.09)
igo_membership_count	0.01* (0.005)	0.01 (0.005)	0.01* (0.005)
polity	0.03* (0.01)	0.01 (0.01)	0.03* (0.01)
gdppc	-0.04 (0.06)	-0.15* (0.07)	-0.04 (0.06)
gdppc_squared	-0.03 (0.03)	-0.02 (0.04)	-0.04 (0.03)
gdp	0.18* (0.04)	0.17* (0.06)	0.17* (0.04)
legislative_approval	0.10 (0.15)	0.21 (0.16)	0.09 (0.14)
ratification_global	0.05* (0.004)	0.04* (0.01)	0.05* (0.003)
ratification_in_region	0.02* (0.003)	0.004 (0.003)	0.02* (0.003)
t1	-0.27* (0.03)	-0.44* (0.06)	-0.27* (0.03)
t2	0.01* (0.001)	0.01* (0.002)	0.01* (0.001)
t3	-0.0001* (0.0000)	-0.0002* (0.0000)	-0.0001* (0.0000)
Constant	-2.81* (0.35)	0.85 (0.68)	-2.58* (0.35)
Treaties	178	25	178
Countries	64	64	64
Years	62	59	62
Observations	245,241	29,339	245,241
Log Likelihood	-11,703.11	-1,973.97	-11,652.70

Note:

\*p&lt;0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified

Table 21: List of regime change countries included in the original analysis that we removed in order to assess the robustness of our main findings. We consider democratic as well as adverse regime changes.

	Country
1	Afghanistan
2	Albania
3	Algeria
4	Angola
5	Argentina
6	Armenia
7	Azerbaijan
8	Bangladesh
9	Belarus
10	Benin
11	Brazil
12	Bulgaria
13	Burkina Faso
14	Burundi
15	Cambodia
16	Central African Republic
17	Chad
18	Chile
19	Comoros
20	Congo, Democratic Republic of
21	Congo, Republic of the
22	Cote d'Ivoire
23	Cuba
24	Cyprus
25	Czech Republic
26	Czechoslovakia
27	Dominican Republic
28	Ecuador
29	El Salvador
30	Equatorial Guinea
31	Ethiopia
32	Fiji
33	France
34	Gambia
35	Georgia
36	Germany
37	Germany, Former GDR
38	Ghana
39	Greece

40 Guinea-Bissau  
41 Guyana  
42 Haiti  
43 Hungary  
44 Indonesia  
45 Iran  
46 Iraq  
47 Jordan  
48 Kenya  
49 Korea, Republic of  
50 Kyrgyzstan  
51 Laos  
52 Lebanon  
53 Lesotho  
54 Liberia  
55 Madagascar  
56 Malaysia  
57 Mauritania  
58 Mexico  
59 Moldova  
60 Morocco  
61 Myanmar  
62 Nepal  
63 Nicaragua  
64 Niger  
65 Nigeria  
66 Pakistan  
67 Panama  
68 Peru  
69 Philippines  
70 Poland  
71 Portugal  
72 Romania  
73 Russian Federation  
74 Rwanda  
75 Senegal  
76 Serbia  
77 Sierra Leone  
78 Singapore  
79 Solomon Islands  
80 Somalia  
81 South Africa  
82 Spain  
83 Sudan  
84 Suriname

85	Swaziland
86	Syria
87	Taiwan
88	Thailand
89	Turkey
90	Uganda
91	Ukraine
92	Uruguay
93	Venezuela
94	Viet Nam
95	Yemen
96	Zambia
97	Zimbabwe

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Table 22: Controlling for a subset of the original sample containing only treaty-country dyads observed before 2001

	(1)	(2)	(3)
fund	0.60* (0.06)		
fund_contribution mandatory all		-2.09* (0.25)	
fund_contribution mandatory some		1.17* (0.33)	
fund_contribution voluntary		1.29* (0.15)	
fund_usage few benefit			1.43* (0.08)
fund_usage all benefit			0.29* (0.07)
subject_energy	0.27* (0.11)	-3.07* (0.65)	0.30* (0.11)
subject_freshwater	-0.25* (0.12)		-0.35* (0.12)
subject_habitat	0.88* (0.07)	-17.44* (0.56)	0.96* (0.07)
subject_nature	0.40* (0.06)	0.41 (0.34)	0.38* (0.06)
subject_ocean	-0.50* (0.07)	-0.44* (0.17)	-0.52* (0.07)
subject_pollution	0.97* (0.08)	0.48 (0.45)	1.04* (0.08)
subject_species	-0.06 (0.05)	0.04 (0.22)	-0.09 (0.05)
subject_weapons	0.30* (0.12)	1.58* (0.30)	0.43* (0.12)
obligations	-0.34* (0.05)	-3.26* (0.29)	-0.43* (0.05)
mon_and_enf	0.16* (0.04)	-0.72* (0.17)	0.07 (0.05)
dispute_settlement	0.58* (0.06)	1.31* (0.20)	0.45* (0.06)
public_good_global	-0.58* (0.07)	0.41 (0.26)	-0.63* (0.06)
public_good_mixed	-0.62* (0.06)		-0.58* (0.06)
trade_openness	0.04 (0.07)	0.09 (0.08)	0.05 (0.07)
igo_membership_count	0.02* (0.004)	0.02* (0.004)	0.02* (0.004)
polity	0.03* (0.01)	0.01 (0.01)	0.03* (0.01)
gdppc	0.13* (0.05)	0.04 (0.07)	0.13* (0.05)
gdppc_squared	-0.05* (0.02)	-0.08* (0.03)	-0.05* (0.02)
gdp	0.08* (0.04)	0.07 (0.05)	0.08* (0.04)
legislative_approval	-0.02 (0.11)	0.08 (0.12)	-0.03 (0.11)
ratification_global	0.05* (0.002)	0.05* (0.004)	0.05* (0.002)
ratification_in_region	0.02* (0.002)	0.001 (0.002)	0.02* (0.002)
t1	-0.28* (0.02)	-0.43* (0.06)	-0.27* (0.02)
t2	0.01* (0.001)	0.01* (0.002)	0.01* (0.001)
t3	-0.0001* (0.0000)	-0.0002* (0.0000)	-0.0001* (0.0000)
Constant	-2.88* (0.29)	1.44* (0.62)	-2.63* (0.29)
Treaties	178	23	178
Countries	153	153	153
Years	51	48	51
Observations	389,267	50,343	389,267
Log Likelihood	-19,036.72	-3,501.49	-18,941.15

Note:

\*p<0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified

### **Controlling for Different Ways of Clustering the Standard Errors**

In our main model, we clustered standard errors by country. If we cluster standard errors by treaty-country instead, our findings remain unchanged.

Table 23: Main results (logit regression with robust standard errors clustered by treaty-country dyads)

	(1)	(2)	(3)
fund	0.40* (0.05)		
fund_contribution mandatory all		−1.56* (0.34)	
fund_contribution mandatory some		0.85* (0.28)	
fund_contribution voluntary		1.07* (0.16)	
fund_usage few benefit			0.94* (0.08)
fund_usage all benefit			0.14* (0.06)
subject_energy	0.24* (0.08)	−2.39* (0.53)	0.24* (0.08)
subject_freshwater	−0.31* (0.12)		−0.41* (0.12)
subject_habitat	0.62* (0.06)	−15.62* (0.55)	0.67* (0.06)
subject_nature	0.35* (0.05)	1.29* (0.28)	0.32* (0.05)
subject_ocean	−0.62* (0.04)	−0.72* (0.12)	−0.63* (0.04)
subject_pollution	0.88* (0.07)	1.86* (0.43)	0.90* (0.07)
subject_species	0.11* (0.06)	0.63* (0.22)	0.11 (0.06)
subject_weapons	0.06 (0.10)	1.29* (0.30)	0.17 (0.10)
obligations	−0.21* (0.05)	−2.18* (0.37)	−0.26* (0.04)
mon_and_enf	0.39* (0.04)	−0.65* (0.26)	0.34* (0.05)
dispute_settlement	0.52* (0.04)	1.34* (0.18)	0.44* (0.04)
public_good_global	−0.37* (0.05)	−0.17 (0.21)	−0.42* (0.05)
public_good_mixed	−0.61* (0.07)		−0.62* (0.07)
trade_openness	0.05 (0.03)	0.08 (0.05)	0.05 (0.03)
igo_membership_count	0.02* (0.002)	0.02* (0.003)	0.02* (0.002)
polity	0.03* (0.003)	0.01 (0.01)	0.03* (0.003)
gdppc	0.13* (0.02)	0.05 (0.05)	0.13* (0.02)
gdppc_squared	−0.05* (0.01)	−0.07* (0.02)	−0.05* (0.01)
gdp	0.04* (0.02)	0.01 (0.03)	0.04* (0.02)
legislative_approval	0.10* (0.05)	0.14 (0.10)	0.10 (0.05)
ratification_global	0.05* (0.001)	0.04* (0.003)	0.05* (0.001)
ratification_in_region	0.02* (0.001)	0.002 (0.002)	0.02* (0.001)
t1	−0.25* (0.02)	−0.30* (0.04)	−0.25* (0.02)
t2	0.01* (0.001)	0.01* (0.001)	0.01* (0.001)
t3	−0.0001* (0.0000)	−0.0001* (0.0000)	−0.0001* (0.0000)
Constant	−3.45* (0.20)	−0.96 (0.73)	−3.27* (0.20)
Treaties	178	26	178
Countries	154	154	154
Years	62	59	62
Observations	612,429	73,293	612,429
Log Likelihood	−25,271.16	−4,669.38	−25,207.26

Note:

\*p&lt;0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified

Table 24: Main results (logit regression with robust standard errors clustered by treaties)

	(1)	(2)	(3)
fund	0.40* (0.19)		
fund_contribution mandatory all		-1.56* (0.74)	
fund_contribution mandatory some		0.85 (0.72)	
fund_contribution voluntary		1.07* (0.30)	
fund_usage few benefit			0.94* (0.35)
fund_usage all benefit			0.14 (0.18)
subject_energy	0.24 (0.35)	-2.39* (0.92)	0.24 (0.36)
subject_freshwater	-0.31 (0.27)		-0.41 (0.27)
subject_habitat	0.62* (0.24)	-15.62* (1.68)	0.67* (0.26)
subject_nature	0.35 (0.22)	1.29* (0.58)	0.32 (0.22)
subject_ocean	-0.62* (0.15)	-0.72 (0.39)	-0.63* (0.15)
subject_pollution	0.88* (0.26)	1.86 (0.99)	0.90* (0.26)
subject_species	0.11 (0.22)	0.63 (0.46)	0.11 (0.22)
subject_weapons	0.06 (0.32)	1.29* (0.62)	0.17 (0.35)
obligations	-0.21 (0.16)	-2.18* (0.79)	-0.26 (0.17)
mon_and_enf	0.39* (0.18)	-0.65 (0.54)	0.34 (0.19)
dispute_settlement	0.52* (0.15)	1.34* (0.44)	0.44* (0.16)
public_good_global	-0.37 (0.20)	-0.17 (0.58)	-0.42* (0.20)
public_good_mixed	-0.61* (0.31)		-0.62 (0.33)
trade_openness	0.05 (0.03)	0.08 (0.08)	0.05 (0.03)
igo_membership_count	0.02* (0.002)	0.02* (0.004)	0.02* (0.002)
polity	0.03* (0.004)	0.01 (0.01)	0.03* (0.004)
gdppc	0.13* (0.04)	0.05 (0.07)	0.13* (0.04)
gdppc_squared	-0.05* (0.01)	-0.07* (0.02)	-0.05* (0.01)
gdp	0.04* (0.02)	0.01 (0.04)	0.04 (0.02)
legislative_approval	0.10 (0.06)	0.14 (0.12)	0.10 (0.06)
ratification_global	0.05* (0.004)	0.04* (0.01)	0.05* (0.005)
ratification_in_region	0.02* (0.004)	0.002 (0.01)	0.02* (0.004)
t1	-0.25* (0.05)	-0.30* (0.07)	-0.25* (0.05)
t2	0.01* (0.002)	0.01* (0.002)	0.01* (0.002)
t3	-0.0001* (0.0000)	-0.0001* (0.0000)	-0.0001* (0.0000)
Constant	-3.45* (0.58)	-0.96 (1.66)	-3.27* (0.60)
Treaties	178	26	178
Countries	154	154	154
Years	62	59	62
Observations	612,429	73,293	612,429
Log Likelihood	-25,271.16	-4,669.38	-25,207.26

Note:

\*p&lt;0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified

### **Controlling for Different Regression Techniques**

Our main results remain unchanged if we use a complementary log-log link function instead of the logit link function. While the logit link function is commonly considered as default, a conditional log-log link function might be a valid alternative if the dependent variable is severely skewed as it is the case with treaty ratification.

## Warning: glm.fit: algorithm did not converge

Table 25: Complementary log-log regression with robust standard errors clustered by country (model 2 did not converge)

	(1)	(2)	(3)
fund	0.34* (0.05)		
fund_contribution mandatory all		0.38 (0.24)	
fund_contribution mandatory some		1.86* (0.23)	
fund_contribution voluntary		0.96* (0.09)	
fund_usage few benefit			0.77* (0.08)
fund_usage all benefit			0.12 (0.06)
subject_energy	0.21* (0.09)	-3.81* (0.54)	0.20* (0.09)
subject_freshwater	-0.30* (0.12)		-0.39* (0.12)
subject_habitat	0.59* (0.07)	-20.57* (0.64)	0.63* (0.07)
subject_nature	0.32* (0.06)	1.17* (0.30)	0.30* (0.06)
subject_ocean	-0.55* (0.06)	-0.20 (0.15)	-0.55* (0.06)
subject_pollution	0.80* (0.07)	-0.21 (0.36)	0.80* (0.08)
subject_species	0.11* (0.05)	-0.36* (0.17)	0.09* (0.04)
subject_weapons	0.06 (0.11)	-0.06 (0.25)	0.17 (0.11)
obligations	-0.19* (0.05)	0.08 (0.42)	-0.25* (0.04)
mon_and_enf	0.36* (0.03)	0.78* (0.17)	0.30* (0.04)
dispute_settlement	0.50* (0.04)	0.64* (0.17)	0.44* (0.04)
public_good_global	-0.39* (0.06)	-0.44 (0.24)	-0.45* (0.05)
public_good_mixed	-0.61* (0.06)		-0.64* (0.06)
trade_openness	0.04 (0.06)	0.08 (0.07)	0.04 (0.06)
igo_membership_count	0.02* (0.004)	0.02* (0.004)	0.02* (0.004)
polity	0.03* (0.01)	0.01 (0.01)	0.03* (0.01)
gdppc	0.13* (0.04)	0.06 (0.08)	0.13* (0.04)
gdppc_squared	-0.04* (0.02)	-0.03 (0.03)	-0.04* (0.02)
gdp	0.03 (0.04)	-0.004 (0.06)	0.03 (0.04)
legislative_approval	0.10 (0.11)	0.04 (0.14)	0.09 (0.11)
ratification_global	0.05* (0.002)	0.04* (0.003)	0.04* (0.002)
ratification_in_region	0.02* (0.002)	-0.002 (0.002)	0.02* (0.002)
Constant	-3.65* (0.54)	-4.18* (0.92)	-3.50* (0.54)
Year dummies	Yes	Yes	Yes
Treaties	178	26	178
Countries	154	154	154
Years	62	59	62
Observations	612,429	73,293	612,429
Log Likelihood	-25,242.53	-4,737.32	-25,193.58

Note:

\*p<0.05

Reference categories: fund and fund-usage: no fund, fund-contribution: unspecified  
Year dummies were included in the regression; results are omitted from this table.

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