

# SAR results for FCTC implementation Articles 5, 6, 8, 11, and 13

June 2, 2017

## Contents

<b>1 Results</b>	<b>3</b>
<b>A Important dates</b>	<b>14</b>
<b>B Maps of implementation</b>	<b>17</b>

The following document shows preliminary results on the assessment of contagion effects in the implementation of the FCTC, where we measure implementation as number of items implemented in a particular article of the treaty. The method used to evaluate the possibility of contagion effects is Spatial Autocorrelation Models (SAR).

Only party members that ratified were used in the models. A complete list of signature and ratification dates is provided in the appendix Appendix A.

Description	Homophily	Density	Size	Modal Degree	Valued	Uirected	% Implemented
General Trade	No	0.36	191	119.00	Yes	No	0.76
Tobacco Trade	No	0.13	188	33.50	Yes	No	0.76
Minimum Distance	No	1.00	170	338.00	Yes	Yes	0.76
Centroid Distance	No	1.00	170	338.00	Yes	Yes	0.76
GL co-subscription	Yes	0.18	100	22.00	No	Yes	0.87
GL Referrals	Yes	0.02	142	3.00	No	No	0.85

Table 1: Networks descriptive statistics. The last column shows what portion of the nodes in the network implemented at least one part of the treaty, whereas a full article or part of it.

	0	1	2	3	4	>=5
2010						
Art. 5	0.59	0.03	0.02	0.03	0.14	0.19
Art. 6	0.59	0.02	0.05	0.12	0.07	0.14
Art. 8	0.58	0.07	0.31	0.01	0.03	0.01
Art. 11	0.60	0.01	0.01	0.02	0.01	0.36
Art. 13	0.60	0.02	0.01	0.00	0.03	0.34
2012						
Art. 51	0.20	0.02	0.10	0.11	0.24	0.32
Art. 61	0.25	0.12	0.12	0.16	0.14	0.21
Art. 81	0.20	0.05	0.04	0.13	0.33	0.25
Art. 111	0.30	0.02	0.01	0.03	0.01	0.62
Art. 131	0.30	0.03	0.02	0.01	0.03	0.61

Table 2: Distribution of number of items implemented per article. Row-sums are equal to 1.

# 1 Results

	Art. 5	Art. 6	Art. 8	Art. 11	Art. 13
General Trade	0.30	0.04 *	0.57	0.01 **	0.91
Tobacco Trade	0.31	0.01 **	0.00 **	0.00 ***	0.50
Minimal distance	0.38	0.05 *	0.12	0.00 **	0.43
Centroid Distance	0.04 *	0.00 ***	0.02 *	0.00 ***	0.39
Country Borders	0.16	0.66	0.09	0.01 *	0.88
GlobalLink Posts	0.20	0.06	0.06	0.01 **	0.89
GlobalLink Referrals	0.45	0.00 **	0.00 **	0.00 **	0.39
FCTC COP co-participation	0.78	0.88	0.05 *	0.16	0.90
FCTC INB co-participation	0.03 *	0.90	0.31	0.12	0.48
Interest Group co-membership	0.50	0.11	0.01 **	0.00 **	0.02 *

Table 3: Significance level of  $\rho$  per network/article in terms of p-values of the SAR models.\*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , and \*  $p < 0.05$ .

	Art. 5	Art. 6	Art. 8	Art. 11	Art. 13
(Intercept)	-1.98 (1.05)	-3.29*** (0.95)	-2.21** (0.83)	-1.93 (1.87)	-3.89 (2.33)
‘Eastern Mediterranean’	0.37 (0.64)	-0.03 (0.58)	0.97 (0.51)	-1.15 (1.15)	1.64 (1.43)
European	0.75 (0.39)	0.71* (0.35)	0.35 (0.31)	0.78 (0.69)	1.71* (0.86)
African	0.07 (0.35)	-0.07 (0.32)	-0.14 (0.28)	-0.74 (0.63)	0.83 (0.78)
‘Western Pacific’	0.32 (0.45)	0.09 (0.41)	0.03 (0.36)	-0.73 (0.81)	0.71 (1.00)
‘South-East Asia’	-0.38 (0.54)	-0.14 (0.49)	-0.49 (0.43)	-2.38* (0.97)	-0.81 (1.21)
democracy	0.20 (0.15)	0.20 (0.13)	0.23 (0.12)	0.10 (0.26)	0.53 (0.33)
GDP	0.16 (0.13)	0.39** (0.12)	0.02 (0.11)	0.39 (0.24)	0.82** (0.30)
‘Years since Sign.’	0.16 (0.09)	0.15 (0.08)	0.10 (0.07)	0.05 (0.16)	0.17 (0.20)
‘Years since Ratif.’	0.37*** (0.07)	0.31*** (0.06)	0.24*** (0.06)	0.92*** (0.13)	0.93*** (0.16)
tobac_prod_pp	0.00 (0.10)	-0.04 (0.09)	-0.09 (0.08)	-0.08 (0.19)	0.01 (0.23)
perc_female_smoke	-0.20 (0.15)	0.02 (0.13)	0.02 (0.12)	-0.23 (0.26)	-0.12 (0.32)
perc_male_smoke	0.14 (0.15)	0.07 (0.14)	0.09 (0.12)	0.08 (0.27)	0.21 (0.34)
year2012	1.49*** (0.23)	0.90*** (0.19)	2.27*** (0.23)	1.88*** (0.39)	2.06*** (0.47)
labor	-0.09 (0.17)	0.07 (0.15)	0.06 (0.13)	-0.20 (0.30)	-0.45 (0.37)
womens_rights	0.12 (0.38)	0.68* (0.34)	0.10 (0.30)	0.03 (0.68)	1.27 (0.84)
population	0.29** (0.11)	0.37*** (0.10)	0.12 (0.09)	0.43* (0.19)	0.68** (0.24)
govtown	0.86* (0.37)	0.76* (0.34)	0.42 (0.30)	1.22 (0.67)	1.39 (0.83)
$\rho$	0.08 (0.07)	0.14* (0.07)	0.05 (0.08)	0.22** (0.08)	-0.01 (0.08)
Num. obs.	352	352	352	352	352
Parameters	20	20	20	20	20
Log Likelihood	-718.77	-683.15	-638.70	-923.64	-1000.71
AIC (Linear model)	1476.60	1408.46	1315.72	1892.83	2039.44
AIC (Spatial model)	1477.54	1406.30	1317.40	1887.29	2041.42
LR test: statistic	1.06	4.16	0.32	7.54	0.01
LR test: p-value	0.30	0.04	0.57	0.01	0.91

\*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$

Table 4: SAR on Number of Items per Article (General Trade)

	Art. 5	Art. 6	Art. 8	Art. 11	Art. 13
(Intercept)	-1.78 (1.05)	-2.81** (0.94)	-1.97* (0.83)	-0.81 (1.86)	-3.82 (2.33)
‘Eastern Mediterranean’	0.37 (0.64)	-0.06 (0.58)	0.92 (0.50)	-1.25 (1.14)	1.64 (1.43)
European	0.65 (0.39)	0.54 (0.35)	0.25 (0.30)	0.27 (0.69)	1.65 (0.86)
African	0.04 (0.35)	-0.11 (0.32)	-0.12 (0.28)	-0.79 (0.62)	0.79 (0.78)
‘Western Pacific’	0.33 (0.45)	0.11 (0.41)	0.11 (0.35)	-0.69 (0.80)	0.79 (1.00)
‘South-East Asia’	-0.35 (0.55)	-0.02 (0.49)	-0.38 (0.43)	-2.24* (0.97)	-0.80 (1.21)
democracy	0.21 (0.15)	0.20 (0.13)	0.24* (0.12)	0.13 (0.26)	0.53 (0.33)
GDP	0.17 (0.13)	0.40** (0.12)	0.01 (0.11)	0.42 (0.24)	0.79** (0.30)
‘Years since Sign.’	0.16 (0.09)	0.16 (0.08)	0.08 (0.07)	0.04 (0.16)	0.14 (0.20)
‘Years since Ratif.’	0.37*** (0.07)	0.29*** (0.06)	0.22*** (0.06)	0.89*** (0.13)	0.92*** (0.16)
tobac_prod_pp	-0.01 (0.10)	-0.07 (0.09)	-0.12 (0.08)	-0.16 (0.19)	-0.02 (0.23)
perc_female_smoke	-0.19 (0.15)	0.04 (0.13)	0.02 (0.11)	-0.16 (0.26)	-0.11 (0.32)
perc_male_smoke	0.16 (0.15)	0.09 (0.14)	0.10 (0.12)	0.17 (0.27)	0.20 (0.34)
year2012	1.49*** (0.21)	0.89*** (0.18)	2.01*** (0.19)	1.87*** (0.37)	1.98*** (0.45)
labor	-0.10 (0.17)	0.04 (0.15)	0.05 (0.13)	-0.27 (0.30)	-0.45 (0.37)
womens_rights	0.07 (0.38)	0.50 (0.34)	0.00 (0.30)	-0.24 (0.68)	1.24 (0.85)
population	0.28** (0.11)	0.35*** (0.10)	0.09 (0.08)	0.38* (0.19)	0.66** (0.24)
govtown	0.83* (0.38)	0.64 (0.34)	0.33 (0.29)	0.98 (0.67)	1.34 (0.84)
$\rho$	0.06 (0.06)	0.15* (0.06)	0.18** (0.06)	0.21** (0.06)	0.04 (0.07)
Num. obs.	352	352	352	352	352
Parameters	20	20	20	20	20
Log Likelihood	-718.79	-681.69	-633.88	-921.93	-1000.49
AIC (Linear model)	1476.60	1408.46	1315.72	1892.83	2039.44
AIC (Spatial model)	1477.57	1403.38	1307.76	1883.86	2040.99
LR test: statistic	1.03	7.08	9.95	10.97	0.45
LR test: p-value	0.31	0.01	0.00	0.00	0.50

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

Table 5: SAR on Number of Items per Article (Tobacco Trade)

	Art. 5	Art. 6	Art. 8	Art. 11	Art. 13
(Intercept)	-1.83 (1.04)	-2.89** (0.94)	-2.19** (0.83)	-1.49 (1.85)	-3.94 (2.32)
‘Eastern Mediterranean’	0.36 (0.64)	-0.10 (0.58)	1.02* (0.51)	-1.04 (1.14)	1.61 (1.43)
European	0.66 (0.39)	0.52 (0.35)	0.31 (0.31)	0.49 (0.68)	1.61 (0.86)
African	0.08 (0.35)	-0.02 (0.32)	-0.09 (0.28)	-0.36 (0.62)	0.87 (0.78)
‘Western Pacific’	0.31 (0.45)	0.04 (0.41)	0.08 (0.36)	-0.69 (0.80)	0.73 (1.00)
‘South-East Asia’	-0.44 (0.55)	-0.31 (0.50)	-0.50 (0.43)	-2.45* (0.97)	-1.00 (1.23)
democracy	0.23 (0.15)	0.23 (0.13)	0.25* (0.12)	0.23 (0.26)	0.56 (0.33)
GDP	0.17 (0.14)	0.39** (0.12)	0.01 (0.11)	0.37 (0.24)	0.78* (0.30)
‘Years since Sign.’	0.16 (0.09)	0.15 (0.08)	0.09 (0.07)	0.07 (0.16)	0.14 (0.20)
‘Years since Ratif.’	0.37*** (0.07)	0.31*** (0.06)	0.24*** (0.06)	0.91*** (0.13)	0.93*** (0.16)
tobac_prod_pp	0.00 (0.10)	-0.05 (0.09)	-0.10 (0.08)	-0.11 (0.19)	-0.01 (0.23)
perc_female_smoke	-0.19 (0.15)	0.04 (0.13)	0.02 (0.12)	-0.18 (0.26)	-0.12 (0.32)
perc_male_smoke	0.15 (0.15)	0.09 (0.14)	0.09 (0.12)	0.16 (0.27)	0.21 (0.34)
year2012	1.47*** (0.22)	0.89*** (0.19)	2.17*** (0.21)	1.76*** (0.37)	1.94*** (0.46)
labor	-0.10 (0.17)	0.03 (0.15)	0.06 (0.13)	-0.26 (0.30)	-0.45 (0.37)
womens_rights	0.08 (0.38)	0.57 (0.34)	0.08 (0.30)	-0.26 (0.67)	1.22 (0.84)
population	0.29** (0.11)	0.38*** (0.10)	0.12 (0.08)	0.47* (0.19)	0.68** (0.24)
govtown	0.83* (0.37)	0.71* (0.34)	0.37 (0.30)	1.13 (0.66)	1.39 (0.83)
$\rho$	0.06 (0.06)	0.13* (0.06)	0.10 (0.06)	0.21*** (0.06)	0.06 (0.07)
Num. obs.	352	352	352	352	352
Parameters	20	20	20	20	20
Log Likelihood	-718.91	-683.27	-637.65	-922.19	-1000.40
AIC (Linear model)	1476.60	1408.46	1315.72	1892.83	2039.44
AIC (Spatial model)	1477.83	1406.55	1315.29	1884.38	2040.81
LR test: statistic	0.77	3.91	2.42	10.45	0.63
LR test: p-value	0.38	0.05	0.12	0.00	0.43

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

Table 6: SAR on Number of Items per Article (Minimal distance)

	Art. 5	Art. 6	Art. 8	Art. 11	Art. 13
(Intercept)	-1.96 (1.04)	-3.16*** (0.93)	-2.22** (0.83)	-1.78 (1.85)	-4.12 (2.33)
‘Eastern Mediterranean’	0.31 (0.64)	-0.12 (0.57)	0.93 (0.51)	-1.32 (1.14)	1.57 (1.43)
European	0.58 (0.39)	0.43 (0.35)	0.26 (0.31)	0.24 (0.68)	1.59 (0.87)
African	0.02 (0.35)	-0.05 (0.31)	-0.15 (0.28)	-0.67 (0.62)	0.81 (0.78)
‘Western Pacific’	0.36 (0.45)	0.17 (0.40)	0.10 (0.36)	-0.62 (0.80)	0.80 (1.00)
‘South-East Asia’	-0.50 (0.54)	-0.23 (0.49)	-0.54 (0.43)	-2.49** (0.96)	-0.92 (1.22)
democracy	0.28 (0.15)	0.31* (0.13)	0.29* (0.12)	0.35 (0.27)	0.60 (0.34)
GDP	0.14 (0.14)	0.35** (0.12)	-0.01 (0.11)	0.33 (0.24)	0.76* (0.30)
‘Years since Sign.’	0.16 (0.09)	0.14 (0.08)	0.09 (0.07)	0.07 (0.16)	0.15 (0.20)
‘Years since Ratif.’	0.36*** (0.07)	0.29*** (0.06)	0.23*** (0.06)	0.89*** (0.13)	0.92*** (0.16)
tobac_prod_pp	-0.02 (0.10)	-0.08 (0.09)	-0.11 (0.08)	-0.14 (0.19)	-0.02 (0.23)
perc_female_smoke	-0.20 (0.14)	0.03 (0.13)	0.02 (0.12)	-0.19 (0.26)	-0.13 (0.32)
perc_male_smoke	0.14 (0.15)	0.07 (0.14)	0.09 (0.12)	0.15 (0.27)	0.20 (0.34)
year2012	1.22*** (0.26)	0.62** (0.21)	1.87*** (0.27)	1.29** (0.42)	1.83*** (0.51)
labor	-0.10 (0.17)	0.03 (0.15)	0.06 (0.13)	-0.29 (0.30)	-0.45 (0.37)
womens_rights	-0.02 (0.38)	0.45 (0.34)	0.01 (0.30)	-0.42 (0.68)	1.17 (0.85)
population	0.28** (0.11)	0.36*** (0.10)	0.11 (0.08)	0.42* (0.19)	0.66** (0.24)
govtown	0.82* (0.37)	0.68* (0.33)	0.40 (0.30)	1.07 (0.66)	1.38 (0.83)
$\rho$	0.24* (0.11)	0.42*** (0.11)	0.24* (0.10)	0.45*** (0.11)	0.12 (0.14)
Num. obs.	352	352	352	352	352
Parameters	20	20	20	20	20
Log Likelihood	-717.27	-679.56	-636.34	-920.67	-1000.35
AIC (Linear model)	1476.60	1408.46	1315.72	1892.83	2039.44
AIC (Spatial model)	1474.55	1399.12	1312.69	1881.34	2040.71
LR test: statistic	4.05	11.34	5.03	13.49	0.73
LR test: p-value	0.04	0.00	0.02	0.00	0.39

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

Table 7: SAR on Number of Items per Article (Centroid Distance)

	Art. 5	Art. 6	Art. 8	Art. 11	Art. 13
(Intercept)	-1.76 (1.04)	-2.92** (0.95)	-2.12* (0.83)	-1.08 (1.87)	-3.91 (2.33)
‘Eastern Mediterranean’	0.35 (0.64)	-0.14 (0.58)	1.00* (0.51)	-1.23 (1.15)	1.63 (1.43)
European	0.64 (0.39)	0.60 (0.36)	0.29 (0.31)	0.40 (0.69)	1.70 (0.87)
African	0.09 (0.35)	-0.08 (0.32)	-0.09 (0.28)	-0.52 (0.63)	0.83 (0.78)
‘Western Pacific’	0.38 (0.45)	0.04 (0.41)	0.14 (0.36)	-0.58 (0.81)	0.73 (1.01)
‘South-East Asia’	-0.48 (0.55)	-0.13 (0.51)	-0.48 (0.43)	-2.46* (0.98)	-0.85 (1.24)
democracy	0.23 (0.15)	0.21 (0.13)	0.25* (0.12)	0.18 (0.26)	0.54 (0.33)
GDP	0.18 (0.13)	0.43*** (0.12)	0.03 (0.11)	0.45 (0.24)	0.81** (0.30)
‘Years since Sign.’	0.15 (0.09)	0.17* (0.08)	0.08 (0.07)	0.06 (0.16)	0.16 (0.20)
‘Years since Ratif.’	0.38*** (0.07)	0.31*** (0.07)	0.25*** (0.06)	0.93*** (0.13)	0.93*** (0.16)
tobac_prod_pp	-0.00 (0.10)	-0.04 (0.10)	-0.10 (0.08)	-0.10 (0.19)	0.00 (0.23)
perc_female_smoke	-0.20 (0.15)	0.05 (0.13)	0.03 (0.12)	-0.17 (0.26)	-0.12 (0.32)
perc_male_smoke	0.14 (0.15)	0.09 (0.14)	0.08 (0.12)	0.14 (0.27)	0.20 (0.34)
year2012	1.45*** (0.21)	0.99*** (0.19)	2.20*** (0.19)	1.93*** (0.37)	2.03*** (0.45)
labor	-0.10 (0.17)	0.03 (0.15)	0.06 (0.13)	-0.28 (0.30)	-0.45 (0.37)
womens_rights	0.06 (0.38)	0.62 (0.34)	0.07 (0.30)	-0.18 (0.68)	1.27 (0.84)
population	0.29** (0.11)	0.38*** (0.10)	0.11 (0.09)	0.43* (0.19)	0.67** (0.24)
govtown	0.79* (0.37)	0.73* (0.34)	0.36 (0.30)	1.05 (0.67)	1.39 (0.84)
$\rho$	0.08 (0.06)	0.02 (0.06)	0.09 (0.05)	0.14* (0.06)	0.01 (0.06)
Num. obs.	352	352	352	352	352
Parameters	20	20	20	20	20
Log Likelihood	-718.30	-685.13	-637.42	-924.27	-1000.71
AIC (Linear model)	1476.60	1408.46	1315.72	1892.83	2039.44
AIC (Spatial model)	1476.61	1410.26	1314.85	1888.55	2041.41
LR test: statistic	1.99	0.20	2.87	6.28	0.02
LR test: p-value	0.16	0.66	0.09	0.01	0.88

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

Table 8: SAR on Number of Items per Article (Country Borders)



	Art. 5	Art. 6	Art. 8	Art. 11	Art. 13
(Intercept)	-1.77 (1.04)	-2.95** (0.94)	-2.12* (0.83)	-1.04 (1.87)	-3.93 (2.33)
‘Eastern Mediterranean’	0.27 (0.64)	-0.20 (0.58)	0.89 (0.51)	-1.64 (1.15)	1.66 (1.43)
European	0.60 (0.39)	0.51 (0.35)	0.24 (0.31)	0.11 (0.70)	1.74* (0.87)
African	0.04 (0.35)	-0.10 (0.32)	-0.14 (0.28)	-0.81 (0.63)	0.83 (0.78)
‘Western Pacific’	0.27 (0.45)	-0.01 (0.41)	-0.03 (0.36)	-1.07 (0.81)	0.72 (1.00)
‘South-East Asia’	-0.39 (0.54)	-0.11 (0.49)	-0.51 (0.43)	-2.38* (0.97)	-0.82 (1.21)
democracy	0.19 (0.15)	0.18 (0.13)	0.22 (0.12)	0.04 (0.26)	0.54 (0.33)
GDP	0.17 (0.13)	0.41*** (0.12)	0.01 (0.11)	0.43 (0.24)	0.82** (0.30)
‘Years since Sign.’	0.16 (0.09)	0.17* (0.08)	0.10 (0.07)	0.11 (0.16)	0.17 (0.20)
‘Years since Ratif.’	0.36*** (0.07)	0.29*** (0.07)	0.23*** (0.06)	0.87*** (0.13)	0.93*** (0.16)
tobac_prod_pp	0.00 (0.10)	-0.04 (0.09)	-0.10 (0.08)	-0.09 (0.19)	0.01 (0.23)
perc_female_smoke	-0.19 (0.15)	0.06 (0.13)	0.04 (0.12)	-0.15 (0.26)	-0.12 (0.32)
perc_male_smoke	0.18 (0.15)	0.13 (0.14)	0.12 (0.12)	0.28 (0.28)	0.20 (0.34)
year2012	1.51*** (0.20)	0.97*** (0.18)	2.25*** (0.17)	2.07*** (0.36)	2.05*** (0.45)
labor	-0.09 (0.17)	0.05 (0.15)	0.06 (0.13)	-0.25 (0.30)	-0.45 (0.37)
womens_rights	0.06 (0.38)	0.56 (0.35)	0.05 (0.30)	-0.21 (0.68)	1.28 (0.85)
population	0.27* (0.11)	0.35*** (0.10)	0.09 (0.09)	0.36 (0.19)	0.68** (0.24)
govtown	0.82* (0.37)	0.70* (0.34)	0.40 (0.30)	1.05 (0.67)	1.41 (0.83)
$\rho$	0.08 (0.06)	0.11 (0.06)	0.11 (0.06)	0.17** (0.07)	-0.01 (0.07)
Num. obs.	352	352	352	352	352
Parameters	20	20	20	20	20
Log Likelihood	-718.48	-683.47	-637.11	-923.59	-1000.71
AIC (Linear model)	1476.60	1408.46	1315.72	1892.83	2039.44
AIC (Spatial model)	1476.97	1406.94	1314.22	1887.19	2041.42
LR test: statistic	1.63	3.52	3.50	7.64	0.02
LR test: p-value	0.20	0.06	0.06	0.01	0.89

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

Table 9: SAR on Number of Items per Article (GlobalLink Posts)

	Art. 5	Art. 6	Art. 8	Art. 11	Art. 13
(Intercept)	-1.75 (1.05)	-2.60** (0.94)	-1.93* (0.82)	-0.52 (1.86)	-3.81 (2.33)
‘Eastern Mediterranean’	0.30 (0.64)	-0.22 (0.58)	0.95 (0.50)	-1.60 (1.14)	1.57 (1.43)
European	0.63 (0.39)	0.44 (0.35)	0.17 (0.30)	0.09 (0.69)	1.62 (0.86)
African	0.04 (0.35)	-0.13 (0.31)	-0.09 (0.28)	-0.77 (0.62)	0.78 (0.78)
‘Western Pacific’	0.26 (0.45)	-0.13 (0.40)	-0.02 (0.35)	-1.21 (0.80)	0.66 (1.00)
‘South-East Asia’	-0.41 (0.55)	-0.28 (0.49)	-0.54 (0.43)	-2.59** (0.97)	-0.93 (1.22)
democracy	0.21 (0.15)	0.22 (0.13)	0.26* (0.12)	0.14 (0.26)	0.54 (0.33)
GDP	0.18 (0.13)	0.40*** (0.12)	0.02 (0.11)	0.46 (0.24)	0.79** (0.30)
‘Years since Sign.’	0.16 (0.09)	0.13 (0.08)	0.08 (0.07)	0.04 (0.16)	0.14 (0.20)
‘Years since Ratif.’	0.37*** (0.07)	0.29*** (0.06)	0.23*** (0.06)	0.88*** (0.13)	0.92*** (0.16)
tobac_prod_pp	0.01 (0.10)	-0.03 (0.09)	-0.08 (0.08)	-0.05 (0.19)	0.01 (0.23)
perc_female_smoke	-0.19 (0.15)	0.05 (0.13)	0.06 (0.11)	-0.15 (0.26)	-0.13 (0.32)
perc_male_smoke	0.15 (0.15)	0.09 (0.14)	0.08 (0.12)	0.20 (0.27)	0.20 (0.34)
year2012	1.52*** (0.21)	0.95*** (0.18)	2.11*** (0.17)	2.02*** (0.36)	2.00*** (0.45)
labor	-0.10 (0.17)	0.02 (0.15)	0.04 (0.13)	-0.32 (0.30)	-0.44 (0.37)
womens_rights	0.09 (0.38)	0.52 (0.34)	0.05 (0.30)	-0.28 (0.67)	1.22 (0.84)
population	0.28** (0.11)	0.36*** (0.10)	0.11 (0.08)	0.41* (0.19)	0.66** (0.24)
govtown	0.80* (0.38)	0.53 (0.34)	0.24 (0.30)	0.73 (0.68)	1.29 (0.84)
$\rho$	0.04 (0.05)	0.13** (0.05)	0.13** (0.05)	0.16** (0.05)	0.04 (0.05)
Num. obs.	352	352	352	352	352
Parameters	20	20	20	20	20
Log Likelihood	-719.02	-680.99	-634.41	-922.28	-1000.36
AIC (Linear model)	1476.60	1408.46	1315.72	1892.83	2039.44
AIC (Spatial model)	1478.04	1401.98	1308.81	1884.57	2040.71
LR test: statistic	0.56	8.48	8.91	10.26	0.72
LR test: p-value	0.45	0.00	0.00	0.00	0.39

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

Table 10: SAR on Number of Items per Article (GlobalLink Referrals)

	Art. 5	Art. 6	Art. 8	Art. 11	Art. 13
(Intercept)	-1.72 (1.07)	-3.02** (0.98)	-2.43** (0.83)	-1.85 (1.91)	-4.03 (2.38)
‘Eastern Mediterranean’	0.35 (0.64)	-0.14 (0.58)	0.91 (0.51)	-1.51 (1.16)	1.64 (1.43)
European	0.70 (0.39)	0.62 (0.35)	0.23 (0.31)	0.25 (0.70)	1.70 (0.87)
African	0.06 (0.35)	-0.10 (0.32)	-0.24 (0.28)	-0.96 (0.64)	0.81 (0.79)
‘Western Pacific’	0.30 (0.45)	0.02 (0.41)	-0.07 (0.36)	-1.09 (0.81)	0.70 (1.00)
‘South-East Asia’	-0.38 (0.55)	-0.08 (0.49)	-0.48 (0.43)	-2.33* (0.98)	-0.81 (1.21)
democracy	0.20 (0.15)	0.21 (0.14)	0.27* (0.12)	0.16 (0.27)	0.54 (0.33)
GDP	0.18 (0.14)	0.44*** (0.13)	0.07 (0.11)	0.59* (0.25)	0.82** (0.31)
‘Years since Sign.’	0.17 (0.09)	0.18* (0.08)	0.08 (0.07)	0.09 (0.16)	0.16 (0.20)
‘Years since Ratif.’	0.37*** (0.07)	0.31*** (0.07)	0.23*** (0.06)	0.91*** (0.13)	0.93*** (0.16)
tobac_prod_pp	0.01 (0.10)	-0.03 (0.09)	-0.09 (0.08)	-0.07 (0.19)	0.00 (0.23)
perc_female_smoke	-0.18 (0.15)	0.04 (0.13)	0.00 (0.12)	-0.20 (0.26)	-0.12 (0.33)
perc_male_smoke	0.15 (0.15)	0.10 (0.14)	0.10 (0.12)	0.19 (0.28)	0.21 (0.34)
year2012	1.56*** (0.25)	1.00*** (0.20)	1.89*** (0.28)	2.03*** (0.44)	2.03*** (0.49)
labor	-0.10 (0.17)	0.04 (0.15)	0.08 (0.13)	-0.25 (0.30)	-0.44 (0.38)
womens_rights	0.10 (0.38)	0.63 (0.34)	0.12 (0.30)	0.06 (0.68)	1.29 (0.84)
population	0.29** (0.11)	0.38*** (0.10)	0.13 (0.08)	0.48* (0.19)	0.68** (0.24)
govtown	0.86* (0.37)	0.73* (0.34)	0.42 (0.30)	1.12 (0.67)	1.39 (0.83)
$\rho$	-0.03 (0.10)	0.01 (0.10)	0.20 (0.11)	0.15 (0.11)	0.01 (0.11)
Num. obs.	352	352	352	352	352
Parameters	20	20	20	20	20
Log Likelihood	-719.26	-685.22	-636.90	-926.41	-1000.71
AIC (Linear model)	1476.60	1408.46	1315.72	1892.83	2039.44
AIC (Spatial model)	1478.52	1410.44	1313.80	1892.82	2041.42
LR test: statistic	0.08	0.02	3.91	2.01	0.01
LR test: p-value	0.78	0.88	0.05	0.16	0.90

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

Table 11: SAR on Number of Items per Article (FCTC COP co-participation)

	Art. 5	Art. 6	Art. 8	Art. 11	Art. 13
(Intercept)	-1.39 (1.05)	-2.95** (0.96)	-2.24** (0.83)	-1.51 (1.89)	-3.65 (2.34)
‘Eastern Mediterranean’	0.26 (0.64)	-0.14 (0.58)	0.97 (0.51)	-1.34 (1.16)	1.60 (1.43)
European	0.84* (0.39)	0.64 (0.35)	0.28 (0.31)	0.24 (0.70)	1.84* (0.87)
African	0.22 (0.35)	-0.08 (0.32)	-0.19 (0.28)	-1.04 (0.64)	0.95 (0.79)
‘Western Pacific’	0.36 (0.45)	0.03 (0.41)	-0.03 (0.36)	-1.09 (0.81)	0.78 (1.00)
‘South-East Asia’	-0.40 (0.54)	-0.08 (0.50)	-0.49 (0.43)	-2.34* (0.98)	-0.84 (1.21)
democracy	0.11 (0.15)	0.20 (0.14)	0.25* (0.12)	0.22 (0.27)	0.46 (0.34)
GDP	0.15 (0.13)	0.43*** (0.12)	0.03 (0.11)	0.52* (0.24)	0.78** (0.30)
‘Years since Sign.’	0.19* (0.09)	0.18* (0.08)	0.10 (0.07)	0.09 (0.16)	0.18 (0.20)
‘Years since Ratif.’	0.41*** (0.07)	0.31*** (0.07)	0.23*** (0.06)	0.88*** (0.13)	0.96*** (0.16)
tobac_prod_pp	0.02 (0.10)	-0.03 (0.09)	-0.09 (0.08)	-0.09 (0.19)	0.02 (0.23)
perc_female_smoke	-0.18 (0.14)	0.05 (0.13)	0.03 (0.12)	-0.19 (0.26)	-0.11 (0.32)
perc_male_smoke	0.16 (0.15)	0.10 (0.14)	0.10 (0.12)	0.19 (0.28)	0.21 (0.34)
year2012	1.67*** (0.23)	1.01*** (0.20)	2.16*** (0.25)	2.01*** (0.41)	2.11*** (0.48)
labor	-0.12 (0.17)	0.03 (0.15)	0.06 (0.13)	-0.26 (0.30)	-0.46 (0.37)
womens_rights	0.21 (0.38)	0.64 (0.35)	0.06 (0.30)	-0.19 (0.69)	1.35 (0.85)
population	0.27* (0.11)	0.38*** (0.10)	0.13 (0.09)	0.48* (0.19)	0.65** (0.24)
govtown	0.87* (0.37)	0.74* (0.34)	0.41 (0.30)	1.15 (0.67)	1.40 (0.83)
$\rho$	-0.18 (0.09)	-0.01 (0.09)	0.08 (0.09)	0.14 (0.10)	-0.07 (0.10)
Num. obs.	352	352	352	352	352
Parameters	20	20	20	20	20
Log Likelihood	-716.87	-685.22	-638.34	-926.22	-1000.46
AIC (Linear model)	1476.60	1408.46	1315.72	1892.83	2039.44
AIC (Spatial model)	1473.74	1410.44	1316.69	1892.44	2040.93
LR test: statistic	4.86	0.02	1.03	2.38	0.51
LR test: p-value	0.03	0.90	0.31	0.12	0.48

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

Table 12: SAR on Number of Items per Article (FCTC INB co-participation)

	Art. 5	Art. 6	Art. 8	Art. 11	Art. 13
(Intercept)	-1.93 (1.04)	-3.16*** (0.95)	-2.28** (0.82)	-1.69 (1.87)	-4.53* (2.31)
‘Eastern Mediterranean’	0.38 (0.64)	-0.08 (0.58)	1.00* (0.51)	-1.28 (1.15)	1.84 (1.42)
European	0.67 (0.39)	0.58 (0.35)	0.26 (0.31)	0.24 (0.69)	1.53 (0.85)
African	0.06 (0.35)	-0.06 (0.32)	-0.11 (0.28)	-0.72 (0.63)	0.92 (0.78)
‘Western Pacific’	0.31 (0.45)	0.06 (0.41)	0.03 (0.35)	-0.89 (0.80)	0.82 (0.99)
‘South-East Asia’	-0.33 (0.55)	-0.01 (0.49)	-0.43 (0.43)	-2.10* (0.98)	-0.56 (1.21)
democracy	0.22 (0.15)	0.24 (0.13)	0.27* (0.12)	0.23 (0.26)	0.65* (0.33)
GDP	0.19 (0.13)	0.44*** (0.12)	0.03 (0.11)	0.51* (0.24)	0.83** (0.30)
‘Years since Sign.’	0.17 (0.09)	0.17* (0.08)	0.09 (0.07)	0.08 (0.16)	0.12 (0.20)
‘Years since Ratif.’	0.36*** (0.07)	0.29*** (0.07)	0.22*** (0.06)	0.85*** (0.13)	0.85*** (0.16)
tobac_prod_pp	0.01 (0.10)	-0.04 (0.09)	-0.10 (0.08)	-0.09 (0.19)	-0.02 (0.23)
perc_female_smoke	-0.19 (0.15)	0.04 (0.13)	0.02 (0.12)	-0.20 (0.26)	-0.14 (0.32)
perc_male_smoke	0.15 (0.15)	0.10 (0.14)	0.11 (0.12)	0.21 (0.27)	0.22 (0.34)
year2012	1.53*** (0.21)	0.99*** (0.18)	2.09*** (0.19)	2.10*** (0.37)	1.88*** (0.45)
labor	-0.09 (0.17)	0.05 (0.15)	0.07 (0.13)	-0.25 (0.30)	-0.40 (0.37)
womens_rights	0.11 (0.38)	0.62 (0.34)	0.08 (0.30)	-0.09 (0.68)	1.23 (0.83)
population	0.29** (0.11)	0.38*** (0.10)	0.11 (0.08)	0.44* (0.19)	0.67** (0.24)
govtown	0.83* (0.38)	0.67* (0.34)	0.34 (0.30)	0.94 (0.67)	1.16 (0.83)
$\rho$	0.03 (0.06)	0.07 (0.05)	0.14* (0.06)	0.15** (0.06)	0.14* (0.06)
Num. obs.	352	352	352	352	352
Parameters	20	20	20	20	20
Log Likelihood	-719.07	-683.92	-635.54	-923.35	-998.01
AIC (Linear model)	1476.60	1408.46	1315.72	1892.83	2039.44
AIC (Spatial model)	1478.14	1407.83	1311.08	1886.70	2036.02
LR test: statistic	0.46	2.62	6.64	8.12	5.42
LR test: p-value	0.50	0.11	0.01	0.00	0.02

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

Table 13: SAR on Number of Items per Article ( Interest Group co-membership)

## A Important dates

	Code	Name	Signature date	Ratification Date
1	AF	Afghanistan	20040629	20100813
2	AL	Albania	20040629	20060426
3	DZ	Algeria	20030620	20060630
4	AO	Angola	20040629	20070920
5	AG	Antigua and Barbuda	20040628	20060605
6	AR	Argentina	20030925	
7	AM	Armenia		20041129
8	AU	Australia	20031205	20041027
9	AT	Austria	20030828	20050915
10	AZ	Azerbaijan		20051101
11	BS	Bahamas	20040629	20091103
12	BH	Bahrain		20070320
13	BD	Bangladesh	20030616	20040614
14	BB	Barbados	20040628	20051103
15	BY	Belarus	20040617	20050908
16	BE	Belgium	20040122	20051101
17	BZ	Belize	20030926	20051215
18	BJ	Benin	20040618	20051103
19	BT	Bhutan	20031209	20040823
20	BO	Bolivia, Plurinational State of	20040227	20050915
21	BA	Bosnia and Herzegovina		20090710
22	BW	Botswana	20030616	20050131
23	BR	Brazil	20030616	20051103
24	BN	Brunei Darussalam	20040603	20040603
25	BG	Bulgaria	20031222	20051107
26	BF	Burkina Faso	20031222	20060731
27	BI	Burundi	20030616	20051122
28	CV	Cabo Verde	20040217	20051004
29	KH	Cambodia	20040525	20051115
30	CM	Cameroon	20040513	20060203
31	CA	Canada	20030715	20041126
32	CF	Central African Republic	20031229	20051107
33	TD	Chad	20040622	20060130
34	CL	Chile	20030925	20050613
35	CN	China	20031110	20051011
36	CO	Colombia		20080410
37	KM	Comoros	20040227	20060124
38	CG	Congo	20040323	20070206
39	CK	Cook Islands	20040514	20040514
40	CR	Costa Rica	20030703	20080821
41	CI	Cte d'Ivoire	20030724	20100813
42	HR	Croatia	20040602	20080714
43	CU	Cuba	20040629	
44	CY	Cyprus	20040524	20051026
45	CZ	Czechia	20030616	20120601
46	KP	Democratic People's Republic of Korea	20030617	20050427
47	CD	Democratic Republic of the Congo	20040628	20051028
48	DK	Denmark	20030616	20041216
49	DJ	Djibouti	20040513	20050731
50	DM	Dominica	20040629	20060724

51	EC	Ecuador	20040322	20060725
52	EG	Egypt	20030617	20050225
53	SV	El Salvador	20040318	20140721
54	GQ	Equatorial Guinea		20050917
55	EE	Estonia	20040608	20050727
56	ET	Ethiopia	20040225	20140325
57		European Union	20030616	20050630
58	FJ	Fiji	20031003	20031003
59	FI	Finland	20030616	20050124
60	FR	France	20030616	20041019
61	GA	Gabon	20030822	20090220
62	GM	Gambia	20030616	20070918
63	GE	Georgia	20040220	20060214
64	DE	Germany	20031024	20041216
65	GH	Ghana	20030620	20041129
66	GR	Greece	20030616	20060127
67	GD	Grenada	20040629	20070814
68	GT	Guatemala	20030925	20051116
69	GN	Guinea	20040401	20071107
70	GW	Guinea-Bissau		20081107
71	GY	Guyana		20050915
72	HT	Haiti	20030723	
73	HN	Honduras	20040618	20050216
74	HU	Hungary	20030616	20040407
75	IS	Iceland	20030616	20040614
76	IN	India	20030910	20040205
77	IR	Iran, Islamic Republic of	20030616	20051106
78	IQ	Iraq	20040629	20080317
79	IE	Ireland	20030916	20051107
80	IL	Israel	20030620	20050824
81	IT	Italy	20030616	20080702
82	JM	Jamaica	20030924	20050707
83	JP	Japan	20040309	20040608
84	JO	Jordan	20040528	20040819
85	KZ	Kazakhstan	20040621	20070122
86	KE	Kenya	20040625	20040625
87	KI	Kiribati	20040427	20050915
88	KW	Kuwait	20030616	20060512
89	KG	Kyrgyzstan	20040218	20060525
90	LA	Lao People's Democratic Republic	20040629	20060906
91	LV	Latvia	20040510	20050210
92	LB	Lebanon	20040304	20051207
93	LS	Lesotho	20040623	20050114
94	LR	Liberia	20040625	20090915
95	LY	Libya	20040618	20050607
96	LT	Lithuania	20030922	20041216
97	LU	Luxembourg	20030616	20050630
98	MG	Madagascar	20030924	20040922
99	MY	Malaysia	20030923	20050916
100	MV	Maldives	20040517	20040520
101	ML	Mali	20030923	20051019
102	MT	Malta	20030616	20030924
103	MH	Marshall Islands	20030616	20041208
104	MR	Mauritania	20040624	20051028

105	MU	Mauritius	20030617	20040517
106	MX	Mexico	20030812	20040528
107	FM	Micronesia, Federated States of	20040628	20050318
108	MN	Mongolia	20030616	20040127
109	ME	Montenegro		20061023
110	MA	Morocco	20040416	
111	MZ	Mozambique	20030618	
112	MM	Myanmar	20031023	20040421
113	NA	Namibia	20040129	20051107
114	NR	Nauru		20040629
115	NP	Nepal	20031203	20061107
116	NL	Netherlands	20030616	20050127
117	NZ	New Zealand	20030616	20040127
118	NI	Nicaragua	20040607	20080409
119	NE	Niger	20040628	20050825
120	NG	Nigeria	20040628	20051020
121	NU	Niue	20040618	20050603
122	NO	Norway	20030616	20030616
123	OM	Oman		20050309
124	PK	Pakistan	20040518	20041103
125	PW	Palau	20030616	20040212
126	PA	Panama	20030926	20040816
127	PG	Papua New Guinea	20040622	20060525
128	PY	Paraguay	20030616	20060926
129	PE	Peru	20040421	20041130
130	PH	Philippines	20030923	20050606
131	PL	Poland	20040614	20060915
132	PT	Portugal	20040109	20051108
133	QA	Qatar	20030617	20040723
134	KR	Republic of Korea	20030721	20050516
135	MD	Republic of Moldova	20040629	20090203
136	RO	Romania	20040625	20060127
137	RU	Russian Federation		20080603
138	RW	Rwanda	20040602	20051019
139	WS	Samoa	20030925	20051103
140	SM	San Marino	20030926	20040707
141	ST	Sao Tome and Principe	20040618	20060412
142	SA	Saudi Arabia	20040624	20050509
143	SN	Senegal	20030619	20050127
144	RS	Serbia	20040628	20060208
145	SC	Seychelles	20030911	20031112
146	SL	Sierra Leone		20090522
147	SG	Singapore	20031229	20040514
148	SK	Slovakia	20031219	20040504
149	SI	Slovenia	20030925	20050315
150	SB	Solomon Islands	20040618	20040810
151	ZA	South Africa	20030616	20050419
152	ES	Spain	20030616	20050111
153	LK	Sri Lanka	20030923	20031111
154	KN	St. Kitts and Nevis	20040629	20110621
155	LC	St. Lucia	20040629	20051107
156	VC	St. Vincent and the Grenadines	20040614	20101029
157	SD	Sudan	20040610	20051031
158	SR	Suriname	20040624	20081216



159	SZ	Swaziland	20040629	20060113
160	SE	Sweden	20030616	20050707
161	CH	Switzerland	20040625	
162	SY	Syrian Arab Republic	20030711	20041122
163	TJ	Tajikistan		20130621
164	TH	Thailand	20030620	20041108
165	MK	The former Yugoslav Republic of Macedonia		20060630
166	TL	Timor-Leste	20040525	20041222
167	TG	Togo	20040512	20051115
168	TO	Tonga	20030925	20050408
169	TT	Trinidad and Tobago	20030827	20040819
170	TN	Tunisia	20030822	20100607
171	TR	Turkey	20040428	20041231
172	TM	Turkmenistan		20110513
173	TV	Tuvalu	20040610	20050926
174	UG	Uganda	20040305	20070620
175	UA	Ukraine	20040625	20060606
176	AE	United Arab Emirates	20040624	20051107
177	GB	United Kingdom of Great Britain and Northern Ireland	20030616	20041216
178	TZ	United Republic of Tanzania	20040127	20070430
179	US	United States of America	20040510	
180	UY	Uruguay	20030619	20040909
181	UZ	Uzbekistan		20120515
182	VU	Vanuatu	20040422	20050916
183	VE	Venezuela, Bolivarian Republic of	20030922	20060627
184	VN	Viet Nam	20030903	20041217
185	YE	Yemen	20030620	20070222
186	ZM	Zambia		20080523
187	ZW	Zimbabwe		20141204

---

Table 14: Signature and Ratification dates. The statistical models only include those countries that ratified the treaty. Notably, US is not included

## B Maps of implementation

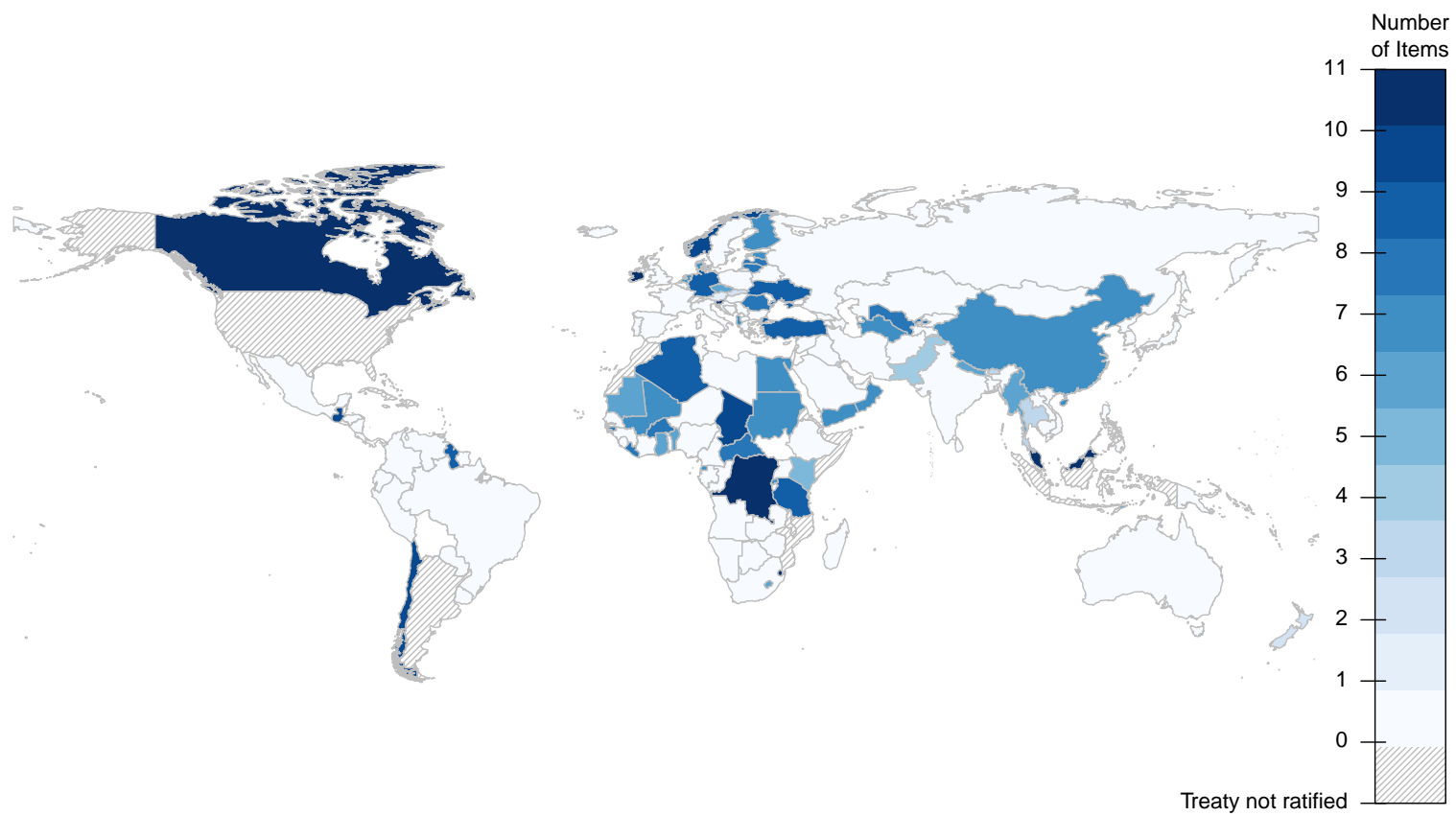


Figure 1: Number of items implemented of Art. 11 by 2010. Source: Downloaded from <http://apps.who.int/fctc/implementation/database>

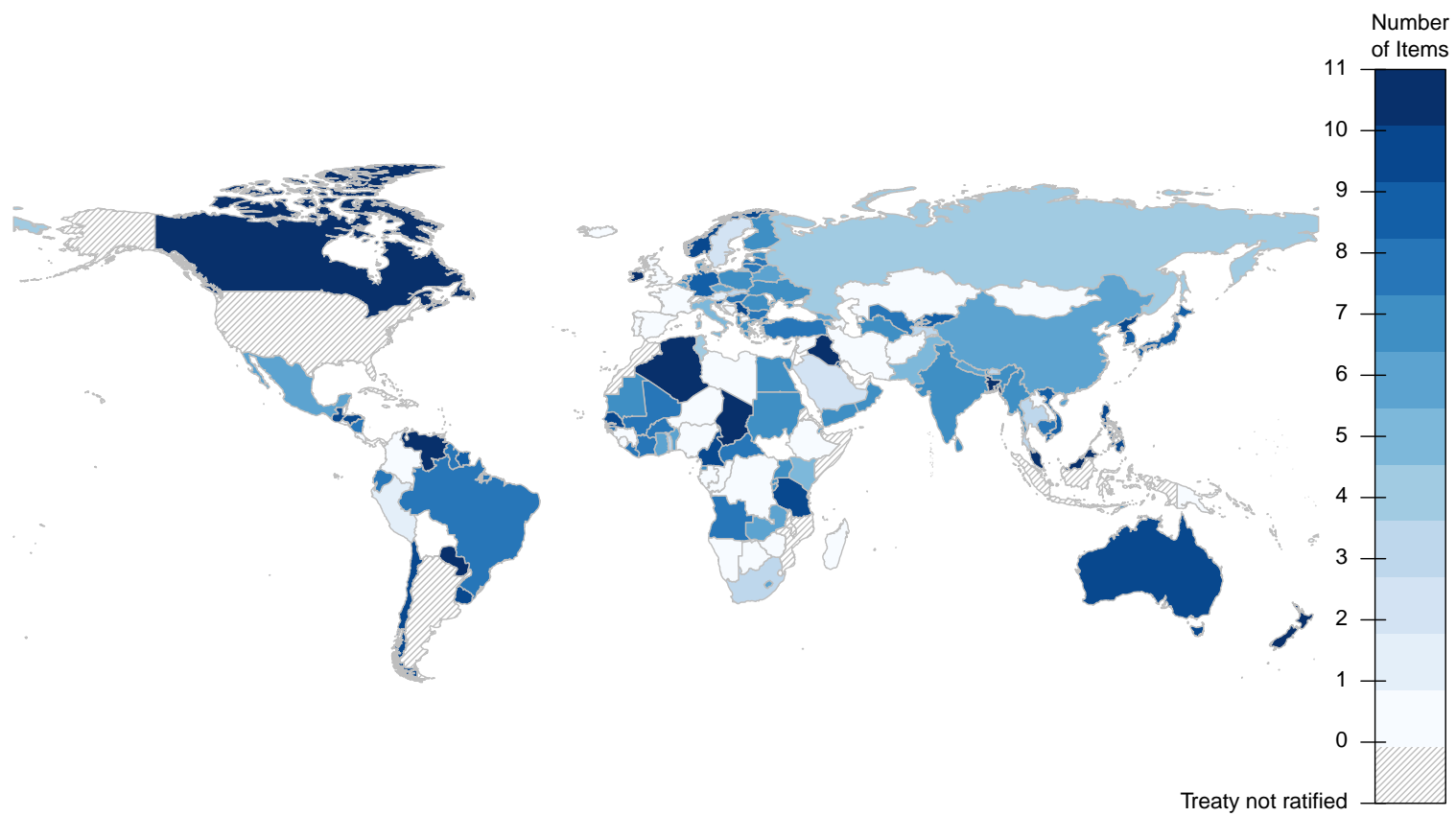


Figure 2: Number of items implemented of Art. 11 by 2012. Source: Downloaded from <http://apps.who.int/fctc/implementation/database>