Appendix to 'The unintended consequences of UN sanctions: A qualitative comparative analysis'

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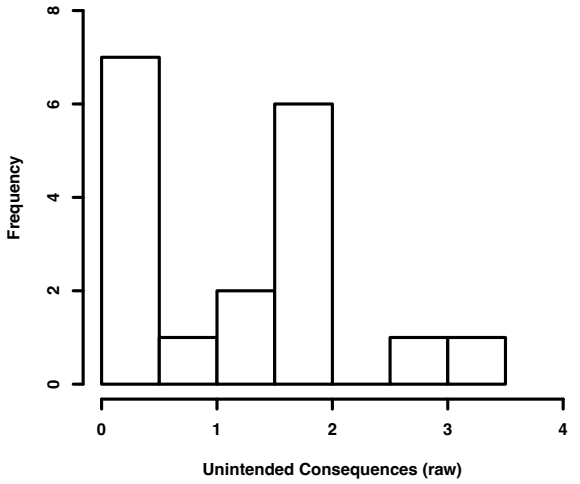
Table A1. Calibration sensitivity ranges and robustness parameters

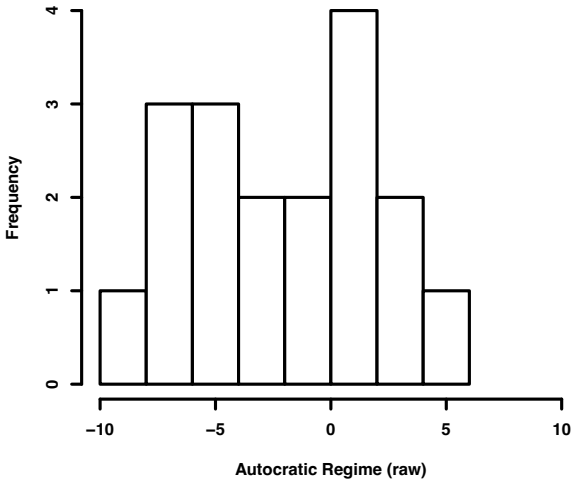
Sensitivity Ranges				
		Lower bound	Empirical anchors	Upper bound
Unintended Consequences (*Outcome*)	Full inclusion	0.76	1.25	NA
	Crossover	0.51	0.75	1.11
	Full exclusion	NA	0.50	0.74
Autocratic Regime	Full inclusion	NA	-6	-1
	Crossover	-2.2	-1	1.3
	Full exclusion	-1	5	NA
Economic Isolation	Full inclusion	40	40	49
	Crossover	50	50	80
	Full exclusion	50	80	NA
Large Scope	Full inclusion	2.1	2.5	NA
	Crossover	1.7	2	2.1
	Full exclusion	0.5	1	1.9
Long Duration	Full inclusion	96	144	NA
	Crossover	79	96	97
	Full exclusion	NA	48	95
Permanent Five Involvement	Full inclusion	0.45	0.70	NA
	Crossover	0.30	0.40	0.45
	Full exclusion	NA	0.30	0.40
Consistency range		0.51	0.75	0.75
Frequency range		1	1	1

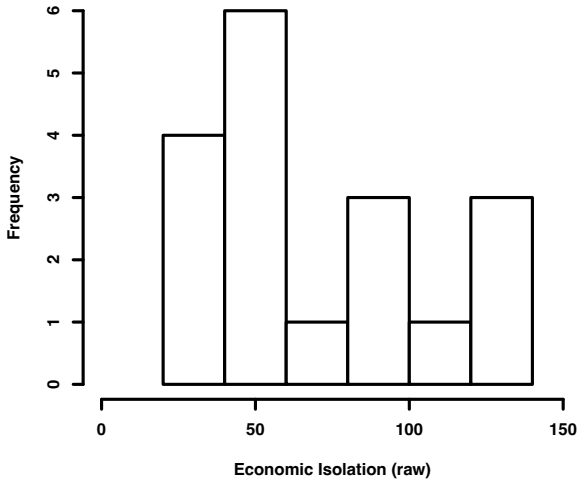
Robustness Parameters			
	Fit-oriented		Case-oriented
RF_{cons}	0.988	RCR_{typ}	1.000
RF_{cov}	0.969	RCR_{dev}	–
$RF_{SC_\min TS}$	0.967	*RCC_Rank*	1
$RF_{SC_\max TS}$	0.973		

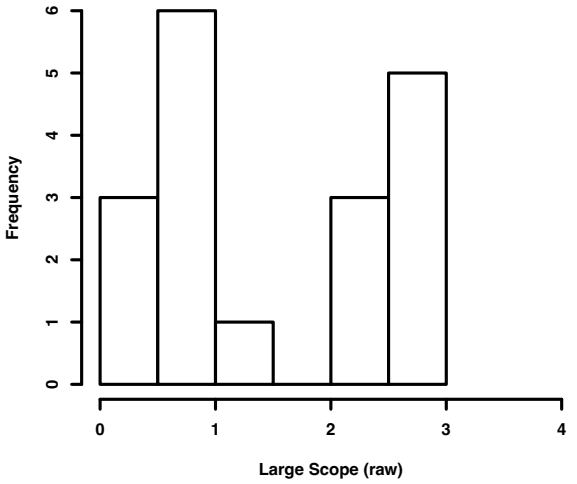
Note: The robustness tests conducted follow the protocol developed by Oana and Schneider (2021) and implemented in the SetMethods package (Oana and Schneider 2018). Upper and lower bound indicate the range within which the solution does not change. "NA" indicates that no limit was found to that range.

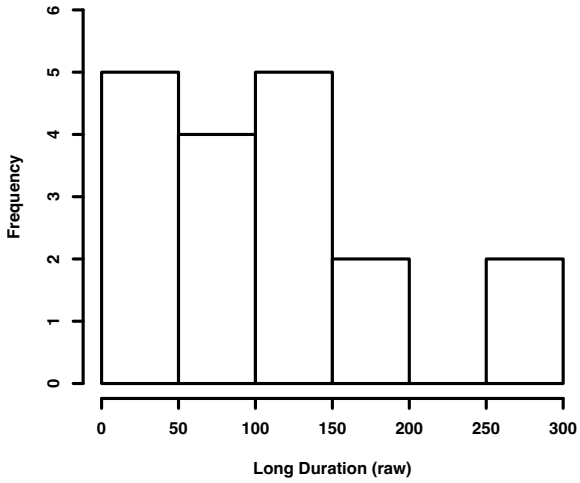
Figure A1. Histograms of raw data











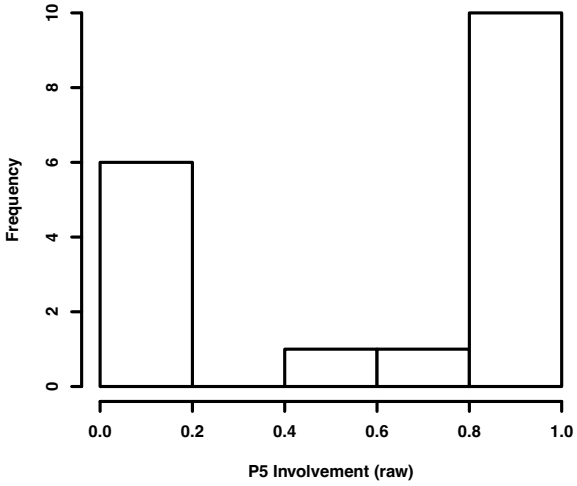


Figure A2. XY plots of raw and calibrated data

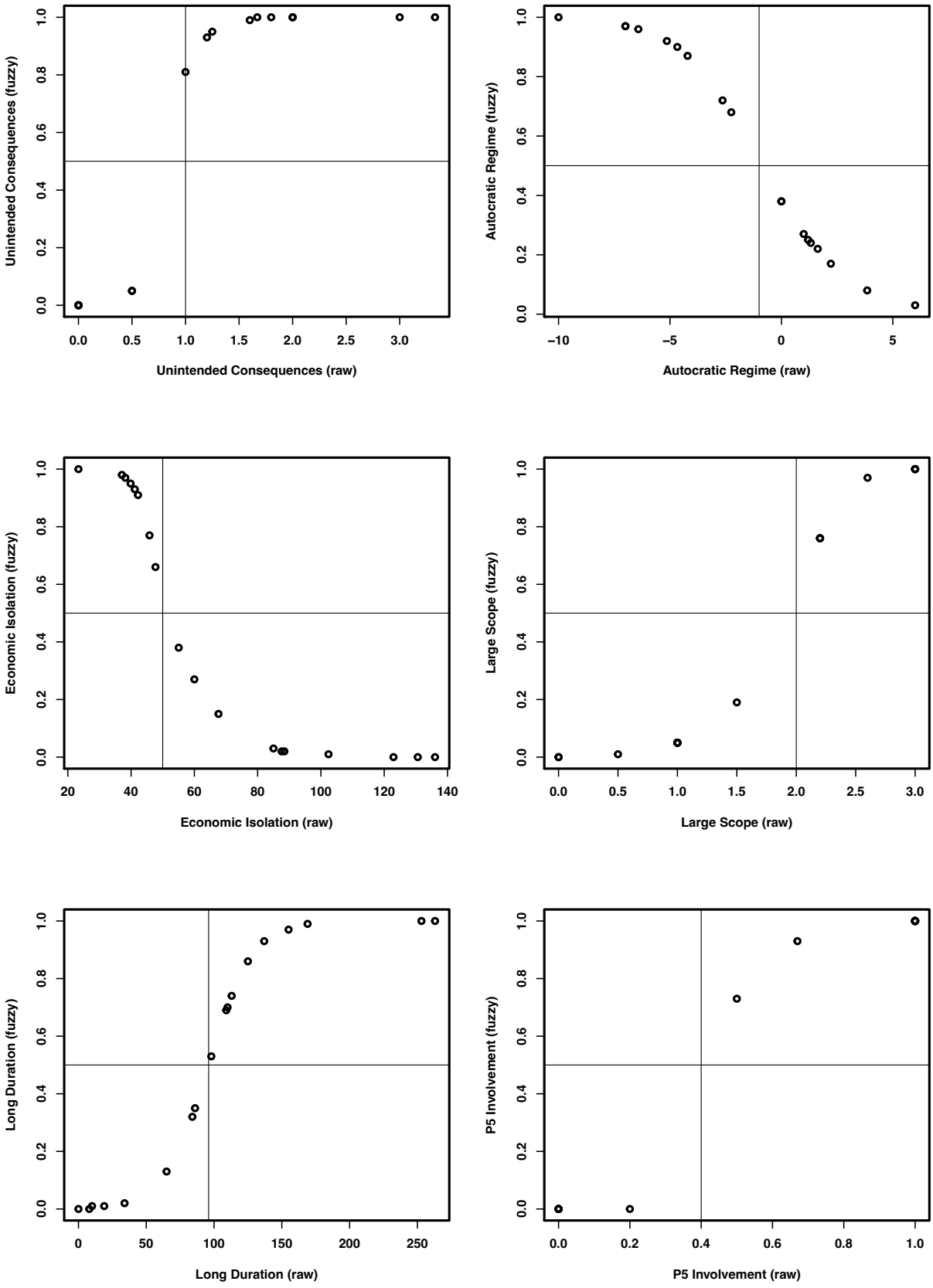


Table A2. Truth table with logical remainders and their treatment

Conditions					Outcome				
AR	LS	P5	EI	LD	UC	*N*	Consistency	PRI	Cases
0	1	1	0	1	1	2	1.000	1.000	**Côte d'Ivoire**, **Somalia**
0	1	1	0	0	1	1	0.980	0.979	**Libya 2**
0	1	0	0	1	1	1	0.979	0.978	**Liberia**
0	0	0	0	1	1	1	0.969	0.967	**Democratic Republic of Congo**
0	1	0	1	1	1	1	0.932	0.928	**Sierra Leone**
1	1	1	0	1	1	1	0.925	0.906	**Angola**
1	1	1	0	0	1	1	0.921	0.910	**North Korea**
1	1	1	1	0	1	1	0.864	0.833	**Haiti**
1	0	1	0	1	1	1	0.779	0.750	**Libya 1**
1	0	1	0	0	1	1	0.750	0.737	**Former Republic of Yugoslavia**
0	0	1	0	1	0	1	0.517	0.434	Lebanon
1	0	1	1	1	0	1	0.303	0.253	Rwanda
1	0	0	1	1	0	1	0.254	0.221	Sudan 2
0	0	0	1	0	0	1	0.183	0.144	Guinea-Bissau
0	0	1	1	0	0	1	0.169	0.099	Central African Republic
1	0	1	1	0	0	1	0.151	0.098	Iran
1	0	0	1	0	0	1	0.091	0.060	Sudan 1
0	0	0	0	0	?	0	×		
0	0	0	1	1	?	0	○		
0	0	1	0	0	?	0	×		
0	0	1	1	1	?	0			
0	1	0	0	0	?	0	×		
0	1	0	1	0	?	0			
0	1	1	1	0	?	0	○		
0	1	1	1	1	?	0	○		
1	0	0	0	0	?	0	×		
1	0	0	0	1	?	0			
1	1	0	0	0	?	0			
1	1	0	0	1	?	0			
1	1	0	1	0	?	0			
1	1	0	1	1	?	0			
1	1	1	1	1	?	0	○		

Note: AR = Autocratic Regime, LS = Large Scope, P5 = UNSC Permanent Five Involvement, EI = Economic Isolation, LD = Long Duration, UC = Unintended Consequences, bold cases hold membership >0.50 in the outcome, × = excluded logical remainders, ○ = simplifying assumptions of the intermediate solution.

Table A3. Parsimonious solution for the outcome unintended consequences

	Parsimonious Solution Term		
	Path 1	Path 2	Path 3
Autocratic Regime		⊗	●
Large Scope	●		
P5 Involvement		⊗	
Economic Isolation			⊗
Long Duration		●	
Consistency	0.94	0.94	0.90
PRI	0.94	0.94	0.89
Raw Coverage	0.68	0.23	0.39
Unique Coverage	0.27	0.07	0.11
Covered Cases / Uniquely Covered Cases (Bold)	Liberia Sierra Leone **Libya 2** **Côte** **Somalia** North Korea Angola **Haiti**	**DR Congo** Liberia Sierra Leone	**FR Yugoslavia** **Libya 1** North Korea Angola
Solution Consistency		0.92	
Solution PRI		0.92	
Solution Coverage		0.87	
Model (Total)		M1 (1)	

Note: Black circles indicate the presence of a condition, crossed-out circles its absence.

Table A4. Conservative solution for the non-outcome (absence of unintended consequences)

	Conservative Solution Term	
	Path 1	Path 2
Autocratic Regime	●	
Large Scope	⊗	⊗
P5 Involvement		
Economic Isolation	●	●
Long Duration		⊗
Consistency	0.86	0.94
PRI	0.86	0.94
Raw Coverage	0.57	0.52
Unique Coverage	0.22	0.17
Covered Cases / Uniquely Covered Cases (Bold)	Sudan 1 **Sudan 2** Iran **Rwanda**	**Guinea-Bissau** **Central African Republic** Sudan 1 Iran
Solution Consistency	0.88	
Solution PRI	0.88	
Solution Coverage	0.74	
Model (Total)	M1 (1)	

Note: Black circles indicate the presence of a condition, crossed-out circles its absence.

Table A5. Correlation matrix for indicators of unintended consequences

	(1)	(2)	(3)	(4)	(5)
(1) Increase in corruption and/or criminality	–				
(2) Strengthening of authoritarian rule	.638*	–			
(3) Increase in human rights violations	.408	.231	–		
(4) Negative humanitarian consequences	.375	.135	.763*	–	
(5) Reduction of local institutional capacity	.247	.156	.690*	.695*	–

Note: * $p < .05$.