WEB APPENDIX

Leadership Turnover and Foreign Policy Change:
Societal Interests, Domestic Institutions, and Voting in the United Nations
(Michaela Mattes, Brett Ashley Leeds, and Royce Carroll)

NOTE FOR USERS:
This paper uses data that is part of the "Change in Source of Leader Support" (CHISOLS) project. For updated data, please check with Brett Ashley Leeds (leeds@rice.edu) or Michaela Mattes (m.mattes@berkeley.edu).

The SOLS change variable used in this paper (*solsch*) uses a more inclusive conceptualization of changes in source of leader support than the larger data project. Here we code as SOLS changes not only all leader transitions that we identify as SOLS changes in the larger data set but also leadership transitions in nondemocracies that are minor SOLS changes. (In other words, *solsch* is coded 1 if solschange=1 | (solsminchange=1 & dem=0) in the CHISOLS data). Minor SOLS changes in nondemocracies occur when a leader transition coincides with the transition of a "pure" autocratic regime into a hybrid that includes features of the formerly pure type and transitions from a hybrid into a related pure type. For example, a transition from a military leader to a military-single-party leader is coded as a minor SOLS change, as is a transition from a personalist-military leader to a military leader. (The CHISOLS coder manual provides more information on these cases.) The reason we opted to treat so-called minor SOLS changes in nondemocracies similarly to regular SOLS changes in any regime for the purposes of this paper is that these leader transitions should also be expected to be accompanied by significant changes in underlying preferences and interests that determine foreign policy.

I. Additional Coding Information:

Our spatial-temporal domain covers all independent states with populations greater than 500,000 from 1946-2008. The only country with a population larger than 500,000 excluded is Kosovo, which was only independent for one year in 2008.

Geddes, Wright, and Frantz (2012) do not code countries with populations below one million. We categorize nine countries with populations between 500,000 and one million according to the Geddes, Wright, and Frantz coding scheme and code them based on the rules outlined in our paper. The countries are Bahrain, Bhutan, Comoros, Cyprus, Djibouti, Equatorial Guinea, Guyana, Qatar, and Solomon Islands.

II. Additional Descriptive Statistics

Our unit of analysis is the state-year. We exclude state-years in which the countries did not vote at the UNGA, the first year of observation for every country, and years in which the country was led by an interim leader. This leaves 7,049 state-years from a total of 165 countries. The average number of leader transitions per country is 6.7 with a standard deviation of 5.4. Some countries experience no leader transitions throughout the entire period under observation and one country changed its leader 29 times (Italy). The mean number of SOLS changes in the sample is 3.9 with a standard deviation of 3.7, a minimum of 0 and a maximum of 19.

This table summarizes the distribution of non-leader transition years, years with leader transitions that were not also a SOLS change, and SOLS change years across regime types:

	Democracy	Non-Democracy	Regime Transition	***Total***
Non-Leader Transition Years	2,166	3,730	47	*5,943*
Other Leader Transitions	219	242	8	*469*
SOLS Change Leader Transitions	346	197	94	*637*
Total	*2,731*	*4, 169*	*149*	***7,049***

III. Robustness Checks

This section contains the robustness checks mentioned in the manuscript. All models include state-level fixed effects and robust standard errors clustered on the country. We replicate Models 1-4 from Table 1 where appropriate. In analyses that add additional control variables we replicate Models 2 & 4, which include controls variables.

Robustness Check #1: UNGA Vote Change without Log Transformation (fn. 18)
To approximate a normal distribution we log our dependent variable in the main analysis. Below are the results when the DV is not logged.

	(1) Model 1: Basic Model (No Controls)	(2) Model 2: Basic Model (With Controls)	(3) Model 3: Interactive Model (No Controls)	(4) Model 4: Interactive Model (With Controls)
SOLS Change	0.036***	0.033***	0.073***	0.074***
	(0.009)	(0.008)	(0.016)	(0.018)
Other Leader Transition	0.009	0.009	0.014	0.014
	(0.007)	(0.007)	(0.010)	(0.010)
Democracy	-0.040***	-0.035***	-0.031***	-0.027***
	(0.006)	(0.007)	(0.007)	(0.007)
SOLS Change X			-0.070***	-0.072***
Democracy			(0.017)	(0.018)
Other Leader Transition			-0.011	-0.012
X Democracy			(0.012)	(0.012)
Regime Transition		0.022		-0.002
		(0.021)		(0.022)
Cold War End		0.010		0.011
		(0.011)		(0.011)
US Ally		-0.005		-0.006
		(0.015)		(0.015)
USSR Ally		0.033		0.035
		(0.024)		(0.024)
Constant	0.131***	0.128***	0.128***	0.126***
	(0.002)	(0.006)	(0.003)	(0.006)
Observations	7,049	7,049	7,049	7,049
Number of Countries	165	165	165	165

(*Notes*. Robust standard errors in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$; two-tailed).

Wald test for SOLS change= Other Leader Transition:
Model 1 p=.017; Model 2 p=.031; Model 3 p=.003; Model 4 p=.005

Robustness Check # 2: Excluding Regime Transitions

Cases of regime transitions (transitions from democracy to autocracy and vice versa) are excluded and the comparison is thus between leader changes in continuing democracies and leader changes in continuing non-democracies.

	(1) Model 1: Basic Model (No Controls)	(2) Model 2: Basic Model (With Controls)	(3) Model 3: Interactive Model (No Controls)	(4) Model 4: Interactive Model (With Controls)
SOLS Change	0.157***	0.157***	0.304***	0.309***
	(0.054)	(0.054)	(0.099)	(0.099)
Other Leader Transition	0.060	0.058	0.065	0.063
	(0.057)	(0.057)	(0.076)	(0.076)
Democracy	-0.372***	-0.358***	-0.351***	-0.335***
	(0.061)	(0.062)	(0.063)	(0.064)
SOLS Change X			-0.238**	-0.245**
Democracy			(0.113)	(0.114)
Other Leader Transition			-0.015	-0.015
X Democracy			(0.117)	(0.118)
Cold War End		0.025		0.027
		(0.062)		(0.062)
US Ally		-0.149		-0.154
		(0.126)		(0.126)
USSR Ally		0.042		0.050
		(0.213)		(0.214)
			(0.117)	(0.118)
Constant	-2.538***	-2.498***	-2.546***	-2.505***
	(0.025)	(0.052)	(0.026)	(0.053)
Observations	6,900	6,900	6,900	6,900
Number of Countries	165	165	165	165

(*Notes*. Robust standard errors in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$; two-tailed).

Wald test for SOLS change= Other Leader Transition:
Model 1 p=.231; Model 2 p=.223; Model 3 p=.059; Model 4 p=.054

Robustness Check # 3: Including Interim Leaders (fn. 6)

Our main analysis drops interim leaders since these do not represent any particular segment of society and are typically placed in office to maintain the status quo. Note that according to our coding rules, we do not code any leader who stays in power more than 18 months as interim. These are short term leaders who serve only until a new regular government is selected to resume active policymaking. In the analysis below we include interim leaders. Interim leaders are categorically coded as "other leader transitions".

	(1) Model 1: Basic Model (No Controls)	(2) Model 2: Basic Model (With Controls)	(3) Model 3: Interactive Model (No Controls)	(4) Model 4: Interactive Model (With Controls)
SOLS Change	0.182***	0.173***	0.318***	0.327***
	(0.050)	(0.054)	(0.079)	(0.094)
Other Leader Transition	0.080	0.078	0.089	0.089
	(0.056)	(0.055)	(0.075)	(0.074)
Democracy	-0.385***	-0.361***	-0.354***	-0.335***
	(0.060)	(0.062)	(0.062)	(0.064)
SOLS Change X			-0.256***	-0.269**
Democracy			(0.097)	(0.110)
Other Leader Transition X			-0.026	-0.028
Democracy			(0.115)	(0.115)
Regime Transition		0.072		-0.014
		(0.111)		(0.122)
Cold War End		0.053		0.053
		(0.066)		(0.065)
US Ally		-0.150		-0.155
		(0.127)		(0.128)
USSR Ally		0.079		0.087
		(0.211)		(0.212)
Constant	-2.534***	-2.501***	-2.546***	-2.508***
	(0.025)	(0.053)	(0.026)	(0.054)
Observations	7,103	7,103	7,103	7,103
Number of Countries	165	165	165	165

(*Notes*. Robust standard errors in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$; two-tailed).

Wald test for SOLS change= Other Leader Transition:
Model 1 p=.195; Model 2 p=.249; Model 3: p=.045; Model 4: p=.061

Robustness Check # 4: December Leaders (fn.5)

As discussed in the manuscript, in leader transition years, we code the second leader as being in charge of the country's UNGA voting unless that leader came to power in December, in which case the predecessor is coded as in office during the UNGA session. If there were multiple leader changes we code the leader in November in power. To ensure that these coding decisions do not affect our results we ran analyses excluding years in which a leader assumed office in December as well as the subsequent year.

	(1) Basic Model (No Controls)	(2) Basic Model (With Controls)	(3) Interactive Model (No Controls)	(4) Interactive Model (With Controls)
SOLS Change	0.174***	0.175***	0.294***	0.323***
	(0.053)	(0.059)	(0.085)	(0.102)
Other Leader Transition	0.057	0.055	0.054	0.054
	(0.061)	(0.060)	(0.083)	(0.084)
Democracy	-0.376***	-0.364***	-0.353***	-0.343***
	(0.062)	(0.064)	(0.064)	(0.066)
SOLS Change X			-0.224**	-0.257**
Democracy			(0.103)	(0.116)
Other Leader Transition			0.002	-0.000
X Democracy			(0.123)	(0.124)
Regime Transition		-0.003		-0.082
		(0.119)		(0.131)
Cold War End		0.017		0.018
		(0.062)		(0.062)
US Ally		-0.168		-0.174
		(0.128)		(0.128)
USSR Ally		0.018		0.027
		(0.224)		(0.225)
Constant	-2.541***	-2.493***	-2.549***	-2.498***
	(0.025)	(0.052)	(0.026)	(0.053)
Observations	6,815	6,815	6,815	6,815
Number of Countries	165	165	165	165

(*Notes*. Robust standard errors in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$; two-tailed).

Wald test for SOLS change= Other Leader Transition:
Model 1 p=.159; Model 2 p=.166; Model 3 p=.051; Model 4 p=.047

Robustness Check # 5: Affinity Score as Dependent Variable (fn.7)
Using the "s3un" variable from the newest release of the United Nations General Assembly Voting Data (Strezhnev and Voeten 2013), we create a measure of the logged absolute value of the year-to-year change in a country's affinity score.

	(1) Model 1: Basic Model (No Controls)	(2) Model 2: Basic Model (With Controls)	(3) Model 3: Interactive Model (No Controls)	(4) Model 4: Interactive Model (With Controls)
SOLS Change	0.137**	0.151***	0.313***	0.375***
	(0.054)	(0.053)	(0.081)	(0.085)
Other Leader Transition	-0.008	-0.012	-0.061	-0.065
	(0.067)	(0.065)	(0.095)	(0.094)
Democracy	-0.263***	-0.237***	-0.232***	-0.210***
	(0.069)	(0.067)	(0.071)	(0.068)
SOLS Change X Democracy			-0.331***	-0.388***
			(0.107)	(0.105)
Other Leader Transition X			0.109	0.112
Democracy			(0.140)	(0.137)
Regime Transition		0.005		-0.124
		(0.114)		(0.117)
Cold War End		-0.953***		-0.953***
		(0.078)		(0.077)
US Ally		0.022		0.014
		(0.114)		(0.113)
USSR Ally		0.316*		0.327**
		(0.160)		(0.161)
Constant	-2.639***	-2.619***	-2.650***	-2.626***
	(0.028)	(0.046)	(0.029)	(0.046)
Observations	7,076	7,076	7,076	7,076
Number of Countries	164	164	164	164

(*Notes*. Robust standard errors in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$; two-tailed).

Wald test for SOLS change= Other Leader Transition:
Model 1 p=.057; Model 2 p=.032; Model 3 p=.002; Model 4 p=.000

Robustness Check # 6: Alliance Control Variables (fn.15)
This table reflects two robustness checks involving the alliance control variables. First**,** we use the COW alliance data version 4.1 (Gibler 2009) rather than the ATOP data version 3.0 (Leeds and Mattes 2007) and replicate Models 2 & 4. Second, we use an aggregate alliance variable based on ATOP that codes whether the country had an alliance with the U.S. *or* the U.S.S.R and replicate Models 2 & 4.

	(1) Model 2: Basic Model (With Controls) COW Data	(2) Model 4: Interactive Model (With Controls) COW Data	(3) Model 2: Basic Model (With Controls) US or USSR Alliance Dummy (ATOP)	(4) Model 4: Interactive Model (With Controls) US or USSR Alliance Dummy (ATOP)
SOLS Change X		-0.269**		-0.266**
Democracy		(0.110)		(0.108)
Other Leader Transition		-0.040		-0.043
X Democracy		(0.119)		(0.118)
SOLS Change	0.176***	0.330***	0.177***	0.330***
	(0.054)	(0.095)	(0.054)	(0.094)
Other Leader Transition	0.072	0.088	0.072	0.090
	(0.057)	(0.077)	(0.057)	(0.077)
Democracy	-0.375***	-0.347***	-0.380***	-0.354***
	(0.062)	(0.064)	(0.061)	(0.062)
Regime Transition	0.054	-0.033	0.057	-0.029
	(0.112)	(0.123)	(0.114)	(0.125)
Cold War End	0.057	0.058	0.060	0.060
	(0.063)	(0.063)	(0.064)	(0.064)
US Ally	-0.257*	-0.266*		
	(0.152)	(0.152)		
USSR Ally	-0.138	-0.128		
	(0.217)	(0.219)		
Alliance w/ US or USSR			-0.108	-0.112
			(0.133)	(0.133)
Constant	-2.455***	-2.463***	-2.500***	-2.508***
	(0.056)	(0.057)	(0.055)	(0.055)
Observations	7,049	7,049	7,049	7,049
Number of Countries	165	165	165	165

(*Notes*. Robust standard errors in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$; two-tailed).

Wald test for SOLS change= Other Leader Transition:
Model 1 p=.199; Model 2 p=.052; Model 3 p=.193; Model 4 p=.053

Robustness Check # 7: Changes in Capabilities

According to realist theory, countries pursue foreign policies that reflect their standing in the international balance of power. States that gain or lose power may pursue different policies than they did previously. To capture this idea, we control for the logged absolute value of the percentage change in the countries' composite indicator of national capability (CINC) score from t-1 to t (Singer, Bremer, and Stuckey 1972). Data on CINC scores is missing for 2008.

	(1) Model 2: Basic Model (With Controls)	(2) Model 4: Interactive Model (With Controls)
SOLS Change X Democracy		-0.281**
		(0.114)
Other Leader Transition X Democracy		-0.036
		(0.114)
SOLS Change	0.172***	0.334***
	(0.054)	(0.096)
Other Leader Transition	0.079	0.093
	(0.055)	(0.077)
Democracy	-0.322***	-0.295***
	(0.063)	(0.065)
Regime Transition	0.066	-0.028
	(0.117)	(0.129)
Cold War End	0.034	0.035
	(0.064)	(0.064)
US Ally	-0.139	-0.145
	(0.127)	(0.128)
USSR Ally	0.073	0.081
	(0.216)	(0.216)
CINC Change	0.034***	0.033***
	(0.011)	(0.011)
Constant	-2.380***	-2.390***
	(0.068)	(0.069)
Observations	6,871	6,871
Number of Countries	165	165

(*Notes*. Robust standard errors in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$; two-tailed).

Wald test for SOLS change= Other Leader Transition:
Model 1 p=.251; Model 2 p=.059

Robustness Check # 8: Changes in GDP per capita

Economic downturns or booms might lead to changes in UNGA voting patterns. Thus, we control for the logged absolute value of the percentage change in a country's GDP per capita from t-1 to t. The GDP per capita measure is based on Gleditsch's Expanded Trade and GDP data v. 4.1 (Gleditsch 2002). These data are available from 1950 onwards.

	(1) Model 2: Basic Model (With Controls)	(2) Model 4: Interactive Model (With Controls)
SOLS Change X Democracy		-0.266**
		(0.113)
Other Leader Transition X Democracy		-0.063
		(0.117)
SOLS Change	0.184***	0.337***
	(0.054)	(0.098)
Other Leader Transition	0.091	0.119
	(0.060)	(0.079)
Democracy	-0.353***	-0.326***
	(0.064)	(0.065)
Regime Transition	0.067	-0.023
	(0.116)	(0.130)
Cold War End	0.072	0.072
	(0.064)	(0.064)
US Ally	-0.102	-0.105
	(0.148)	(0.149)
USSR Ally	0.100	0.106
	(0.234)	(0.235)
GDP Change	0.010	0.010
	(0.013)	(0.013)
Constant	-2.507***	-2.518***
	(0.073)	(0.074)
Observations	6,840	6,840
Number of Countries	165	165

(*Notes*. Robust standard errors in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$; two-tailed).

Wald test for SOLS change= Other Leader Transition:
Model 1 p=.265; Model 2 p=.092

Robustness Check # 9: Cold War Period

The tight bipolar system during the Cold War might have constrained foreign policy change even for those countries that were not formally tied to the US or USSR through defense pacts. To account for this possibility, we include a dummy variable that is coded 1 for the 1946-1988 period.

	(1) Model 2: Basic Model (With Controls)	(2) Model 4: Interactive Model (With Controls)
SOLS Change X Democracy		-0.238**
		(0.108)
Other Leader Transition X Democracy		-0.075
		(0.111)
SOLS Change	0.188***	0.324***
	(0.053)	(0.094)
Other Leader Transition	0.063	0.096
	(0.054)	(0.073)
Democracy	-0.127**	-0.102
	(0.062)	(0.063)
Regime Transition	0.203*	0.126
	(0.115)	(0.127)
Cold War End	0.335***	0.335***
	(0.069)	(0.069)
US Ally	-0.178*	-0.183*
	(0.099)	(0.099)
USSR Ally	-0.149	-0.141
	(0.195)	(0.196)
Cold War	0.436***	0.434***
	(0.043)	(0.043)
Constant	-2.845***	-2.851***
	(0.054)	(0.055)
Observations	7,049	7,049
Number of Countries	165	165

(*Notes*. Robust standard errors in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$; two-tailed).

Wald test for SOLS change= Other Leader Transition:
Model 1 p=.104; Model 2 p=.060

Robustness Check # 10: Disaggregating *Cold War End* (fn.20)
Our main analysis captures the possible effects of the end of the Cold War as a dummy variable that is coded 1 for the years 1989, 1990, and 1991. Below is an alternative analysis with separate dummy variables for each of these three years. (If the year dummies are included in three separate analyses the results are similar.)

	(1) Model 2: Basic Model (With Controls)	(2) Model 4: Interactive Model (With Controls)
SOLS Change X Democracy		-0.263**
		(0.110)
Other Leader Transition X Democracy		-0.038
		(0.118)
SOLS Change	0.177***	0.329***
	(0.054)	(0.095)
Other Leader Transition	0.075	0.091
	(0.057)	(0.076)
Democracy	-0.363***	-0.336***
	(0.062)	(0.064)
Regime Transition	0.065	-0.021
	(0.114)	(0.125)
1989	-0.082	-0.077
	(0.084)	(0.085)
1990	0.041	0.045
	(0.113)	(0.113)
1991	0.218**	0.210**
	(0.098)	(0.098)
US Ally	-0.144	-0.149
	(0.126)	(0.126)
USSR Ally	0.077	0.084
	(0.210)	(0.211)
Constant	-2.503***	-2.511***
	(0.052)	(0.053)
Observations	7,049	7,049
Number of Countries	165	165

(*Notes*. Robust standard errors in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$; two-tailed).

Wald test for SOLS change= Other Leader Transition:
Model 1 p=.207; Model 2 p=.057

Wald test for SOLS change= 1991:
Model 1 p=.710; Model 2 p=.365

Robustness Check # 11: Archigos Irregular Leader Transitions

We examine whether the relationship between SOLS change, democracy, and UNGA vote change holds when leaders who entered office through irregular means are excluded. We rely on Archigos (Goemans et al. 2009) to identify irregular entries and drop all observations in which the current leader's entry into office occurred in an irregular manner or through foreign imposition. Because Archigos only covers years through 2004, we lose the last four years of our observation period. Below see a) a re-analysis of our models excluding cases of irregular entry and b) some descriptive statistics on the relationship between irregular entry and our core independent variables.

	(1) Model 1: Basic Model (No Controls)	(2) Model 2: Basic Model (With Controls)	(3) Model 3: Interactive Model (No Controls)	(4) Model 4: Interactive Model (With Controls)
SOLS Change	0.107*	0.097	0.317***	0.350**
	(0.060)	(0.064)	(0.118)	(0.143)
Other Leader Transition	0.085	0.081	0.130	0.123
	(0.062)	(0.062)	(0.088)	(0.090)
Democracy	-0.371***	-0.327***	-0.325***	-0.290***
	(0.072)	(0.078)	(0.077)	(0.081)
SOLS Change X			-0.312**	-0.354**
Democracy			(0.134)	(0.155)
Other Leader Transition			-0.088	-0.084
X Democracy			(0.129)	(0.130)
Regime Transition		0.059		-0.066
		(0.154)		(0.174)
Cold War End		0.082		0.079
		(0.078)		(0.078)
US Ally		-0.222		-0.227
		(0.136)		(0.137)
USSR Ally		0.264		0.276
		(0.191)		(0.191)
Constant	-2.484***	-2.439***	-2.506***	-2.454***
	(0.037)	(0.066)	(0.040)	(0.068)
Observations	4,772	4,772	4,772	4,772
Number of Countries	159	159	159	159

(*Notes*. Robust standard errors in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$; two-tailed).

Wald test for SOLS change= Other Leader Transition:
Model 1 p=.810; Model 2 p=.855; Model 3 p=.186; Model 4 p= .174

Descriptive Statistics on the Relationship between Mode of Entry (Regular vs. Irregular), Other Leader Transition, SOLS Changes, and Regime Type:

	Democracy		Non-Democracy	
	Other Leader Transition	SOLS Change	Other Leader Transition	SOLS Change
Regular entry	190	295	176	137
Irregular entry	1	2	55	133
Total	191	297	231	270

Note: This table only includes leader transition years. The non-SOLS change irregular entry in a democracy is the 2000 entry into office of Peruvian President Gustavo Noboa, who was affiliated with the same party as his predecessor. Noboa was the Vice President in his predecessor's regime and in the regular constitutional order succeeded the presidency after his predecessor was removed in a military coup.

References (not cited in paper):

Gleditsch, Kristian Skrede. 2002. Expanded Trade and GDP Data. *Journal of Conflict Resolution* 46(5): 712-724.

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