

# Supplementary File: Civil Society and the Democratic Peace Forthcoming in *Journal of Conflict Resolution*

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## Contents

|          |   |          |
|----------|---|----------|
| <b>1</b> | <b>Description of variables</b>   | <b>2</b> |
|          | Control variables . . . . .   | 2        |
|          | Additional constraint variable . . . . .  | 2        |
|          | Correlations, indices of accountability . . . . .                                     | 3        |
| <b>2</b> | <b>Protest and NATO member country participation in second Gulf War coalition</b>     | <b>3</b> |
| <b>3</b> | <b>Limitations of Polity</b>  | <b>4</b> |
| <b>4</b> | <b>Main results reproduced</b>  | <b>6</b> |
|          | Collinearity in our models . . . . .  | 8        |
| <b>5</b> | <b>Robustness tests</b>   | <b>9</b> |
|          | Alternative variable specifications . . . . .   | 9        |
|          | Reduced-sample results . . . . .  | 14       |
|          | Re-estimation using Polity and the five standard V-Dem indices of democracy . . . . . | 15       |
|          | The traditional weak-link specification . . . . .                                     | 17       |
|          | The cold war and other temporal shifts . . . . .                                      | 18       |
|          | Development and Mousseau’s contract-intensive economies . . . . .                     | 18       |
|          | Gartzke’s ‘capitalist peace’ . . . . .  | 21       |
|          | Gibler’s ‘territorial peace’ . . . . .  | 22       |

# 1 Description of variables

## Control variables

The control variables in the model are mostly taken from the replication dataset of Hegre (2008) but extended by us to cover the 2002–2010 period:

**Military capabilities** : The COW military capabilities index (Singer, Bremer, and Stuckey, 1972) is based on data on states' total population, urban population, energy consumption, iron and steel production, military expenditures, and size of the armed forces. The COW project calculated each state's share of the world's total for each of these sub-indices. The CINC index is constructed as the unweighted average of each of these shares. The theoretical range for the index is [0, 1] (Hegre, 2008, p. 577).

**Population size** The population variables are the natural log of total population in thousands for the stronger and the weaker countries, and are taken from the Correlates of War military capabilities dataset. Military capabilities are strongly correlated with population size — populous countries like the US and China are powerful countries. When controlling for population size, the capabilities index shifts interpretation to the effect of per-capita capabilities, which is highly correlated with GDP per capita.

**Direct contiguity** This variable is set to 1 if two states share a land boundary or less than 240 kilometers of water separate them.

**Distance** Distance is measured as the great-circle distance between the capitals or major ports of the countries (Hegre, 2008, p. 577).

**System size** The risk of war for 'low-relevance' dyads in designs like ours depend on the number of states in the system (Raknerud and Hegre, 1997, pp. 390–391). To account for this, we enter the log of the number of independent states in the year of observation. See Raknerud and Hegre (1997) and Hegre (2008) for detailed justification of this specification.

**Peace years** We use the decay function of time since previous conflict in the dyad suggested by Raknerud and Hegre (1997) to handle temporal dependence. The decay function is defined as  $2^{-py/\alpha}$  where  $py$  is the count of years since last conflict and  $\alpha$  a half-life parameter.  $\alpha$  is set to 1, implying that the effect of a previous war is halved every year.

## Additional constraint variable

**Media freedom** This index (`v2x_mefree` in the V-Dem codebook; Coppedge et al., 2015) is formed by taking the first principle component of the indicators tapping into the extent of (a) print/broadcast censorship effort, (b) harassment of journalists, (c) media bias against opposition parties, (d) media self-censorship when reporting on issues that the government considers politically sensitive, (e) criticism of the government among the major print and broadcast outlets, and (f) how wide a range of political perspectives the major print and broadcast media represent.

## Correlations, indices of accountability

Figure SF-1: Scatterplots showing correlations between the three indices of accountability, 2010.

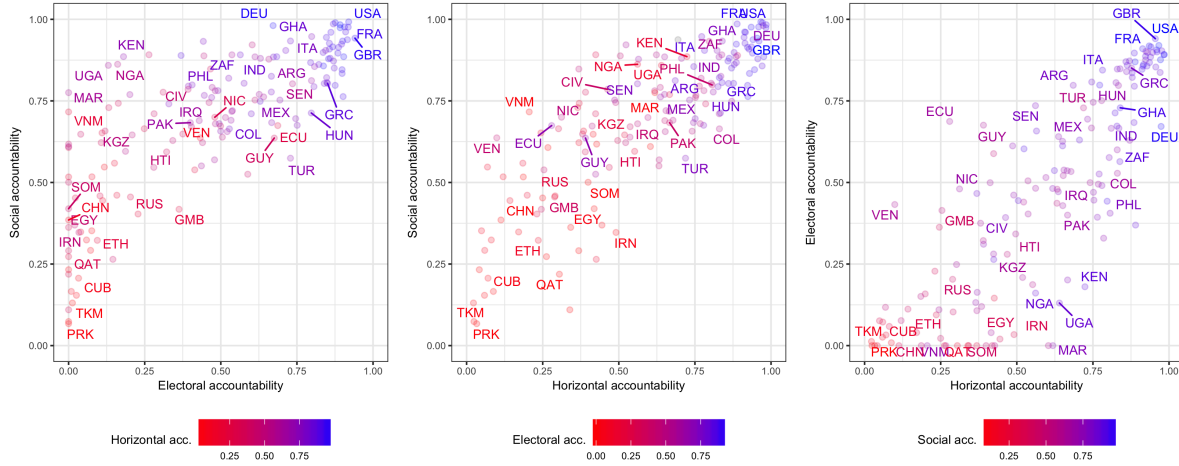


Figure SF-1 plots the three indices of accountability against each other, restricted to the year 2010 only. The two left-most plots are included in the main article in gray-scale. Here, we also represent the value on the third index as a color. The plot to the left, for instance, shows electoral accountability along the x-axis, social accountability on the y-axis, and horizontal accountability as a color, with blue color denoting a high value.

Table SF-1 shows the correlations for the 1900–2010 period between the three accountability indices, the three alternative indices for horizontal accountability, and Polity. The three main indices in our analysis are correlated at between 0.725 and 0.810. We discuss the relationship to Polity in Section 3.

Table SF-1: Correlation matrix, accountability indices and Polity, all years

|              | v2x_munck | v2x_execon | v2x_cspart | v2xlg_legcon | v2x_jucon | v2x_mefree | e_polity2 |
|--------------|-----------|------------|------------|--------------|-----------|------------|-----------|
| v2x_munck    | 1         | 0.725      | 0.810      | 0.766        | 0.666     | 0.772      | 0.827     |
| v2x_execon   | 0.725     | 1          | 0.739      | 0.934        | 0.940     | 0.767      | 0.806     |
| v2x_cspart   | 0.810     | 0.739      | 1          | 0.790        | 0.668     | 0.867      | 0.789     |
| v2xlg_legcon | 0.766     | 0.934      | 0.790      | 1            | 0.740     | 0.804      | 0.806     |
| v2x_jucon    | 0.666     | 0.940      | 0.668      | 0.740        | 1         | 0.705      | 0.727     |
| v2x_mefree   | 0.772     | 0.767      | 0.867      | 0.804        | 0.705     | 1          | 0.866     |
| e_polity2    | 0.827     | 0.806      | 0.789      | 0.806        | 0.727     | 0.866      | 1         |

## 2 Protest and NATO member country participation in second Gulf War coalition

Civil society’s power to impose audience costs is visible in the differing responses of the public in NATO countries during the two Gulf Wars. NATO is particularly useful for our purposes given the overwhelmingly democratic character of its membership. During the 1990 war large numbers of US NATO allies (and future NATO allies) participated in the coalition of forces that drove Saddam Hussein’s army out of Kuwait and back into Iraq.

The second Gulf War (2003) was much more controversial and from the outset, the United States had a harder time convincing the world community that the action was necessary or just. In the run-up to the war there was a global protest movement which culminated on February 15, 2003 with a wave of demonstrations in some 600 cities. Protests are one of the ways in which civil society exerts pressure on sitting governments, potentially imposing the kinds of audience costs that constrain leaders. Table SF-2 details the impact of this global protest movement in detaching several NATO members from the second Gulf War coalition.

Table SF-2: NATO member participation in the second Gulf War and protest

| NATO and Future NATO<br>Member Participants (1990) | Participants in 15 February<br>2003 Antiwar Protests |
|--|--|
| <i>Did not Participate 2003-2011</i>               |  |
| Belgium  | 100,000  |
| Canada   | 250,000  |
| France   | 500,000  |
| Germany  | 500,000  |
| Greece   | 150,000  |
| Turkey   | 50,000   |
| <i>Coalition of the Willing, 2003-11</i>           |  |
| Denmark  | 30,000   |
| Hungary  | 60,000   |
| Italy  | 650,000  |
| Norway   | 85,000   |
| Poland   | 10,000   |
| Portugal   | 80,000   |
| Spain  | 3,000,000  |
| the Netherlands                                    | 70,000   |
| the United Kingdom                                 | 750,000  |
| Czechoslovakia*                                    | 2,100  |

\*The Czech Republic and Slovakia participating as separate states in the Second Gulf War.  
Sources: Kakizaki (2011) and Wikipedia contributors (n.d.)

Our argument is not that there is direct correlation between the number of protestors and decisions not to participate but to frame an example that gives plausibility to one of mechanisms that discussed above. Further, the Iraqi regime, against whom the war was waged, was hardly democratic so the exercise of the mechanism here is monadic. The individual calculus to participate or not is also a product of the audience costs that participation would have in different contexts. It is clear that Spain (3 million demonstrators) paid greater audience costs than Poland (only 10 thousand), and that the Turkish government under the AKP was more vulnerable to pressure given their contiguity with Iraq and US plans to invade Northern Iraq from Turkey proper (50 thousand demonstrators). This, in itself, made the potential audience costs much higher than the kind of symbolic participation required of the Czech Republic or Slovakia (a mere two thousand demonstrators between them).

What is important to our theory here is that a highly unified and powerful alliance which had already participated in the defeat of Iraq a little more than a decade earlier could not coordinate a successful effort. Six of the countries who participated in 1990 (Belgium, Canada, France, Germany, Greece, and Turkey) could not be convinced to take part the second time. Among them were Germany and France, co-leaders of the European Union and two of America’s strongest allies. While the global protest movement described here does not provide a full explanation for that coordination failure, it is hard to not to give credence to its contribution given the absence of such a movement during the Gulf War in 1990.

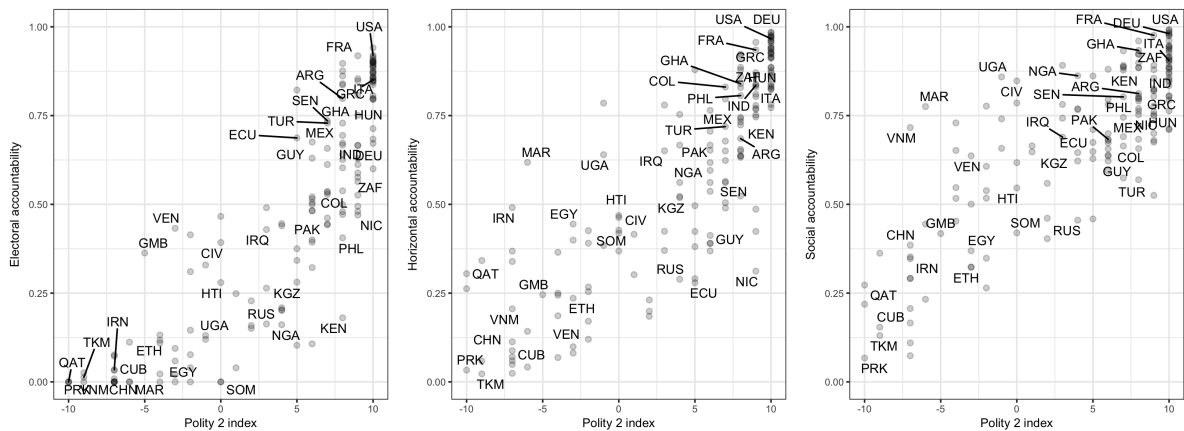
### 3 Limitations of Polity

The vast majority of studies on the democratic peace since Bremer (1992) have relied on the Polity dataset to operationalize the concept of democracy.<sup>1</sup> There are many good reasons for this choice. Up to recently, Polity was the most extensive among major datasets that measure democracy in terms of its coverage across time. In conjunction with the COW data this allowed findings to be based on the population of states (save for micro-states) in the global system from the post-Napoleonic period to the present. Figure SF-2 shows how our three indices of accountability compare to the Polity DEMOC-AUTOC index.

Polity has been to some extent amenable to disaggregating certain aspects of democracy to examine which of its properties are responsible for the pacific nature of democratic dyads. Choi and James (2004) for example has used it effectively to show that one prominent component, executive constraint (xconst),

<sup>1</sup>Several earlier studies relied on other, dichotomous indicators of democracy (e.g. Babst, 1964; Small and Singer, 1976; Doyle, 1986) , and Rummel (1983) used the Freedom House data.

Figure SF-2: Scatterplots showing correlations between our three indices of accountability and the Polity index, 2010.



is a potential cause.<sup>2</sup> However, Polity is not particularly fruitful for more fine-grained disaggregation that will allow us to pinpoint the ways in which political accountability works to enhance peace.

This is in part due to the fact that Eckstein and Gurr did not initially set out to explicitly understand and measure democracy, but patterns of authority (Eckstein and Gurr, 1975).<sup>3</sup> Despite the conceptual origins of the project, Gurr was able to adapt the taxonomy to distinguish the three classic Polity-based regime types – democracy, anocracy and autocracy. However, his conceptualization of democracy at that stage – ‘the presence of multiple institutionalized centers of power, some of which are open to widespread citizen participation’ stands as relatively underspecified from the perspective of modern comparative politics (Gurr, 1974). This contrasts with autocracy, which monopolizes power in one center and anocracy, which is under-institutionalized.

This work was further elaborated and validated in Jagers and Gurr (1995) where they specify three dimensions of democracy: 1) ‘the presence of institutions and procedures through which citizens can express effective preferences about alternative policies and leaders,’ 2) ‘institutionalized constraints on the exercise of executive power,’ and 3) ‘guarantee of civil liberties to all citizens in their daily lives and actors of political participation’ (p. 471). Three ‘conceptual variables’ included in the Polity dataset correspond to these three dimensions – EXREC, EXCONST, and POLCOMP. Yet there is little discussion of how the five indicators used in tabulating the 21-point polity scores match up to these dimensions. Clearly effective expression of preferences is related to how competitive and regulated political participation is (five points and two points respectively), but they are not coterminous. In the overall Polity index, there is a preponderance of information about the chief executive – competitiveness of recruitment (four points), openness of recruitment (two points), and constraints on the chief executive (seven points), perhaps even too much, as Gleditsch and Ward (1997) have pointed out. Finally, there are no direct measures of civil liberties here at all.

Figure SF-2 shows how the overall Polity index relates to our three indices of accountability. As shown in Table SF-1, the correlations shown here vary between 0.789 and 0.827.

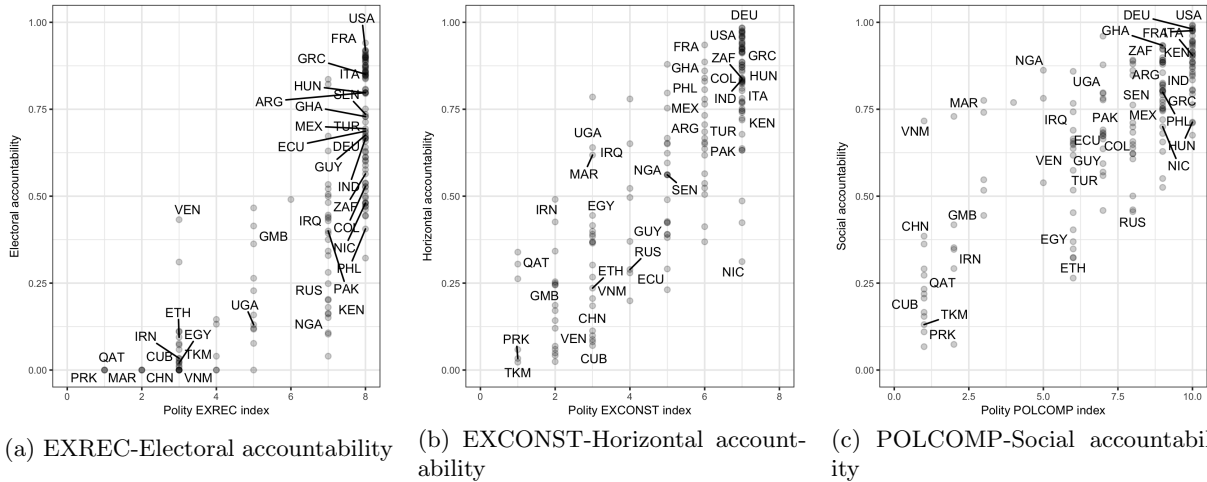
The three Polity ‘conceptual variables’ are related to our three concepts of accountability, but not nearly as precisely as our indices based on V-DEM. The wealth of clearly defined sub-indicators in V-DEM allows operationalizing our concepts clearly. There is insufficient information available for the Polity codings to identify the extent to which these conceptual variables measure the same. A review of how the two sources rate countries in 2010 is still instructive.

Figure SF-3 plots (for the year 2010) our three indices of accountability against the three ‘concept variables’ of Polity (Marshall, Gurr, and Jagers, 2018, p. 28). The Polity ‘Executive recruitment’ (EXREC) index (Figure SF-3a) identifies eight ‘concepts’ (Marshall, Gurr, and Jagers, 2018, pp. 49-61). The first six concepts refer to various non-elected systems. In line with our electoral accountability index, countries like North Korea (PRK), China (CHN), and Egypt (EGY) are placed in these groups. Concepts 7 and 8 classify countries as having ‘transitional or restricted’ (7) or ‘competitive’ (8) elections. The

<sup>2</sup>Choi argues that we need to look at the impact of structural and normative factors, and is most interested in the interaction between executive constraint as the former and rule of law as the latter. We would see both of these as properties of democratic institutions and structural. In his base model executive constraint is also significant on its own (p. 267).

<sup>3</sup>This original theoretical work on the project yielded a 479-page volume in which the term ‘democracy’ is referenced in the index on thirteen pages, whereas ‘authority’ merits references on over 200 pages (Eckstein and Gurr, 1975).

Figure SF-3: Scatterplots showing correlations between the three accountability indices used in the article and the three Polity ‘conceptual variables’, 2010.



political systems placed in these two groups mostly score high on our electoral accountability, but Polity does not attempt to characterize differences within these groups. Our electoral accountability index, on the other hand, captures the wide gulf between systems like the USA and France (FRA) at the upper end from those of Nicaragua (NIC) and the Philippines (PHL) at the lower. All of these are characterized as ‘competitive’ in the Polity EXREC index.

The Polity ‘EXCONST’ variable (Figure SF-3b) captures various constraints on the executive. In contrast to our index based on V-DEM, the Polity codebook is not sufficiently detailed to allow a precise account of the mechanisms of constraint, and it is hard to ascertain the extent to which the EXCONST variable captures our theoretical concept of horizontal accountability. Figure SF-3b indicates a number of disagreements between the two indices. The Polity EXCONST rates the political systems in Turkey, Kenya, Pakistan, and Nicaragua as having maximal constraints on the executive branch, whereas these systems score relatively low on our horizontal accountability index. In contrast, the Polity EXCONST index sees the executives in Iran, Uganda, and Marocco as relatively unconstrained, whereas our horizontal accountability index judges horizontal constraints to be quite substantial.

The Polity ‘Polcomp’ variable (Figure SF-3c) seeks to capture the broadness of political competition overall, and is not concerned about social accountability at all. Polity does not have any data that is useful for our purpose. The figure shows that the two indices are positively correlated, but less so than the previous ones.

Polity is also inferior to V-Dem in terms of discerning variance among well-established democracies. For instance, Polity does not distinguish between political systems that grant women’s suffrage and those that do not. In general, the V-Dem index displays a stronger increasing trend over time than Polity. Figure SF-4 plots the mean of our three accountability indices against Polity. It shows that in 1930 several of the political systems that Polity give the maximum score of 10 scores well below 0.75 in mean accountability. In 2010, countries that Polity regards as maximally democratic obtain a much higher score in the V-Dem-based indices. In 2010, there is still considerable variation among what Polity codes as close to maximally democratic. France, the US and Germany score high in terms of our accountability scores. Kenya and Nicaragua are given scores of 9 by Polity, but have relatively low accountability scores.

As this section has shown, our indices based on V-DEM are much more clearly associated with the theoretical concepts of electoral, horizontal, and social accountability. In addition, the indices based on V-DEM yields a much stronger empirical representation of the democratic peace. As shown in Table 2 in the main article and Table SF-9 below, the models using Polity have considerably lower fit with the data, both within and outside of the estimation sample.

## 4 Main results reproduced

In Table SF-3, we present the results underlying Figure 3 in the main text as well as the parameter estimates for the control variables.

Figure SF-4: Scatterplot of the mean of our accountability indices vs. Polity in 1930 (left) and 2010 (right).

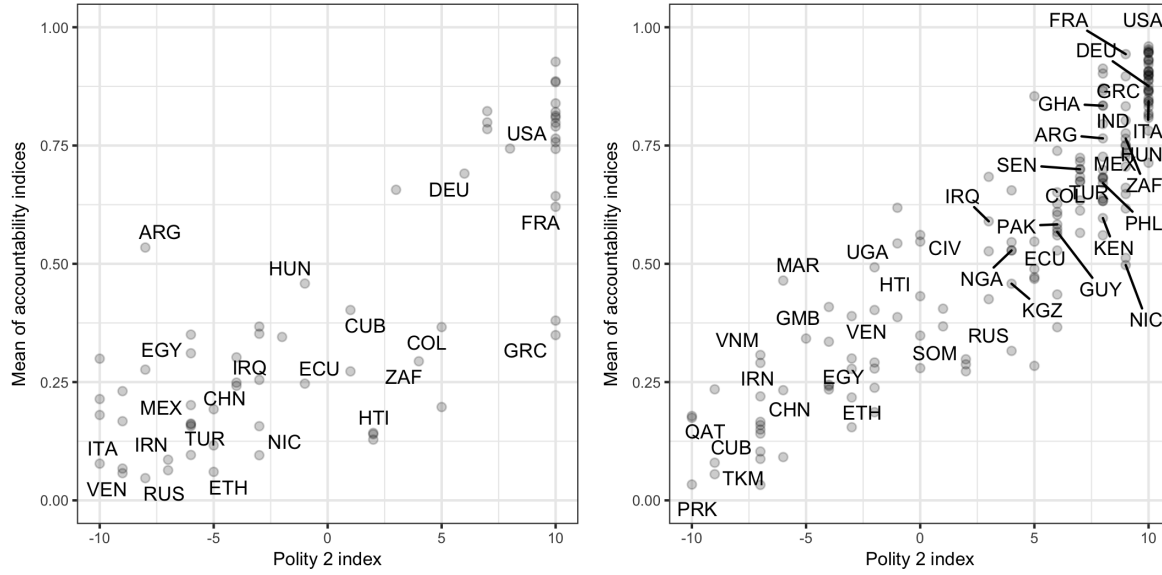


Table SF-3: Estimation results, models with the three indices of constraint entered separately (columns 1–3) and jointly (column 4). Full sample.

|                                     | 1 Electoral          | 2 Horizontal         | 3 Social             | 4 Joint              |
|-------------------------------------|----------------------|----------------------|----------------------|----------------------|
| Electoral accountability, stronger  | 0.638**<br>(2.84)    |                      |                      | -0.0120<br>(-0.03)   |
| Electoral accountability, weaker    | 0.195<br>(0.77)      |                      |                      | 0.140<br>(0.31)      |
| Electoral accountability, int.      | -4.122***<br>(-5.79) |                      |                      | 0.519<br>(0.52)      |
| Horizontal accountability, stronger |                      | 2.011***<br>(4.93)   |                      | 1.208<br>(1.78)      |
| Horizontal accountability, weaker   |                      | 1.302***<br>(3.76)   |                      | 1.199<br>(1.79)      |
| Horizontal accountability, int.     |                      | -5.588***<br>(-7.88) |                      | -3.257**<br>(-2.80)  |
| Social accountability, stronger     |                      |                      | 2.018***<br>(4.64)   | 1.230*<br>(2.03)     |
| Social accountability, weaker       |                      |                      | 1.401***<br>(3.69)   | 0.357<br>(0.50)      |
| Social accountability, int.         |                      |                      | -6.092***<br>(-7.72) | -3.875**<br>(-3.05)  |
| Log CINC score, stronger            | 0.0502<br>(0.58)     | 0.100<br>(1.09)      | 0.0803<br>(0.93)     | 0.0761<br>(0.81)     |
| Loc CINC score, weaker              | 0.375***<br>(4.34)   | 0.404***<br>(4.38)   | 0.336***<br>(3.71)   | 0.343***<br>(3.72)   |
| Log population, stronger            | 0.199*<br>(2.04)     | 0.131<br>(1.18)      | 0.169<br>(1.69)      | 0.162<br>(1.48)      |
| Log population, weaker              | 0.106<br>(0.99)      | 0.0768<br>(0.64)     | 0.159<br>(1.41)      | 0.145<br>(1.27)      |
| Direct contiguity                   | 1.096***<br>(4.54)   | 0.958***<br>(3.96)   | 1.195***<br>(4.90)   | 1.092***<br>(4.40)   |
| Log distance, ports                 | -0.719***<br>(-8.50) | -0.774***<br>(-8.90) | -0.756***<br>(-8.77) | -0.776***<br>(-9.18) |
| Log system size                     | -0.637***<br>(-4.18) | -0.720***<br>(-5.07) | -0.533***<br>(-3.68) | -0.606***<br>(-3.89) |
| Peace years                         | 2.437***<br>(17.01)  | 2.445***<br>(17.31)  | 2.435***<br>(17.18)  | 2.436***<br>(17.28)  |
| Constant                            | -3.562<br>(-1.71)    | -1.419<br>(-0.53)    | -4.227<br>(-1.86)    | -3.742<br>(-1.39)    |
| Observations                        | 541560               | 541560               | 541560               | 541560               |
| AIC                                 | 5945.7               | 5873.3               | 5854.5               | 5848.0               |

*t* statistics in parentheses  
 \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Dependent variable: Fatal Militarized Interstate Dispute (with at least one battle-related death in the dyad).  
 Logit model, with robust standard errors.

## Collinearity in our models

As shown in Table SF-1, our three accountability indices are correlated. The ensuing collinearity makes it somewhat challenging to separate out their independent effects. The collinearity issues are compounded by introducing interactions to model the dyadic aspect of the democratic peace. These collinearity problems are not so severe as to invalidate our main conclusions, however. We will take a closer look at the joint constraint model to demonstrate this.

First, Table SF-4 shows variance inflation factors for all terms in the joint constraint models. With the number of interaction terms in the model, it is expected that VIF values are quite high, and that terms should be interpreted jointly as done in the effect plots in the main article. Note that the VIF values are lower for the electoral accountability terms than the two other.

| Variable  | VIF   | 1/VIF    |
|-----------|-------|----------|
| execon_ij | 18.38 | 0.054402 |
| cspart_ij | 17.70 | 0.056511 |
| execon_i  | 13.24 | 0.075531 |
| execon_j  | 12.26 | 0.081587 |
| cspart_i  | 11.25 | 0.088907 |
| cspart_j  | 10.55 | 0.094768 |
| munck_ij  | 6.84  | 0.146094 |
| munck_j   | 6.79  | 0.147231 |
| munck_i   | 6.69  | 0.149489 |
| lncapi    | 5.90  | 0.169631 |
| lnpopi    | 5.74  | 0.174144 |
| lnpopj    | 5.18  | 0.193074 |
| lncapj    | 5.00  | 0.199808 |
| lnNt      | 2.63  | 0.380361 |
| dircont   | 1.99  | 0.502880 |
| lndstab   | 1.39  | 0.717288 |
| py1       | 1.04  | 0.962094 |
| Mean VIF  | 7.80  |          |

Table SF-4: Variance inflation factors, joint constraint table

Most of the collinearity in this model is due to the multiplicative interaction terms that model ‘dyadic accountability’. Table SF-5 shows the estimated correlation between the accountability index estimates in this model. The estimates for the main terms in this model are not highly correlated – the estimate for electoral accountability larger (munck\_i) is correlated by  $-0.207$  with the estimate for social accountability larger (cspart\_i), for instance. The interaction terms are more problematic. For instance, the estimates for cspart\_i and cspart\_ij are correlated at 0.7268.

| Variable  | munck_i | munck_j | munck_ij | cspart_i | cspart_j | cspart_ij | execon_i | execon_j | execon_ij |
|-----------|---------|---------|----------|----------|----------|-----------|----------|----------|-----------|
| munck_i   | 1.0000  |         |          |          |          |           |          |          |           |
| munck_j   | 0.1009  | 1.0000  |          |          |          |           |          |          |           |
| munck_ij  | -0.4581 | -0.4521 | 1.0000   |          |          |           |          |          |           |
| cspart_i  | -0.2070 | -0.0875 | 0.2997   | 1.0000   |          |           |          |          |           |
| cspart_j  | -0.2040 | -0.3321 | 0.3304   | 0.5941   | 1.0000   |           |          |          |           |
| cspart_ij | 0.1864  | 0.1406  | -0.4431  | -0.7268  | -0.7682  | 1.0000    |          |          |           |
| execon_i  | -0.6009 | -0.1036 | 0.2421   | -0.4045  | -0.1580  | 0.2246    | 1.0000   |          |           |
| execon_j  | -0.0161 | -0.3696 | 0.1334   | -0.3365  | -0.5817  | 0.4567    | 0.4453   | 1.0000   |           |
| execon_ij | 0.3139  | 0.2070  | -0.3304  | 0.2456   | 0.3554   | -0.4801   | -0.6470  | -0.6948  | 1.0000    |

Table SF-5: Matrix of correlation of estimates (based on the variance-covariance matrix), accountability index terms

Given this collinearity, we take care not to interpret the coefficients independently. The variance inflation factors relate to the variance of these individual estimates. Typically, the picture that the correlated coefficient paint jointly is much more stable – the sums of correlated estimates, for instance, has much lower variance than each of them.

To demonstrate this, we extracted the coefficients for ‘Social accountability stronger’ and ‘Social accountability interaction’ from each of the 20 estimations we did for our out-of-sample validations.<sup>4</sup>

<sup>4</sup>In each of this estimations, we draw on random half of the observations in our dataset and ran the logit model.

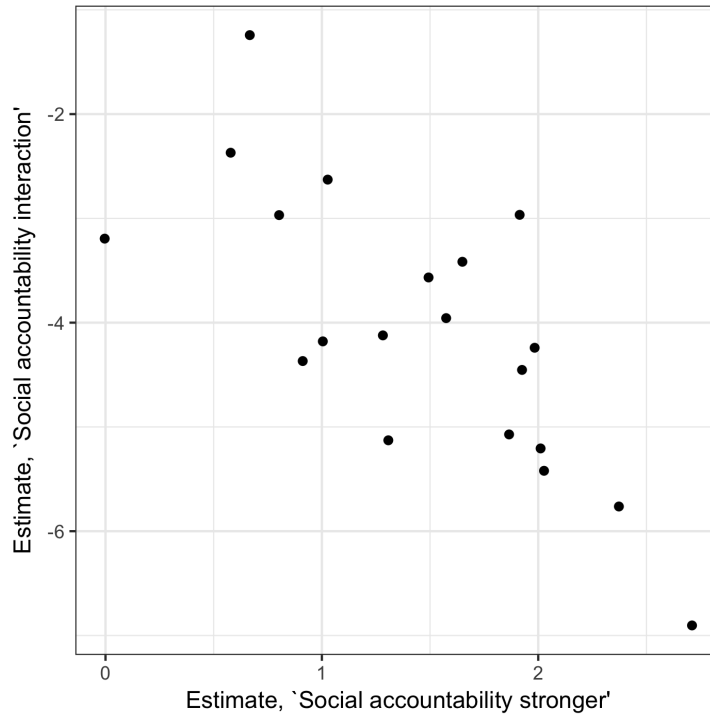


Figure SF-5: Correlation of coefficients

Figure SF-5 shows these 20 pairs of estimates. Since they are negatively correlated, high values for one correspond to a low value for the other. The sums of estimates are all quite close to  $-2.7$ .

Figure 4 in the main article interprets the three coefficients for each of the accountability indices jointly, by calculating log odds of fatal MIDS as a function of all three terms – i.e., calculating the sum of the product of the coefficients and the example values plotted in the figure. When using this procedure, the relative stability of the sum of estimates compensates the ‘variance inflation’ for the individual ones.

Another potential problem with collinearity is a greater danger of overfitting the models. Our reliance on out-of-sample validation safeguards us against this problem – the models that do well in terms of in-sample fit (as measured using the AIC) also do well out of sample. Moreover, the extensive robustness tests shown in this Supplementary File strongly indicates that our results are not due to overfitting.

## 5 Robustness tests

### Alternative variable specifications

In Table SF-6, we split the ‘electoral accountability’ measure into the the ‘Schumpeterian’ core dimensions tapping into contestation and the extent of suffrage in the political system (see the Section on ‘electoral accountability’ in the main article). The results show that the effect of electoral democracy is driven by Schumpeterian contestation rather than suffrage. The terms representing suffrage are not significant – suffrage does not play an independent role in promoting peace.

Table SF-6: Estimation results, models with alternative formulations of main measures and model with COW wars as dependent variable. Full sample

|  | Schumpeter           | Executive constraint | Civil society participation | Cow wars             |
|--|----------------------|----------------------|-----------------------------|----------------------|
| Schumpeterian accountability, stronger | 0.560**<br>(2.59)    |                      |                             |                      |
| Schumpeterian accountability, weaker   | 0.0146<br>(0.06)     |                      |                             |                      |
| Schumpeterian accountability, int.     | -4.221***<br>(-6.43) |                      |                             |                      |
| Electoral accountability, stronger     |                      |                      |                             | 1.576*<br>(2.56)     |
| Electoral accountability, weaker       |                      |                      |                             | 0.754<br>(1.13)      |
| Electoral accountability, int.         |                      |                      |                             | -4.203<br>(-1.54)    |
| Suffrage, stronger                     | -0.508<br>(-0.78)    |                      |                             |                      |
| Suffrage, weaker                       | 0.215<br>(0.40)      |                      |                             |                      |
| Suffrage, interaction                  | 0.615<br>(0.85)      |                      |                             |                      |
| Horizontal accountability, stronger    |                      | 2.011***<br>(4.93)   |                             | -0.882<br>(-0.83)    |
| Horizontal accountability, weaker      |                      | 1.302***<br>(3.76)   |                             | 0.719<br>(0.69)      |
| Horizontal accountability, int.        |                      | -5.588***<br>(-7.88) |                             | -0.552<br>(-0.34)    |
| Social accountability, stronger        |                      |                      |                             | 1.064<br>(1.21)      |
| Social accountability, weaker          |                      |                      |                             | -0.321<br>(-0.30)    |
| Social accountability, int.            |                      |                      |                             | -4.494*<br>(-2.43)   |
| Lean civil society index, stronger     |                      |                      | -0.0895*<br>(-2.12)         |                      |
| Lean civil society index, weaker       |                      |                      | -0.213***<br>(-4.92)        |                      |
| Lean civil society index, int.         |                      |                      | -0.141***<br>(-6.09)        |                      |
| Log CINC score, stronger               | 0.122<br>(1.33)      | 0.100<br>(1.09)      | 0.0540<br>(0.57)            | 0.130<br>(1.09)      |
| Loc CINC score, weaker                 | 0.437***<br>(4.69)   | 0.404***<br>(4.38)   | 0.305**<br>(3.18)           | 0.825***<br>(6.73)   |
| Log population, stronger               | 0.116<br>(1.12)      | 0.131<br>(1.18)      | 0.197<br>(1.85)             | 0.147<br>(0.92)      |
| Log population, weaker                 | 0.0290<br>(0.25)     | 0.0768<br>(0.64)     | 0.187<br>(1.57)             | -0.296<br>(-1.82)    |
| Direct contiguity                      | 1.064***<br>(4.28)   | 0.958***<br>(3.96)   | 0.998***<br>(3.99)          | -1.081**<br>(-2.78)  |
| Log distance, ports                    | -0.710***<br>(-8.43) | -0.774***<br>(-8.90) | -0.745***<br>(-8.68)        | -0.685***<br>(-6.55) |
| Log system size                        | -0.673***<br>(-4.36) | -0.720***<br>(-5.07) | -0.692***<br>(-4.64)        | -2.132***<br>(-6.26) |
| Peace years                            | 2.418***<br>(17.12)  | 2.445***<br>(17.31)  | 2.489***<br>(17.13)         | 2.111***<br>(12.31)  |
| Constant                               | -0.347<br>(-0.14)    | -1.419<br>(-0.53)    | -5.089*<br>(-2.04)          | 7.226*<br>(2.25)     |
| Observations                           | 541560               | 541560               | 541560                      | 445131               |
| <i>AIC</i>                             | 5916.4               | 5873.3               | 5929.9                      | 2024.2               |

*t* statistics in parentheses

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

Dependent variable: Fatal Militarized Interstate Dispute (with at least one battle-related death in the dyad).  
Logit model, with robust standard errors.

Column 2 reports the results from adding a more general index of executive constraints by simply taking the average of the legislative and judicial constrains indices (v2x\_execon).

Column 3 in Table SF-6 reports the results of using a much leaner version of the civil-society participation index, omitting information on civil society input on nominations, civil society consultation, and women’s participation in civil society organizations. The model using the lean civil society measure performs less well than our preferred corresponding metric, but still better than the electoral accountability model.

Column 4 of Table SF-6 shows once more the ‘joint constraint’ model, but here we replace the ‘fatal dispute’ variable with a dyadic war variable – at least 1,000 deaths in the dyad. This dependent variable is from the Maoz (2005) dyadic MID dataset and based the Correlates of War data. The results using these infrequent wars is fully consistent with the results for the fatal disputes.

In Table SF-7 we split the executive constraints variable into judicial and legislative constraint and also control for media freedom.

Table SF-7: Estimation results, models splitting executive constraints variable in three indices. Full sample

|                                    | 1 Electoral          | 2 Leg. constr.       | 3 Jud. constr.       | 4 Media              | 5 Social             | 6 Interaction        |
|------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Electoral accountability, stronger | 0.638**<br>(2.84)    |                      |                      |                      |                      | -2.449*<br>(-2.57)   |
| Electoral accountability, weaker   | 0.195<br>(0.77)      |                      |                      |                      |                      | -0.119<br>(-0.13)    |
| Electoral accountability, int.     | -4.122***<br>(-5.79) |                      |                      |                      |                      | 5.977**<br>(2.78)    |
| Legislative constraints, stronger  |                      | 1.425***<br>(4.58)   |                      |                      |                      |                      |
| Legislative constraints, weaker    |                      | 1.116***<br>(3.82)   |                      |                      |                      |                      |
| Legislative constraints, int.      |                      | -4.492***<br>(-7.90) |                      |                      |                      |                      |
| Judicial constraints, stronger     |                      |                      | 1.681***<br>(4.00)   |                      |                      |                      |
| Judicial constraints, weaker       |                      |                      | 0.815*<br>(2.40)     |                      |                      |                      |
| Judicial constraints, int.         |                      |                      | -4.486***<br>(-6.86) |                      |                      |                      |
| Media freedom, stronger            |                      |                      |                      | 1.328***<br>(4.40)   |                      |                      |
| Media freedom, weaker              |                      |                      |                      | 0.771**<br>(2.85)    |                      |                      |
| Media freedom, int.                |                      |                      |                      | -4.099***<br>(-7.66) |                      |                      |
| Social accountability, stronger    |                      |                      |                      |                      | 2.018***<br>(4.64)   | 0.894<br>(1.51)      |
| Social accountability, weaker      |                      |                      |                      |                      | 1.401***<br>(3.69)   | 0.614<br>(1.02)      |
| Social accountability, int.        |                      |                      |                      |                      | -6.092***<br>(-7.72) | -4.191***<br>(-3.78) |
| Social*Electoral int., stronger    |                      |                      |                      |                      |                      | 3.659**<br>(3.17)    |
| Social*Electoral int., weaker      |                      |                      |                      |                      |                      | 0.492<br>(0.48)      |
| Social*Electoral int., int.        |                      |                      |                      |                      |                      | -12.80**<br>(-2.89)  |
| Log CINC score, stronger           | 0.0502<br>(0.58)     | 0.0923<br>(1.01)     | 0.120<br>(1.31)      | 0.113<br>(1.20)      | 0.0803<br>(0.93)     | 0.00389<br>(0.04)    |
| Loc CINC score, weaker             | 0.375***<br>(4.34)   | 0.370***<br>(4.09)   | 0.418***<br>(4.40)   | 0.346***<br>(3.66)   | 0.336***<br>(3.71)   | 0.360***<br>(3.91)   |
| Log population, stronger           | 0.199*<br>(2.04)     | 0.142<br>(1.33)      | 0.121<br>(1.08)      | 0.137<br>(1.27)      | 0.169<br>(1.69)      | 0.239*<br>(2.21)     |
| Log population, weaker             | 0.106<br>(0.99)      | 0.124<br>(1.07)      | 0.0515<br>(0.42)     | 0.146<br>(1.21)      | 0.159<br>(1.41)      | 0.144<br>(1.25)      |
| Direct contiguity                  | 1.096***<br>(4.54)   | 1.032***<br>(4.29)   | 0.907***<br>(3.72)   | 1.040***<br>(4.13)   | 1.195***<br>(4.90)   | 1.123***<br>(4.35)   |
| Log distance, ports                | -0.719***<br>(-8.50) | -0.764***<br>(-8.66) | -0.770***<br>(-8.96) | -0.742***<br>(-8.71) | -0.756***<br>(-8.77) | -0.765***<br>(-8.58) |
| Log system size                    | -0.637***<br>(-4.18) | -0.658***<br>(-4.49) | -0.744***<br>(-5.21) | -0.659***<br>(-4.26) | -0.533***<br>(-3.68) | -0.621***<br>(-3.97) |
| Peace years                        | 2.437***<br>(17.01)  | 2.474***<br>(17.21)  | 2.431***<br>(17.29)  | 2.450***<br>(17.32)  | 2.435***<br>(17.18)  | 2.418***<br>(16.38)  |
| Constant                           | -3.562<br>(-1.71)    | -2.683<br>(-1.04)    | -0.455<br>(-0.16)    | -2.918<br>(-1.09)    | -4.227<br>(-1.86)    | -4.876*<br>(-2.10)   |
| Observations                       | 541560               | 541560               | 541560               | 541560               | 541560               | 541560               |
| AIC                                | 5945.7               | 5917.9               | 5882.2               | 5876.4               | 5854.5               | 5831.2               |

*t* statistics in parentheses

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

Dependent variable: Fatal Militarized Interstate Dispute (with at least one battle-related death in the dyad).  
Logit model, with robust standard errors.

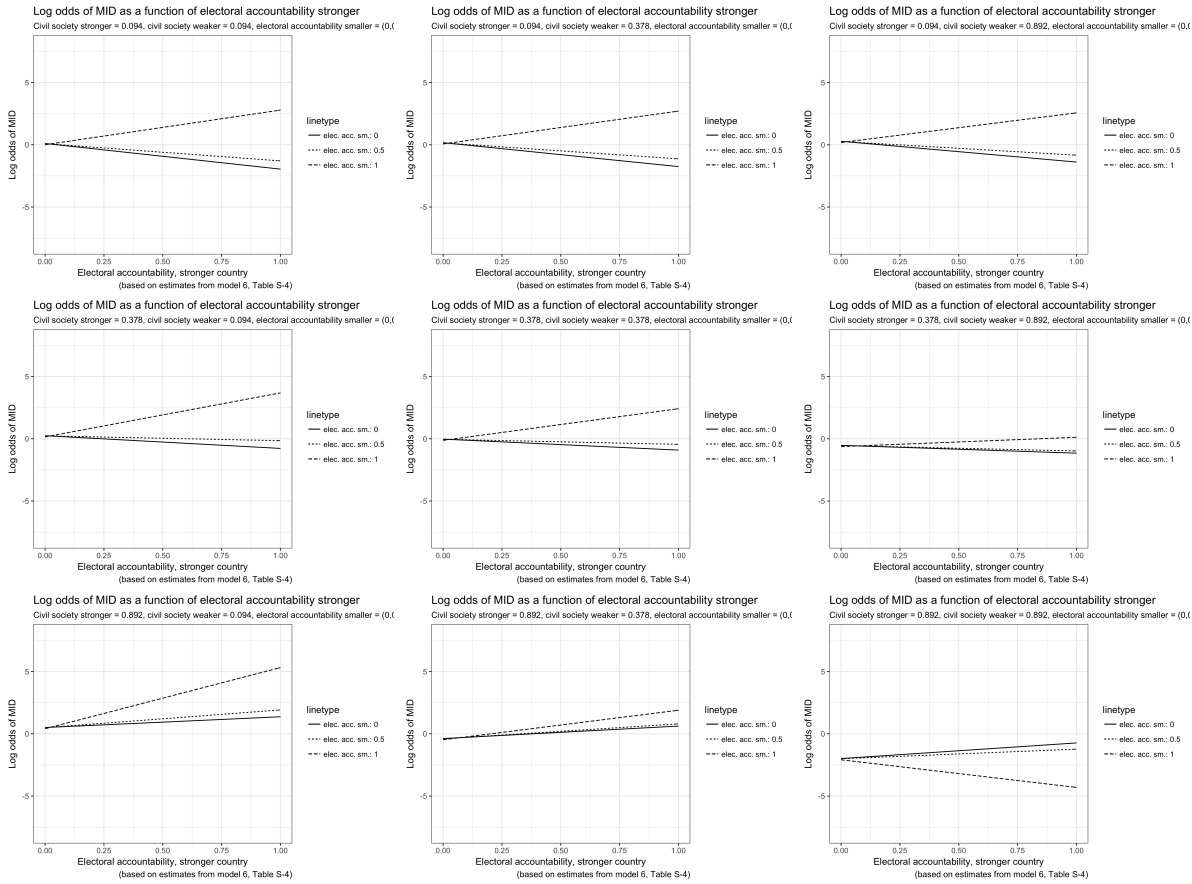


Figure SF-6: Interaction figures. Predicted log odds of conflict relative to a non-democratic baseline, as a function of electoral accountability stronger, control variables held constant. Social accountability index held at 10th, 50th, and 90th percentiles

Figure SF-6 shows the interaction plots in Figure 7 in the main text for nine combinations of values for the social accountability index: for the 10th, 50th, and 90th percentile of social accountability for the stronger country combined with the same percentiles for the weaker country.

All panels show estimated log odds of fatal MID as a function of electoral accountability in the stronger country, with separate lines for low (solid line), medium and high (dashed line) electoral accountability in the weaker. The democratic peace implies that log odds is lowest when both countries have high accountability. All but the lower right panel shows this relationship when social accountability is either low or moderate in at least one country. In that case, the estimates do not support the hypothesis that joint electoral accountability reduces the risk of conflict. The lower right panel (also reproduced in the main article) on the other hand, shows the same when social accountability is high in both countries. Under these conditions, there is a clear “electoral peace”. In addition, the figure shows that log odds of conflict is lower overall when social accountability is high.

## Reduced-sample results

Table SF-8 shows the results from an asymmetrically reduced-sample model that we use as a basis for our out-of-sample evaluations. We reduced the size of our dataset by removing at random 95% of all the non-MID dyad years but retained all the MID dyad years. Results are fully consistent with the full-sample results shown in Table SF-3 above.

Table SF-8: Models with the three indices of constraint entered separately (columns 1–3) and jointly (column 4). Reduced sample, 1900-2010

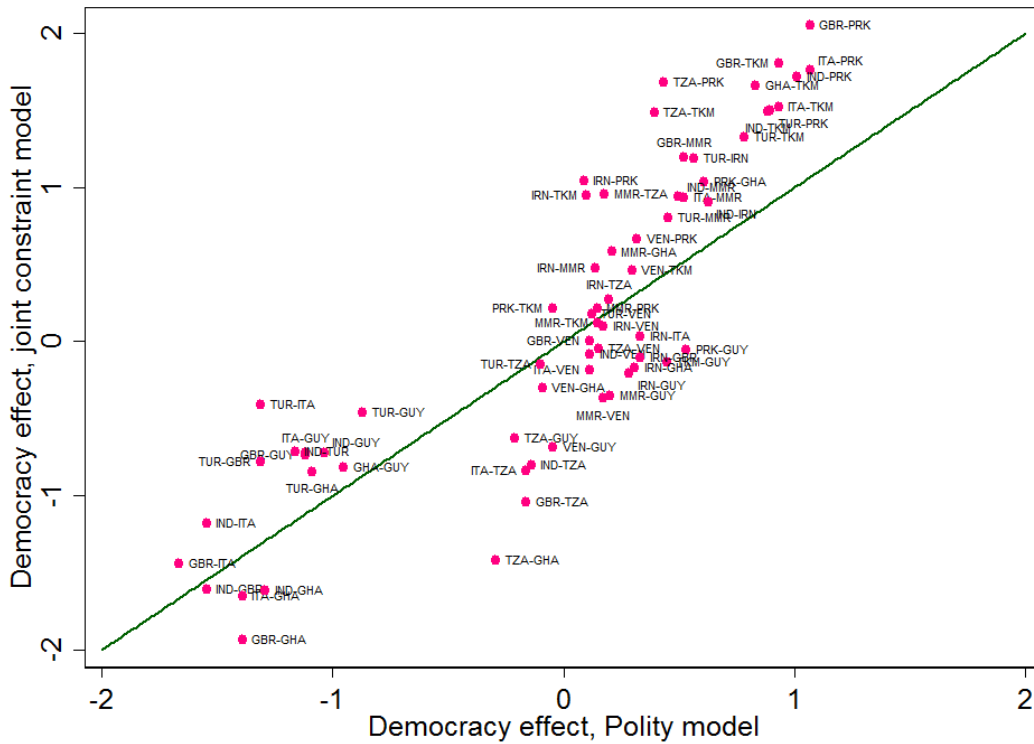
|                                     | 1 Electoral          | 2 Horizontal          | 3 Social             | 4 Joint               |
|-------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Electoral accountability, stronger  | 0.592*<br>(2.23)     |                       |                      | -0.263<br>(-0.61)     |
| Electoral accountability, weaker    | 0.00416<br>(0.02)    |                       |                      | -0.0268<br>(-0.06)    |
| Electoral accountability, int.      | -3.827***<br>(-5.11) |                       |                      | 1.367<br>(1.30)       |
| Horizontal accountability, stronger |                      | 2.153***<br>(4.94)    |                      | 1.661*<br>(2.12)      |
| Horizontal accountability, weaker   |                      | 1.297***<br>(3.30)    |                      | 1.635*<br>(2.23)      |
| Horizontal accountability, int.     |                      | -6.160***<br>(-7.46)  |                      | -4.649***<br>(-3.61)  |
| Social accountability, stronger     |                      |                       | 2.052***<br>(4.48)   | 1.313*<br>(2.08)      |
| Social accountability, weaker       |                      |                       | 1.292**<br>(3.17)    | 0.198<br>(0.27)       |
| Social accountability, int.         |                      |                       | -6.233***<br>(-7.09) | -3.789**<br>(-2.78)   |
| Log CINC score, stronger            | 0.102<br>(1.13)      | 0.143<br>(1.61)       | 0.0960<br>(1.10)     | 0.109<br>(1.21)       |
| Loc CINC score, weaker              | 0.378***<br>(4.06)   | 0.429***<br>(4.69)    | 0.329***<br>(3.64)   | 0.356***<br>(3.92)    |
| Log population, stronger            | 0.167<br>(1.62)      | 0.109<br>(1.07)       | 0.170<br>(1.68)      | 0.146<br>(1.41)       |
| Log population, weaker              | 0.0907<br>(0.80)     | 0.0240<br>(0.21)      | 0.149<br>(1.33)      | 0.113<br>(1.01)       |
| Direct contiguity                   | 1.093***<br>(4.31)   | 0.948***<br>(3.74)    | 1.182***<br>(4.55)   | 1.088***<br>(4.05)    |
| Log distance, ports                 | -0.782***<br>(-9.28) | -0.840***<br>(-10.30) | -0.809***<br>(-9.72) | -0.837***<br>(-10.15) |
| Log system size                     | -0.607***<br>(-3.75) | -0.719***<br>(-4.79)  | -0.531***<br>(-3.39) | -0.605***<br>(-3.61)  |
| Peace years                         | 2.101***<br>(10.96)  | 2.071***<br>(11.70)   | 2.076***<br>(11.40)  | 2.070***<br>(11.69)   |
| Constant                            | 1.023<br>(0.42)      | 3.731<br>(1.58)       | -0.561<br>(-0.24)    | 0.707<br>(0.28)       |
| Observations                        | 27547                | 27547                 | 27547                | 27547                 |
| AIC                                 | 3133.9               | 3053.4                | 3050.9               | 3036.5                |

*t* statistics in parentheses

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

Dependent variable: Fatal Militarized Interstate Dispute (with at least one battle-related death in the dyad).  
Logit model, with robust standard errors.

Figure SF-7: Predicted effect of institutional setup for risk of conflict, Polity and joint constraint model, selected dyads, 2010



The figure shows how much the indices of constraint change log odds of conflict for each dyad relative to what is predicted by the control variables in the model. The values along the  $x$  axis are the sums  $\beta_1 x_i + \beta_2 x_j + \beta_3 x_{ij}$  where  $x_i$  is the Polity index value for country  $i$ ,  $x_j$  the value for country  $j$ ,  $x_{ij}$  the interaction term, and the  $\beta$  terms the corresponding from the Polity model. The values along the  $y$  axis are constructed in a similar way for all the indices of constraint terms in the joint constraint model.

### Re-estimation using Polity and the five standard V-Dem indices of democracy

Table SF-9 shows results from estimating our models using Polity and the five standard V-Dem democracy indices (models 7–12 in Table 2 in the main article). The model summary statistics are reported in Table 2. The democratic peace is supported no matter which index we are using – the interaction term is negative and significant in each of them. The model summary statistics in Table 2 suggest they perform less well than our theoretically derived institutions of constraint, however.

Confirming the impression that horizontal accountability is more important than the formal vertical, the V-Dem Polyarchy index (that focuses in particular on the formal vertical aspect of democracy) performs worse than the V-Dem Liberal Democracy index (LDI) that captures the horizontal forms of constraint that more liberal democracies enjoy. The model using the LDI has AIC, AUROC, and Brier values that are better than the three single-indicator models, but inferior to our joint constraint model. The three other V-Dem indices fit the data (within and out of sample) roughly as well as the Polyarchy index. The Polity index has the poorest performance in terms of AIC and Brier. None of the models based on these standard one-dimensional indices perform nearly as well as the model with all three indices of constraint entered jointly.

Figure SF-7 shows that the predictions from the Polity model resemble those from our electoral accountability model. For each pair of countries, we calculated the extent to which the “democraticness” of those institutions alter the risk (measured as log odds) of conflict in comparison to what is explained by the control variables. We plot the effect of the Polity model along the horizontal axis and that of the joint constraint model along the vertical one.

Table SF-9: Estimation results, models using Polity and the five standard V-Dem indices of democracy entered separately. Reduced sample.

|                                      | 1 Polity               | 2 Polyarchy          | 3 Lib. dem.           | 4 Partip. dem.       | 5 Delib. dem.        | 6 Egal. dem.         |
|--------------------------------------|------------------------|----------------------|-----------------------|----------------------|----------------------|----------------------|
| Polity score, stronger               | -0.0347***<br>(-3.35)  |                      |                       |                      |                      |                      |
| Polity score, weaker                 | -0.0605***<br>(-5.56)  |                      |                       |                      |                      |                      |
| Polity score, interaction            | -0.00874***<br>(-6.44) |                      |                       |                      |                      |                      |
| Polyarchy index, stronger            |                        | 1.578***<br>(3.72)   |                       |                      |                      |                      |
| Polyarchy index, weaker              |                        | 0.830*<br>(2.01)     |                       |                      |                      |                      |
| Polyarchy index, interaction         |                        | -6.664***<br>(-5.81) |                       |                      |                      |                      |
| Liberal democracy, stronger          |                        |                      | 1.765***<br>(3.96)    |                      |                      |                      |
| Liberal democracy, weaker            |                        |                      | 0.735<br>(1.78)       |                      |                      |                      |
| Liberal democracy, interaction       |                        |                      | -10.95***<br>(-5.25)  |                      |                      |                      |
| Participatory democracy, stronger    |                        |                      |                       | 1.809**<br>(3.25)    |                      |                      |
| Participatory democracy, weaker      |                        |                      |                       | 0.716<br>(1.41)      |                      |                      |
| Participatory democracy, interaction |                        |                      |                       | -13.66***<br>(-5.45) |                      |                      |
| Deliberative democracy, stronger     |                        |                      |                       |                      | 1.035**<br>(2.93)    |                      |
| Deliberative democracy, weaker       |                        |                      |                       |                      | 0.221<br>(0.66)      |                      |
| Deliberative democracy, interaction  |                        |                      |                       |                      | -8.163***<br>(-5.17) |                      |
| Egalitarian democracy, stronger      |                        |                      |                       |                      |                      | 1.769***<br>(3.41)   |
| Egalitarian democracy, weaker        |                        |                      |                       |                      |                      | 0.788<br>(1.53)      |
| Egalitarian democracy, interaction   |                        |                      |                       |                      |                      | -9.797***<br>(-5.31) |
| Log CINC score, stronger             | 0.154<br>(1.71)        | 0.141<br>(1.58)      | 0.135<br>(1.51)       | 0.130<br>(1.47)      | 0.128<br>(1.43)      | 0.162<br>(1.70)      |
| Loc CINC score, weaker               | 0.373***<br>(4.23)     | 0.367***<br>(4.11)   | 0.416***<br>(4.58)    | 0.378***<br>(4.21)   | 0.391***<br>(4.27)   | 0.436***<br>(4.54)   |
| Log population, stronger             | 0.117<br>(1.13)        | 0.122<br>(1.20)      | 0.127<br>(1.22)       | 0.134<br>(1.31)      | 0.142<br>(1.38)      | 0.124<br>(1.15)      |
| Log population, weaker               | 0.109<br>(0.99)        | 0.108<br>(0.98)      | 0.0432<br>(0.39)      | 0.0974<br>(0.89)     | 0.0847<br>(0.75)     | 0.0321<br>(0.28)     |
| Direct contiguity                    | 1.098***<br>(4.30)     | 1.148***<br>(4.62)   | 1.083***<br>(4.33)    | 1.138***<br>(4.55)   | 1.161***<br>(4.63)   | 1.193***<br>(4.71)   |
| Log distance, ports                  | -0.793***<br>(-9.44)   | -0.810***<br>(-9.56) | -0.835***<br>(-10.06) | -0.812***<br>(-9.77) | -0.797***<br>(-9.54) | -0.849***<br>(-9.91) |
| Log system size                      | -0.616***<br>(-3.87)   | -0.532***<br>(-3.39) | -0.587***<br>(-3.81)  | -0.534***<br>(-3.46) | -0.545***<br>(-3.48) | -0.458**<br>(-2.81)  |
| Peace years                          | 2.144***<br>(11.44)    | 2.092***<br>(11.03)  | 2.066***<br>(11.17)   | 2.052***<br>(11.07)  | 2.063***<br>(10.88)  | 2.053***<br>(10.48)  |
| Constant                             | 1.714<br>(0.74)        | 1.652<br>(0.69)      | 3.197<br>(1.36)       | 1.756<br>(0.74)      | 1.830<br>(0.78)      | 3.658<br>(1.49)      |
| Observations                         | 27547                  | 27547                | 27547                 | 27547                | 27547                | 27547                |
| AIC                                  | 3080.6                 | 3084.6               | 3048.9                | 3080.9               | 3082.6               | 3089.4               |

*t* statistics in parentheses

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

Dependent variable: Fatal Militarized Interstate Dispute (with at least one battle-related death in the dyad).  
Logit model, with robust standard errors.

## The traditional weak-link specification

Table SF-10 shows the results from estimating models corresponding to those in Table SF-3, but using the traditional weak-link specification. The ‘electoral accountability lower’ variable is the electoral accountability score for the least accountable country in the dyad, and ‘electoral accountability higher’ that for the most accountable. As in previous studies of the democratic peace, the estimate for the least accountable is negative and significant in model 1 focusing on electoral accountability.

Table SF-10: Models with traditional weak-link construction

|                                  | 1 Electoral acc.     | 2 Leg. constr.       | 3 Jud. constr.       | 4 Media              | 5 Civil society      | 7 interaction        |
|----------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Electoral accountability, lower  | -2.949***<br>(-6.46) |                      |                      |                      |                      | 5.066***<br>(3.49)   |
| Electoral accountability, higher | 0.412*<br>(2.27)     |                      |                      |                      |                      | -0.165<br>(-0.19)    |
| Legislative constraints, lower   |                      | -2.261***<br>(-7.55) |                      |                      |                      | 0.754<br>(1.65)      |
| Legislative constraints, higher  |                      | 0.768***<br>(3.29)   |                      |                      |                      | 1.321**<br>(2.93)    |
| Judicial constraints, lower      |                      |                      | -2.310***<br>(-7.40) |                      |                      | -1.166**<br>(-3.04)  |
| Judicial constraints, higher     |                      |                      | 0.554*<br>(2.02)     |                      |                      | -0.0729<br>(-0.17)   |
| Media freedom, lower             |                      |                      |                      | -2.275***<br>(-7.92) |                      | -0.678<br>(-1.12)    |
| Media freedom, higher            |                      |                      |                      | 0.478*<br>(2.24)     |                      | -1.047<br>(-1.66)    |
| Civil society index, lower       |                      |                      |                      |                      | -3.200***<br>(-9.64) | -1.481*<br>(-2.04)   |
| Civil society index, higher      |                      |                      |                      |                      | 0.860***<br>(3.30)   | 0.409<br>(0.58)      |
| t_elecpart_l                     |                      |                      |                      |                      |                      | -9.286***<br>(-3.73) |
| t_elecpart_h                     |                      |                      |                      |                      |                      | 0.427<br>(0.41)      |
| Log population, stronger         | 0.148<br>(1.43)      | 0.125<br>(1.14)      | 0.0872<br>(0.73)     | 0.148<br>(1.33)      | 0.162<br>(1.54)      | 0.143<br>(1.26)      |
| Log population, weaker           | 0.169<br>(1.57)      | 0.179<br>(1.52)      | 0.154<br>(1.22)      | 0.201<br>(1.63)      | 0.251*<br>(2.18)     | 0.209<br>(1.76)      |
| Direct contiguity                | 1.103***<br>(4.54)   | 0.999***<br>(4.07)   | 0.898***<br>(3.54)   | 0.972***<br>(3.75)   | 1.121***<br>(4.46)   | 0.989***<br>(3.63)   |
| Log distance, ports              | -0.735***<br>(-8.71) | -0.758***<br>(-8.62) | -0.757***<br>(-8.32) | -0.746***<br>(-8.85) | -0.772***<br>(-8.88) | -0.785***<br>(-8.67) |
| Log system size                  | -0.619***<br>(-3.95) | -0.682***<br>(-4.44) | -0.751***<br>(-4.99) | -0.694***<br>(-4.18) | -0.569***<br>(-3.70) | -0.674***<br>(-3.98) |
| Peace years                      | 2.450***<br>(17.02)  | 2.492***<br>(17.10)  | 2.472***<br>(16.64)  | 2.472***<br>(16.98)  | 2.474***<br>(16.97)  | 2.383***<br>(15.68)  |
| Log CINC score, stronger         | 0.0973<br>(1.02)     | 0.0941<br>(0.97)     | 0.123<br>(1.25)      | 0.0915<br>(0.94)     | 0.0762<br>(0.83)     | 0.0953<br>(1.03)     |
| Loc CINC score, weaker           | 0.321***<br>(3.66)   | 0.321***<br>(3.56)   | 0.333***<br>(3.49)   | 0.295**<br>(3.09)    | 0.255**<br>(2.81)    | 0.295**<br>(3.12)    |
| Constant                         | -3.643<br>(-1.71)    | -3.210<br>(-1.24)    | -1.581<br>(-0.53)    | -3.886<br>(-1.44)    | -5.200*<br>(-2.19)   | -3.615<br>(-1.26)    |
| Observations                     | 541560               | 541560               | 541560               | 541560               | 541560               | 541560               |
| AIC                              | 5942.3               | 5941.9               | 5922.2               | 5909.0               | 5874.2               | 5819.8               |

*t* statistics in parentheses

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

Dependent variable: Fatal Militarized Interstate Dispute (with at least one battle-related death in the dyad).  
Logit model, with robust standard errors clustered on dyad.

Models 2–6 present results for the four other constraint variables as well as the traditional weak-link version of the joint constraint model. In all models, we use the same formulations of control variables as in the main analysis (Table SF-3). All the ‘least accountable’ variables are negative and significant using the traditional weak-link specification. Note that except for Model 1, the AIC scores are much higher than in our preferred specification – the traditional weak-link specification is clearly worse in terms of within-sample goodness-of-fit than the specification that assumes that the strongest country is the ‘least constrained’.

## The cold war and other temporal shifts

Table SF-11 explores the argument that the democratic peace has changed in strength over time (Gowa, 1999; Cederman, 2001; McDonald, 2015; Nieman, 2016). We reanalyze Models 2 and 5 in our main specification (Table SF-3). The first two columns in Table SF-11 reproduces the results for Models 2 and 5.

In columns 3 and 4, we add a dummy variable for the cold war period 1946–1991 as well as interaction terms between the three constraint terms and the cold war dummy. The AIC of the model improves when adding the cold war terms to the legislative constraint model, but not when adding them to the civil society model. In neither model does the strength of the democratic peace change perceptively in substantial terms, in contrast to the results in McDonald (2015).<sup>5</sup> In columns 5 and 6, we add a time variable, operationalized as (calendar year–1960), and the interaction terms between calendar time and the constraint variables. In this case, AIC improves for the civil society participation variable, but not the legislative constraint variable. Again, the analysis does not suggest that the democratic peace has changed strength over time, although there are indications that the baseline risk of war between states have declined over the course of the 20th century.

## Development and Mousseau’s contract-intensive economies

In Table SF-12, we show that our results are also robust to the challenge posed by the work of Michael Mousseau (Mousseau, 2000; Mousseau, Hegre, and Oneal, 2003; Mousseau, 2009; Mousseau, 2012; Mousseau, 2013), while supporting his claim that the contract-intensity of economies is clearly related to interstate peace. In Model Dev1 in the table, we add the interaction between our legislative constraint variable and log GDP per capita. This corresponds to the interaction between Polity and GDP per capita in Mousseau (2000) and Mousseau, Hegre, and Oneal (2003). In Model Dev2, we enter the interaction with our civil-society participation variable. In both cases, our variables of constraint have a clear conflict-reducing effect independently of GDP per capita, but we also see that the relationship is stronger in high-income countries than in low-income ones.

In Models Dev3–5, we add the proxy for contract-intensive economies suggested in Mousseau (2009) – Life insurance premiums in 2005 international \$ per person. Data were taken from Mousseau (2017). We use of our preferred weak-link specification also for this variable, coding it separately for the stronger and the weaker state in the pair. The life insurance variable has limited coverage, reducing our dataset to 69,265 dyad-year observations. In Model Dev-3, the life-insurance stronger-weaker interaction is clearly significant and with the sign hypothesized by Mousseau. Our legislative constraint variable retains most of its explanatory power when controlling for it, however. The same applies to our civil society variable in Model Dev-4. In Model Dev-5, we log-transform the life insurance variable as suggested in Mousseau and Mousseau (2008). Since there are some negative values in the original dataset, this causes some observations to be dropped, and the weaker-stronger interaction term drops out. Still, the results continue to be in line with Mousseau (2009) without affecting our main conclusion.

In Models Dev6–8, we use ‘CIE’, the most recent proxy for contract-intensive economies suggested in Mousseau (2012). The variable is called CIE, and is measured as the value of the contract-intensity economy as constant dollars per capita. The data were taken from Mousseau (2017). We continue to use our preferred weak-link specification, with separate terms for the weaker and the stronger country in the dyad, and an  $i, j$  interaction reflecting the dyadic aspect of the democratic peace, or the ‘contract-intensive economic peace’ in this case. In Models D6 and D7, we add this set of variables to our legislative constraint and civil society models, respectively. As for life insurance, and in line with Mousseau (2012), the estimates for the CIE stronger-weaker interaction term is negative and significant: Pairs of countries that have contract-intensive economies have a lower risk of fatal interstate disputes. Our legislative constraint and civil society variables are not much affected by their inclusion, however. The  $i, j$  interaction terms remain negative and clearly significant. In Model Dev8, we use the dichotomous version of the CIE measure proposed by Mousseau (‘CIEb’). As in Mousseau’s studies, the  $i, j$  interaction form of this variable predicts absence of fatal militarized disputes perfectly and cannot be estimated. Our main conclusions hold firmly also in this specification.

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<sup>5</sup>The difference in results between our study and that of McDonald (2015) may partly be due to his inclusion of ‘interest similarity’ in the model. Since we think countries’ interests are defined by their decision makers who in turn are constrained by the political institutions they operate within, we do not include this variable in order to avoid post-treatment bias.

Table SF-11: Is the democratic peace restricted to specific periods? Our models 2 and 5, adding time variables

|                                       | Model 2              | M2, cold war         | M2, time             | Model 5              | M5, cold war         | M5, time             |
|---------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Legislative constraints, stronger     | 1.425***<br>(4.58)   | 1.411***<br>(3.72)   | 1.271***<br>(3.74)   |                      |                      |                      |
| Legislative constraints, weaker       | 1.116***<br>(3.82)   | 0.462<br>(1.14)      | 0.978**<br>(3.28)    |                      |                      |                      |
| Legislative constraints, int.         | -4.492***<br>(-7.90) | -4.764***<br>(-6.99) | -4.429***<br>(-7.34) |                      |                      |                      |
| Civil society index, stronger         |                      |                      |                      | 2.018***<br>(4.64)   | 2.375***<br>(4.04)   | 1.840***<br>(4.20)   |
| Civil society index, weaker           |                      |                      |                      | 1.401***<br>(3.69)   | 1.232*<br>(2.14)     | 1.300***<br>(3.37)   |
| Civil society index, int.             |                      |                      |                      | -6.092***<br>(-7.72) | -6.650***<br>(-6.15) | -6.547***<br>(-7.36) |
| Cold war dummy (1946–1990)            |                      | -0.300<br>(-1.04)    |                      |                      | 0.0465<br>(0.11)     |                      |
| Calendar time (year - 1960)           |                      |                      | -0.00736<br>(-1.20)  |                      |                      | -0.0167*<br>(-2.23)  |
| Cold war x leg. constraints, stronger |                      | -0.137<br>(-0.24)    |                      |                      |                      |                      |
| Cold war x leg. constraints, weaker   |                      | 0.893<br>(1.87)      |                      |                      |                      |                      |
| Cold war x leg. constraints, int.     |                      | 1.071<br>(1.16)      |                      |                      |                      |                      |
| Year x leg. constraints, stronger     |                      |                      | 0.0147<br>(1.55)     |                      |                      |                      |
| Year x leg. constraints, weaker       |                      |                      | 0.0140<br>(1.58)     |                      |                      |                      |
| Year x leg. constraints, int.         |                      |                      | -0.00612<br>(-0.39)  |                      |                      |                      |
| Cold war x civil society, stronger    |                      |                      |                      |                      | -0.706<br>(-0.88)    |                      |
| Cold war x civil society, weaker      |                      |                      |                      |                      | 0.150<br>(0.21)      |                      |
| Cold war x civil society, int.        |                      |                      |                      |                      | 1.539<br>(1.07)      |                      |
| Year x civil society, stronger        |                      |                      |                      |                      |                      | 0.0315*<br>(2.28)    |
| Year x civil society, weaker          |                      |                      |                      |                      |                      | 0.0252<br>(1.85)     |
| Year x civil society, int.            |                      |                      |                      |                      |                      | -0.00476<br>(-0.17)  |
| Log population, stronger              | 0.142<br>(1.33)      | 0.135<br>(1.25)      | 0.105<br>(0.86)      | 0.169<br>(1.69)      | 0.172<br>(1.70)      | 0.102<br>(0.91)      |
| Log population, weaker                | 0.124<br>(1.07)      | 0.104<br>(0.88)      | 0.0837<br>(0.65)     | 0.159<br>(1.41)      | 0.150<br>(1.29)      | 0.0984<br>(0.82)     |
| Direct contiguity                     | 1.032***<br>(4.29)   | 1.022***<br>(4.05)   | 0.857***<br>(3.33)   | 1.195***<br>(4.90)   | 1.188***<br>(4.71)   | 0.874***<br>(3.36)   |
| Log distance, ports                   | -0.764***<br>(-8.66) | -0.772***<br>(-8.84) | -0.766***<br>(-8.78) | -0.756***<br>(-8.77) | -0.762***<br>(-8.85) | -0.758***<br>(-8.95) |
| Log system size                       | -0.658***<br>(-4.49) | -0.644***<br>(-4.07) | -0.813***<br>(-5.11) | -0.533***<br>(-3.68) | -0.528***<br>(-3.52) | -0.823***<br>(-4.99) |
| Peace years                           | 2.474***<br>(17.21)  | 2.455***<br>(17.02)  | 2.480***<br>(17.03)  | 2.435***<br>(17.18)  | 2.433***<br>(17.08)  | 2.446***<br>(17.06)  |
| Log CINC score, stronger              | 0.0923<br>(1.01)     | 0.104<br>(1.12)      | 0.128<br>(1.19)      | 0.0803<br>(0.93)     | 0.0800<br>(0.90)     | 0.144<br>(1.44)      |
| Loc CINC score, weaker                | 0.370***<br>(4.09)   | 0.386***<br>(4.16)   | 0.400***<br>(4.11)   | 0.336***<br>(3.71)   | 0.343***<br>(3.67)   | 0.385***<br>(4.07)   |
| Constant                              | -2.683<br>(-1.04)    | -1.795<br>(-0.67)    | -0.765<br>(-0.22)    | -4.227<br>(-1.86)    | -4.053<br>(-1.66)    | -1.051<br>(-0.34)    |
| Observations                          | 541560               | 541560               | 541560               | 541560               | 541560               | 541560               |
| AIC                                   | 5917.9               | 5902.4               | 5917.1               | 5854.5               | 5854.5               | 5834.2               |

*t* statistics in parentheses

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

Dependent variable: Fatal Militarized Interstate Dispute (with at least one battle-related death in the dyad).

Logit model, with robust standard errors clustered on dyad.

Table SF-12: Reanalysis of our models adding various Mousseau specifications

|                                     | Dev1                 | Dev2                 | Dev3                   | Dev4                  | Dev5                 | Dev6                 | Dev7                 | Dev8                 |
|-------------------------------------|----------------------|----------------------|------------------------|-----------------------|----------------------|----------------------|----------------------|----------------------|
| Legislative constraints, stronger   | 0.000568<br>(0.00)   |                      | 3.181*<br>(2.27)       |                       |                      | 1.247***<br>(3.30)   |                      | 1.112**<br>(3.05)    |
| Legislative constraints, weaker     | 0.772<br>(1.57)      |                      | 2.501<br>(1.91)        |                       |                      | 1.801***<br>(4.92)   |                      | 1.348***<br>(4.06)   |
| Legislative constraints, int.       | -2.915***<br>(-3.41) |                      | -5.899***<br>(-3.45)   |                       |                      | -3.734***<br>(-5.78) |                      | -3.408***<br>(-4.94) |
| Civil society index, stronger       |                      | -0.260<br>(-0.46)    |                        | 2.413<br>(1.69)       | 3.638*<br>(2.49)     |                      | 1.745*<br>(2.55)     |                      |
| Civil society index, weaker         |                      | -0.0190<br>(-0.03)   |                        | 2.043<br>(1.47)       | 2.912<br>(1.91)      |                      | 1.606*<br>(2.13)     |                      |
| Civil society index, int.           |                      | -3.290**<br>(-3.13)  |                        | -8.500***<br>(-3.42)  | -9.603***<br>(-4.07) |                      | -5.000***<br>(-4.07) |                      |
| Log GDP per capita, stronger        | -0.437**<br>(-2.87)  | -0.707***<br>(-4.07) |                        |                       |                      |                      |                      |                      |
| Log GDP per capita, weaker          | -0.214<br>(-1.43)    | -0.319<br>(-1.88)    |                        |                       |                      |                      |                      |                      |
| Log GDP per capita, int.            | 0.00196<br>(0.02)    | 0.108<br>(1.09)      |                        |                       |                      |                      |                      |                      |
| GDPcap x leg. constraints, stronger | 1.037***<br>(4.45)   |                      |                        |                       |                      |                      |                      |                      |
| GDPcap x leg. constraints, weaker   | 0.499*<br>(2.16)     |                      |                        |                       |                      |                      |                      |                      |
| GDPcap x leg. constraints, int.     | -0.492**<br>(-3.22)  |                      |                        |                       |                      |                      |                      |                      |
| GDPcap x civil society, stronger    |                      | 1.455***<br>(5.76)   |                        |                       |                      |                      |                      |                      |
| GDPcap x civil society, weaker      |                      | 0.904***<br>(3.58)   |                        |                       |                      |                      |                      |                      |
| GDPcap x civil society, int.        |                      | -0.857***<br>(-3.81) |                        |                       |                      |                      |                      |                      |
| Life insurance, stronger            |                      |                      | 0.0000276<br>(0.09)    | 0.000269<br>(0.88)    |                      |                      |                      |                      |
| Life insurance, weaker              |                      |                      | -0.000991<br>(-1.60)   | -0.000608<br>(-1.08)  |                      |                      |                      |                      |
| Life insurance, int.                |                      |                      | -0.0000244*<br>(-2.43) | -0.0000922<br>(-1.12) |                      |                      |                      |                      |
| Log life insurance, stronger        |                      |                      |                        |                       | -0.164<br>(-1.73)    |                      |                      |                      |
| Log life insurance, weaker          |                      |                      |                        |                       | -0.164<br>(-1.91)    |                      |                      |                      |
| Log life insurance, int.            |                      |                      |                        |                       | 0<br>(.)             |                      |                      |                      |
| CIE, stronger                       |                      |                      |                        |                       |                      | 0.224*<br>(2.18)     | 0.217*<br>(2.00)     |                      |
| CIE, weaker                         |                      |                      |                        |                       |                      | 0.0192<br>(0.19)     | 0.132<br>(1.14)      |                      |
| CIE, int.                           |                      |                      |                        |                       |                      | -0.126***<br>(-4.28) | -0.115***<br>(-3.75) |                      |
| Dichotomous CIE, stronger           |                      |                      |                        |                       |                      |                      |                      | 0.657*<br>(2.26)     |
| Dichotomous CIE, weaker             |                      |                      |                        |                       |                      |                      |                      | -0.574*<br>(-2.24)   |
| Dichotomous CIE, int.               |                      |                      |                        |                       |                      |                      |                      | 0<br>(.)             |
| Log CINC score, stronger            |                      |                      | 0.382<br>(0.86)        | 0.425<br>(1.00)       | 0.656<br>(1.49)      | 0.361**<br>(2.59)    | 0.327*<br>(2.38)     | 0.0138<br>(0.13)     |
| Loc CINC score, weaker              |                      |                      | 1.579***<br>(3.40)     | 1.270**<br>(2.72)     | 1.195*<br>(2.48)     | 0.474***<br>(3.42)   | 0.346*<br>(2.53)     | 0.630***<br>(6.47)   |
| Log population, stronger            | 0.208**<br>(3.21)    | 0.196**<br>(3.06)    | 0.0979<br>(0.18)       | 0.0583<br>(0.12)      | -0.142<br>(-0.32)    | -0.177<br>(-1.08)    | -0.156<br>(-0.98)    | 0.203<br>(1.64)      |
| Log population, weaker              | 0.514***<br>(6.84)   | 0.518***<br>(7.47)   | -0.879*<br>(-2.10)     | -0.576<br>(-1.48)     | -0.560<br>(-1.37)    | -0.00449<br>(-0.03)  | 0.163<br>(0.93)      | -0.124<br>(-0.93)    |
| Direct contiguity                   | 0.385<br>(1.17)      | 0.526<br>(1.56)      | 0.815<br>(1.43)        | 1.186*<br>(2.40)      | 1.225*<br>(2.35)     | 1.516***<br>(4.73)   | 1.734***<br>(5.68)   | 1.116***<br>(3.90)   |
| Log distance, ports                 | -0.777***<br>(-6.68) | -0.763***<br>(-6.77) | -0.895*<br>(-2.50)     | -1.001**<br>(-2.82)   | -0.938**<br>(-2.70)  | -0.761***<br>(-6.10) | -0.749***<br>(-6.08) | -0.744***<br>(-7.76) |
| Log system size                     | -1.204***<br>(-5.70) | -1.148***<br>(-5.00) | -0.226<br>(-0.88)      | 0.0902<br>(0.27)      | 0.119<br>(0.35)      | -0.476**<br>(-3.09)  | -0.347*<br>(-2.27)   | -0.663***<br>(-3.92) |
| Peace years                         | 2.485***<br>(16.81)  | 2.471***<br>(17.18)  | 2.435***<br>(6.08)     | 2.667***<br>(6.23)    | 2.691***<br>(6.35)   | 2.207***<br>(13.47)  | 2.238***<br>(13.73)  | 2.401***<br>(14.40)  |
| Constant                            | -11.63***<br>(-9.59) | -11.23***<br>(-9.63) | 21.89<br>(1.42)        | 17.58<br>(1.38)       | 21.05<br>(1.60)      | 6.583<br>(1.54)      | 2.025<br>(0.46)      | 1.310<br>(0.45)      |
| Observations                        | 404495               | 404495               | 69265                  | 69265                 | 69133                | 396030               | 396030               | 376771               |
| AIC                                 | 5075.6               | 5004.6               | 524.4                  | 502.4                 | 502.3                | 3127.0               | 3116.6               | 4616.4               |

*t* statistics in parentheses

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

Dependent variable: Fatal Militarized Interstate Dispute (with at least one battle-related death in the dyad).

Logit model, with robust standard errors clustered on dyad.

## Gartzke's 'capitalist peace'

Gartzke (2007) argues that the democratic peace can equally well be explained as a 'capitalist peace'. He finds that pairs of states with interdependent markets and high GDP per capita have a low risk of interstate disputes if they are neighbors, but that GDP per capita does not reduce the risk of conflict if countries are far apart. In Table SF-13, we add major components of Gartzke's specification: trade, GDP per capita, and interaction between GDP per capita and contiguity.<sup>6</sup> Table SF-13 presents the results. The trade variable is from Hegre, Oneal, and Russett (2010) and measured as the logarithm of the real value of trade (in millions of 1996 dollars).

Table SF-13: Partial replication of Gartzke (2007) with our data

|                                    | lc1                   | lc2                   | lc3                   | cs1                   | cs2                   | cs3                   |
|------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Legislative constraints, stronger  | 1.542***<br>(4.14)    | 1.611***<br>(4.31)    | 1.490***<br>(4.26)    |                       |                       |                       |
| Legislative constraints, weaker    | 1.687***<br>(4.18)    | 1.714***<br>(4.22)    | 1.582***<br>(3.97)    |                       |                       |                       |
| Legislative constraints, int.      | -4.849***<br>(-6.46)  | -4.602***<br>(-6.15)  | -4.285***<br>(-6.00)  |                       |                       |                       |
| Civil society index, stronger      |                       |                       |                       | 2.310***<br>(4.57)    | 2.410***<br>(4.65)    | 2.181***<br>(4.48)    |
| Civil society index, weaker        |                       |                       |                       | 1.926***<br>(3.98)    | 1.991***<br>(3.99)    | 1.781***<br>(3.69)    |
| Civil society index, int.          |                       |                       |                       | -6.800***<br>(-6.87)  | -6.642***<br>(-6.75)  | -6.155***<br>(-6.62)  |
| Log GDP per capita, stronger       | -0.00434<br>(-0.04)   | 0.214<br>(1.48)       | 0.595*<br>(2.28)      | -0.0368<br>(-0.41)    | 0.147<br>(1.06)       | 0.568*<br>(2.28)      |
| Log GDP per capita, weaker         | -0.0789<br>(-0.88)    | 0.154<br>(1.21)       | 0.556**<br>(2.79)     | 0.00706<br>(0.08)     | 0.200<br>(1.69)       | 0.631***<br>(3.37)    |
| Log GDP per capita, int.           |                       | -0.156<br>(-1.69)     | -0.199<br>(-1.37)     |                       | -0.127<br>(-1.34)     | -0.213<br>(-1.47)     |
| Log GDP/cap x contiguity, stronger |                       |                       | -0.460<br>(-1.60)     |                       |                       | -0.536<br>(-1.88)     |
| Log GDP/cap x contiguity, weaker   |                       |                       | -0.457<br>(-1.71)     |                       |                       | -0.512*<br>(-2.00)    |
| Log GDP/cap x contiguity, int.     |                       |                       | -0.0282<br>(-0.15)    |                       |                       | 0.0527<br>(0.29)      |
| Log population, stronger           | 0.229***<br>(3.61)    | 0.287***<br>(4.27)    | 0.280***<br>(4.25)    | 0.237***<br>(3.74)    | 0.288***<br>(4.28)    | 0.278***<br>(4.20)    |
| Log population, weaker             | 0.496***<br>(6.59)    | 0.567***<br>(7.20)    | 0.569***<br>(7.01)    | 0.499***<br>(7.26)    | 0.566***<br>(7.90)    | 0.568***<br>(7.72)    |
| Direct contiguity                  | 0.274<br>(0.79)       | 0.200<br>(0.57)       | 0.887*<br>(2.28)      | 0.492<br>(1.39)       | 0.397<br>(1.13)       | 1.136**<br>(2.75)     |
| Log distance, ports                | -0.768***<br>(-7.59)  | -0.850***<br>(-8.15)  | -0.828***<br>(-7.51)  | -0.747***<br>(-7.65)  | -0.821***<br>(-8.10)  | -0.800***<br>(-7.43)  |
| Log system size                    | -1.196***<br>(-5.43)  | -1.356***<br>(-6.08)  | -1.671***<br>(-7.21)  | -1.072***<br>(-4.54)  | -1.236***<br>(-5.20)  | -1.530***<br>(-6.38)  |
| Peace years                        | 2.513***<br>(16.28)   | 2.337***<br>(15.82)   | 2.308***<br>(15.87)   | 2.492***<br>(16.31)   | 2.333***<br>(15.72)   | 2.305***<br>(15.95)   |
| Log real value of trade            |                       | -0.0677***<br>(-4.27) | -0.0777***<br>(-4.73) |                       | -0.0624***<br>(-3.90) | -0.0719***<br>(-4.41) |
| Constant                           | -12.28***<br>(-10.64) | -13.94***<br>(-10.54) | -14.41***<br>(-10.40) | -12.89***<br>(-11.46) | -14.40***<br>(-11.09) | -14.81***<br>(-11.02) |
| Observations                       | 404495                | 402865                | 402865                | 404495                | 402865                | 402865                |
| AIC                                | 5117.5                | 5076.9                | 5040.9                | 5070.2                | 5037.3                | 5003.9                |

*t* statistics in parentheses

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

Dependent variable: Fatal Militarized Interstate Dispute (with at least one battle-related death in the dyad).  
Logit model, with robust standard errors clustered on dyad.

Column 1 (Model lc1) is close to our model 2 (with legislative constraint), but with log gdp per capita rather than log capabilities to reproduce Gartzke's model.<sup>7</sup> Model lc2 adds the interaction term for GDP per capita of country  $i$  and  $j$  as well as log trade (trade data are from Hegre, Oneal, and Russett, 2010). As in Oneal and Russett (1997), trade reduces the risk of interstate disputes, but our constraint variables are not affected by accounting for trade.

Model lc3 adds the capitalist peace interaction terms between GDP per capita and contiguity. The addition of these variables improves the goodness of fit of the model considerably, with estimates in the same direction as in Gartzke's model and borderline significant. Accounting for this aspect of the democratic peace weakens our legcon terms only slightly. Models cs1, cs2, cs3 repeat the exercise starting from our cspart model (model 5). Cspart is barely affected by the interaction term at all.

<sup>6</sup>We do not add his measure of financial openness since this variable is missing data for a large fraction of observations, introducing unknown bias, nor the measure of joint interests due to the post-treatment bias discussed above.

<sup>7</sup>Note that more than 90% of the variance in COW's capability score can be accounted for by log population and log GDP per capita. The model specification consequently captures the impact of military capabilities and asymmetry in this, as demonstrated in Hegre (2008).

## Gibler’s ‘territorial peace’

In Tables SF-14 and SF-15 we address the argument in Gibler (2012) that the democratic peace rather is a ‘territorial peace’. He finds that the empirical evidence for a democratic peace is critically weakened when controlling for a set of proxies for stable borders (Gibler, 2012, Table 7.2). These proxies are the natural log of time since the youngest country in the pair became independent (‘lnddyaddur1’); same former colonial master in both countries (‘samemaster’); whether there was a peaceful territorial transfer between the two countries in the past five years (‘peacetrans’); a violent territorial transfer between the two countries in the past five years (‘violenttrans’); the existence of a defense pact in dyad (‘lowpeacedefpact’); whether there is an internal war in either country (‘either\_cowintra’); the highest number of soldiers per capita in the two countries’ neighborhoods (‘high\_threat\_militarization’); whether there has been any territorial dispute against any of the states in the past five years (‘high\_threat\_terrMID’); and a multiplicative interaction term between the two latter variables (‘high\_threat\_terrMIDxmilpe’).

Table SF-14: Our model 2 with legislative constraint as point of departure, adding proxies for stable borders from Gibler (2012)

|                                    | cspart model         | W Gibler’s           | Only neighbors       | Neighbors, Gibler’s  | With allies          |
|------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Legislative constraints, stronger  | 1.425***<br>(4.58)   | 1.507***<br>(4.31)   | 0.521<br>(1.32)      | 0.371<br>(1.02)      | 0.234<br>(0.64)      |
| Legislative constraints, weaker    | 1.116***<br>(3.82)   | 1.188***<br>(3.90)   | 0.794*<br>(1.97)     | 0.662<br>(1.62)      | 0.550<br>(1.37)      |
| Legislative constraints, int.      | -4.492***<br>(-7.90) | -4.658***<br>(-7.21) | -2.956***<br>(-4.55) | -2.634***<br>(-3.88) | -2.412***<br>(-3.55) |
| Log population, stronger           | 0.142<br>(1.33)      | 0.0276<br>(0.28)     | 0.253<br>(1.48)      | 0.145<br>(1.01)      | 0.122<br>(0.85)      |
| Log population, weaker             | 0.124<br>(1.07)      | 0.0410<br>(0.38)     | 0.135<br>(0.78)      | 0.183<br>(1.24)      | 0.188<br>(1.27)      |
| Direct contiguity                  | 1.032***<br>(4.29)   | 0.806**<br>(2.94)    |                      |                      |                      |
| Log distance, ports                | -0.764***<br>(-8.66) | -0.766***<br>(-9.96) | -0.588***<br>(-4.44) | -0.597***<br>(-4.92) | -0.592***<br>(-4.90) |
| Log system size                    | -0.658***<br>(-4.49) | -0.647**<br>(-3.10)  |                      |                      |                      |
| Peace years                        | 2.474***<br>(17.21)  | 2.394***<br>(13.48)  | 2.504***<br>(16.25)  | 2.280***<br>(14.14)  | 2.246***<br>(14.22)  |
| Log CINC score, stronger           | 0.0923<br>(1.01)     | 0.145<br>(1.51)      | -0.232<br>(-1.75)    | -0.172<br>(-1.36)    | -0.153<br>(-1.21)    |
| Loc CINC score, weaker             | 0.370***<br>(4.09)   | 0.395***<br>(4.32)   | 0.321*<br>(2.32)     | 0.200<br>(1.49)      | 0.193<br>(1.45)      |
| Natural log of dyad duration       |                      | 0.0856<br>(1.52)     |                      | 0.0305<br>(0.40)     | 0.0429<br>(0.57)     |
| Same colonial master               |                      | 0.707***<br>(3.70)   |                      | 0.403<br>(1.73)      | 0.490*<br>(2.05)     |
| Peaceful territorial transfer      |                      | -0.0421<br>(-0.16)   |                      | 0.163<br>(0.58)      | 0.169<br>(0.62)      |
| Violent territorial transfer       |                      | 0.414<br>(1.67)      |                      | 0.650*<br>(2.46)     | 0.659*<br>(2.49)     |
| Existence of defence pact in dyad  |                      | -0.482<br>(-1.83)    |                      | -0.434<br>(-1.53)    | -0.219<br>(-0.76)    |
| Intrastate war in either state     |                      | 0.704***<br>(5.60)   |                      | 0.584**<br>(3.24)    | 0.563**<br>(3.09)    |
| Highest neighbor militarization    |                      | 8.304***<br>(3.45)   |                      | 7.468*<br>(2.13)     | 7.755*<br>(2.26)     |
| Either targeted in territorial MID |                      | 0.382**<br>(2.69)    |                      | 0.478**<br>(2.91)    | 0.461**<br>(2.85)    |
| Territorial MID x militarization   |                      | 2.849<br>(0.61)      |                      | 12.50<br>(1.89)      | 12.19<br>(1.95)      |
| Allied                             |                      |                      |                      |                      | -0.405*<br>(-2.20)   |
| Constant                           | -2.683<br>(-1.04)    | 0.234<br>(0.10)      | -6.428<br>(-1.88)    | -6.484*<br>(-2.20)   | -6.026*<br>(-2.05)   |
| Observations                       | 541560               | 428369               | 18917                | 18691                | 18691                |
| AIC                                | 5917.9               | 5518.9               | 2682.0               | 2603.0               | 2598.9               |

*t* statistics in parentheses

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

Dependent variable: Fatal Militarized Interstate Dispute (with at least one battle-related death in the dyad).

Logit model, with robust standard errors clustered on dyad.

In Table SF-14 we take our model 2 with legislative constraint variables as the point of departure. The first column reproduces our main result, but restricted to the years 1900–2000 since Gibler’s data end in 2000. In column 2, we add Gibler’s border proxy variables. This does not alter our main results. Gibler’s argument is strictly speaking only applicable to neighboring countries, however. Hence, we reproduce our model 2 for neighbors only in column 3. Since this removes more than 95% of the dyad years, the statistical significance of our legislative constraint variables is somewhat weakened – the  $z$ -value is

reduced from  $-7.90$  to  $-4.55$ .<sup>8</sup> We add Gibler’s border variables to the neighbors-only model in column 4. The estimates for our legislative constraint variables are only slightly weakened as a consequence, and remain clearly significant with a  $z$ -value of  $-3.88$ . In the final column, we add ‘joint alliances’ as in Gibler’s study, although we consider the alliance variable an intervening variable for the same reasons as the ‘interest similarity’ variable. This addition further reduces the strength of the estimates for the legislative constraint variable, but the interaction term is still clearly significant according to conventional thresholds.

Table SF-15: Our model 5 with cspart as point of departure, adding proxies for stable borders from Gibler (2012)

|                                    | cspart model         | W Gibler’s            | Only neighbors       | Neighbors, Gibler’s  | With allies          |
|------------------------------------|----------------------|-----------------------|----------------------|----------------------|----------------------|
| Civil society index, stronger      | 2.018***<br>(4.64)   | 2.220***<br>(4.85)    | 0.430<br>(0.83)      | 0.444<br>(0.81)      | 0.226<br>(0.40)      |
| Civil society index, weaker        | 1.401***<br>(3.69)   | 1.510***<br>(3.86)    | 0.552<br>(1.09)      | 0.458<br>(0.87)      | 0.296<br>(0.57)      |
| Civil society index, int.          | -6.092***<br>(-7.72) | -6.367***<br>(-7.47)  | -3.566***<br>(-4.06) | -3.281***<br>(-3.60) | -2.876**<br>(-3.12)  |
| Log population, stronger           | 0.169<br>(1.69)      | 0.0673<br>(0.70)      | 0.218<br>(1.42)      | 0.139<br>(1.03)      | 0.123<br>(0.92)      |
| Log population, weaker             | 0.159<br>(1.41)      | 0.0525<br>(0.50)      | 0.228<br>(1.27)      | 0.237<br>(1.54)      | 0.236<br>(1.54)      |
| Direct contiguity                  | 1.195***<br>(4.90)   | 0.946***<br>(3.30)    |                      |                      |                      |
| Log distance, ports                | -0.756***<br>(-8.77) | -0.763***<br>(-10.00) | -0.598***<br>(-4.53) | -0.609***<br>(-5.07) | -0.603***<br>(-5.03) |
| Log system size                    | -0.533***<br>(-3.68) | -0.582**<br>(-2.73)   |                      |                      |                      |
| Peace years                        | 2.435***<br>(17.18)  | 2.365***<br>(13.61)   | 2.439***<br>(16.50)  | 2.246***<br>(14.34)  | 2.215***<br>(14.47)  |
| Log CINC score, stronger           | 0.0803<br>(0.93)     | 0.124<br>(1.33)       | -0.189<br>(-1.51)    | -0.153<br>(-1.23)    | -0.141<br>(-1.13)    |
| Loc CINC score, weaker             | 0.336***<br>(3.71)   | 0.389***<br>(4.26)    | 0.235<br>(1.60)      | 0.159<br>(1.13)      | 0.157<br>(1.12)      |
| Natural log of dyad duration       |                      | 0.0581<br>(1.01)      |                      | 0.0214<br>(0.28)     | 0.0316<br>(0.42)     |
| Same colonial master               |                      | 0.647***<br>(3.47)    |                      | 0.342<br>(1.50)      | 0.413<br>(1.80)      |
| Peaceful territorial transfer      |                      | -0.0497<br>(-0.19)    |                      | 0.0924<br>(0.33)     | 0.0982<br>(0.36)     |
| Violent territorial transfer       |                      | 0.296<br>(1.27)       |                      | 0.556*<br>(2.19)     | 0.566*<br>(2.22)     |
| Existence of defence pact in dyad  |                      | -0.323<br>(-1.24)     |                      | -0.242<br>(-0.83)    | -0.0540<br>(-0.18)   |
| Intrastate war in either state     |                      | 0.713***<br>(5.79)    |                      | 0.588***<br>(3.34)   | 0.570**<br>(3.22)    |
| Highest neighbor militarization    |                      | 7.493***<br>(3.09)    |                      | 6.542<br>(1.89)      | 6.852*<br>(2.02)     |
| Either targeted in territorial MID |                      | 0.377**<br>(2.69)     |                      | 0.458**<br>(2.71)    | 0.441**<br>(2.65)    |
| Territorial MID x militarization   |                      | 3.699<br>(0.80)       |                      | 12.53<br>(1.92)      | 12.23<br>(1.95)      |
| Allied                             |                      |                       |                      |                      | -0.354<br>(-1.84)    |
| Constant                           | -4.227<br>(-1.86)    | -0.897<br>(-0.40)     | -7.275*<br>(-2.31)   | -7.050*<br>(-2.48)   | -6.610*<br>(-2.33)   |
| Observations                       | 541560               | 428369                | 18917                | 18691                | 18691                |
| AIC                                | 5854.5               | 5472.2                | 2654.2               | 2587.2               | 2584.6               |

$t$  statistics in parentheses

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

Dependent variable: Fatal Militarized Interstate Dispute (with at least one battle-related death in the dyad).

Logit model, with robust standard errors clustered on dyad.

In Table SF-15, we show that the same conclusions hold for the civil society participation variable. Strong legislatures and civil societies clearly serve as powerful constraints on leaders irrespective of the status of their international borders.

We obtain similar results as Gibler for some of his border variables, but not all of them. The estimates for ‘lnddyaddur1’ is much weaker here than in Gibler’s analysis, but this is probably due to collinearity with the peace years terms both in our and Gibler’s analysis. Our estimates for ‘samemaster’ is much stronger than Gibler’s, in same direction as in his analysis. The estimate for peacetrans’ is negative in his specification, not significant here. The estimates for ‘violenttrans’ and ‘high\_threat\_terrMID’ is positive and significant here, just as in Gibler’s. The estimate for ‘lowpeacedefpact’ is negative and not significant in our analysis just as in Gibler’s. The result for ‘either\_cowintra’ is positive in our model as well as in Gibler’s, but much stronger in ours. The estimate for ‘high\_threat\_militarization’ is positive here as in

<sup>8</sup>The contiguity and  $\ln(N_t)$  variables do not vary for this subset, so they are not estimated.

Gibler's but not significant. Finally, the 'high\_threat\_terrMIDxmilpe' interaction term is positive and not significant here as in Gibler's.

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