REPLICATION MATERIALS FOR *Why Do Authoritarian Regimes Sign the Convention Against Torture? Signaling, Domestic Politics and Non-Compliance*

This folder contains the replication materials for Hollyer & Rosendorff (2011) *Why Do Authoritarian Regimes Sign the Convention Against Torture? Signaling, Domestic Politics and Non-Compliance*. It contains six data files: `torture4.dta`, `Hollyer_torture_tvc_4.dta`, `Unrest_Data.dta`, `For_Matching.dta`, `Matched.dta`, and `Unrest_data_final.dta`. Also included are eight Stata .do files and one R .r file, which execute the analyses reported in the paper.

To replicate the analyses reported in the paper, please perform the following steps:

- **To reproduce the results on the difference in torture levels between eventual CAT signatories and non-signatories, reported in Figure 1:** Run the Stata .do file labeled `torture_magnitude.do`. This executive file makes use of the time-series-cross-sectional (TSCS) data on CAT signatory status and torture levels contained in `Hollyer_torture_tvc_4.dta`. It first generate an indicator variable equal to 1 if a given country-leader ever signs the CAT and drops all observations after CAT signing. The file then runs a series of ordered probit and OLS regressions of torture levels against the indicator `eversign`, which assumes the value 1 if a given leader eventually comes to sign the CAT. These results thus indicate the difference in average levels of torture between eventual signatories and non-signatories *prior* to signing. The file then creates a graphical representation of these differences in torture magnitudes, which is reported as Figure 1 in the paper.

- **To reproduce the results from the single record Cox analyses reported in Tables 1 and 2 of the paper:** Run the Stata .do files labeled `SingleRecord1.do` and `SingleRecord2.do`. The former runs a Cox proportional hazards regression of leader survival time against an indicator (`eversign`) equal to 1 if a given leader is ever a signatory to the CAT. Controls are also included for a variety of additional covariates taken at their mean levels for each leader. The results from these regressions correspond to those reported in Table 1 of the paper. Data for these regressions are drawn from the .dta file `torture4.dta`.

  `SingleRecord2.do` creates an indicator variable `inherit_signatory` that equals 1 if a given leader inherited his signatory status from a predecessor government. It then runs a series of specifications identical to those conducted in `SingleRecord1.do` *only on the set of leaders that did not inherit their signatory status*. The results from these regressions correspond to those reported in Table 2 of the paper. Data for these regressions are drawn from the .dta file `torture4.dta`.

- **To reproduce the results from the multiple record Cox analyses reported in Table 3 and the graphics reported in Figure 2:** Run the Stata .do file `MultipleRecordCox.do`. This file draws upon the TSCS data contained in `Hollyer_torture_tvc_4.dta`. The .do file regresses

the probability of leader removal in a given year on a variety of covariates using Cox proportional hazards models. The covariate of interest in this model is `cats_lag2`, an indicator variable that takes the value 1 in the year following CAT signing. Leader-years in which the leader inherited signatory status from a predecessor government are dropped from the regression.

The initial set of Cox regressions assume the proportional hazards assumption holds. This assumption is tested using standard residual-based tests applying the `estat phtest` command in Stata. Several covariates fail the covariate-specific version of this test, and we run models interacting these covariates with the logged value of leader time in office to demonstrate that our substantive results are unchanged. The results reported in Table 3 assume the proportional hazards assumption does hold. These are the first four Cox models run in the .do file. The file will also automatically produce the graphs of the hazard rate over leader time in office reported in Figure 2 of the paper.

- **To reproduce the results from Tables 4 and 5 of the paper:** Run the Stata .do file `UnrestAnalysis.do`. This .do file makes use of the TSCS data on civil war battle deaths from PRIO and other measures of domestic unrest from Banks. These data are contained in the .dta file `Unrest_data_final.dta`. The results from Table 5 are produced via a series of seemingly unrelated regressions (SUR) models contained in the opening of the .do file. Several of these models specify that observations should be weighted (the code contains the term `[w=weights]`. These weights are created by a genetic matching algorithm, and these results correspond to those on the left two columns of Table 5, labeled "Matched Dataset." Code that does not contain this weighting term produces results from the full dataset, corresponding to those reported in the right two columns of Table 5, labeled "Full Dataset." (We will describe how to reproduce our matching results in greater detail below.)

  The battle deaths results from Table 4 are produced by a subsequent set of SUR models. Again, those models in which the code specifies `[w=weights]` are from the matched dataset. Models in which this portion of code is lacking are run on the full dataset.

  Finally, this .do file runs a series of fixed effects models regressing different measures of battle deaths on CAT signatory status. These regressions are run do to the sensitivity of the difference-in-differences estimates reported in Table 4 to outlying observations. The results broadly confirm the negative association between battle deaths and CAT signing.

- **To reproduce the results from Table 6 of the paper:** Run the Stata .do file `TortureChangeAnalysis.do`. This file runs several ordered probit models to assess the relationship between changes in torture levels and changes in CAT signatory status. The dependent variables are two trichotomous indicators (`change_torture` and `change_tort_ciri`) which assume the values -1, 0, and 1. Each variable takes the value -1 if torture levels (defined, respectively, by Hathaway

and CIRI) decline, 0 if they remain unchanged, and 1 if they increase. These trichomous variable are regressed on indicators for the change in CAT signatory status. Results are reported for when the sample is confined to eventual CAT signatories (`if eversign == 1`) and for the full sample. Data are drawn from the .dta file `Unrest_data_final.dta`.

- **To reproduce our matching procedure:** Run the following files in order, `UnrestMatch1.do`, `UnrestMatch2.r`, `UnrestMatch3.do`. To then reproduce our analysis, run `UnrestAnalysis.do`. `UnrestMatch1.do` draws TSCS data from `Unrest_data.dta` and collapses the data by leader. The collapsed data are saved as `For_Matching.dta`. `UnrestMatch2.r` uses `For_Matching.dta` to match leaders who eventually sign the CAT to those that do not, based on a propensity scores and a genetic matching algorithm. This file will reproduce the matching process and matching diagnostics. Please note, however, that a degree of randomness is inherent in the genetic matching process, so the results obtained from replicating our matching will not correspond *precisely* to those reported in the paper. Though, the correspondence should be quite close. `UnrestMatch2.r` will save its results as `Matched.dta`. `UnrestMatching3.do` takes the weights for each leader contained in `Matched.dta` and merges them with the TSCS data in `Unrest_Data.dta` to produce a TSCS dataset complete with weights – `Unrest_Data_Final.dta`.