Replication Instructions for *Leadership Survival, Regime Type, Policy Uncertainty and PTA Accession*

The two datasets analyzed in this paper are `baccini_survival2.dta` – which contains information on leader tenure, PTA signings, regime type (as measured by Polity) – and `baccinimatched2.dta` – which contains the weights produced from a nearest-neighbor matching processing. We also include the necessary materials to construct results using the ACLP measure of regime type in place of Polity, which are not reported in the paper.

Please note that all Stata files were created in Stata 11.0. Several commands may need to be altered to run in earlier Stata version.

.R files have been coded in Tinn-R and were run on R.2.7.1.

Replicating Cox-Frailty Results

The results reported in Table 4, and graphed in Figure 1, can be replicated simply by running the .do file `Table4Figure1.do`. This will run four Cox-Frailty regressions of leader survival on PTA signing, corresponding to the models reported in Table 4. Results will be reported as coefficient values, rather than as hazard ratios, and can be directly exported to TEXby uncommenting the line 93 of the code.

This .do file will also generate the two hazard function plots included in Figure 1 of the paper. And it will run the Grambsch-Thorneau and Harrel's Rho tests of the proportional hazards assumption reported in Table 8.

Table 6, which simply reports the frequency of PTA signings in election periods in the full dataset, can be reproduced by running the .do file `Table6.do`.

Replicating Matched Cox-Frailty Results

The post-matching results reported in Table 5, and graphed in Figure 2, can be replicated by simply running the .do file `Table5Figure2.do`. As with the above, this .do file will run all models reported in Table 5, will generate the hazard rate plots in Figure 2, and will report the proportional hazards tests from Table 9 of the paper. Results can be directly outputted to TEXby uncommenting line 109 of the code.

Those who wish to replicate the matching process used in the paper may do so using the materials here, but the process is a little more complicated. More precisely, three steps must be followed to replicate our matching results.

1. Run the file `MatchPrepTable7.do` in Stata. This file will collapse the dataset such that the observation is the leader, rather than the leader-year. The mean values of all controls are

obtained for each leader. As is a binary measure of whether a given leader ever signed a PTA. This measure will be used to match leaders that signed at least one PTA with those that did not sign any. This .do file will also generate the results of the matching equation, reported in Table 7 of the paper.

2. Run the file `baccini_match.r` in R. This file will conduct the matching process and will generate the matching diagnostics reported in Figures 3 and 4 of the paper. Please note that the `arm`, `MatchIt`, `Matching`, and `foreign` packages may need to be installed. After this file is run, a new dataset `baccinimatched2.dta`– containing the matching weights – will be created.

3. Finally, run the `Table5Figure2.do` file as indicated above. This file will merge the matching weights with the full dataset, and will reproduce the results from Table 5 in the paper.

Results Using the ACLP Measure of Democracy

These results can be obtained in much the same manner as the above. Results from the full (unmatched) dataset can be obtained by running `SurvivalResultsACLP.do`. Results from the matched dataset can be obtained by running `SurvivalResultsACLP_matched`.

To replicate the matching process we use, follow a similar three-step procedure to the above:

1. Run the file `BacciniACLPmatchprep.do` in Stata.

2. Run the file `baccini_matchACLP.r` in R.

3. Run the file `SurvivalResultsACLP_matched` in Stata.