Appendix B

IGOs and INGOs

The data analysis employed two measures of "organizational" interdependence. The first is the number of international governmental organizations (IGOs) of which each country is a member. The second is the number of international nongovernmental organizations (INGOs) with a registered office in each country. Both sets of numbers come from the Union of International Associations (UIA), which publishes statistical yearbooks with membership figures. In both cases, the analysis uses the total number of organizations across the different categories. Although the IGO data come from the UIA, Bruce Russet at Yale University kindly provided the tabulated figures by country. The INGO numbers were obtained from the UIA yearbooks and input into the data set by Gemma Mackman, a researcher at the University of Essex who worked on this study in 2003.

The data are provided at five-year intervals, so the missing observations were replaced with figures from a linear interpolation. For the INGO numbers, the data analysis used the logged transformation of the membership figures to reduce the amount of skewness in the distribution, which was not a problem for the IGO numbers. Figure B.1 shows histograms for the original distribution IGOs and INGOs. The distribution for the IGOs is quite normal (skewness = .49 and kurtosis = .35), whereas the distribution for INGOs is skewed with a long tail of a very few observations in which there are a large number of INGOs (skewness = 2.06 and kurtosis = 4.16). Figure B.2 shows histograms for IGOs and INGOs after the linear interpolation. The mean for each variable changes a little, but the

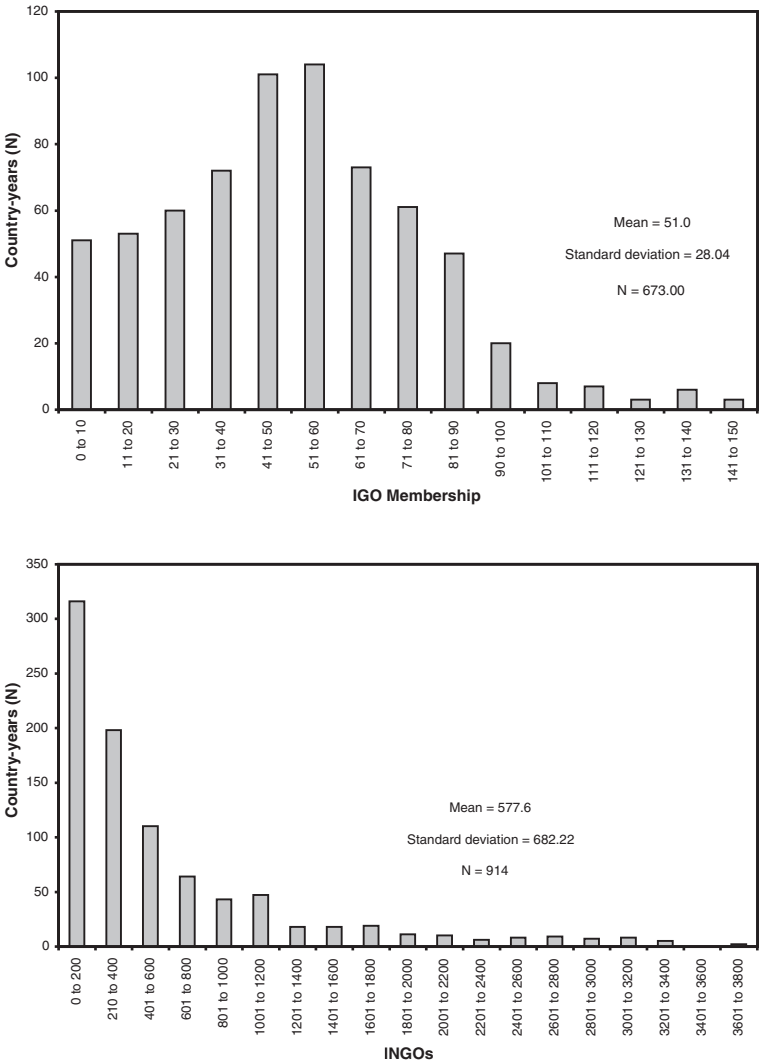

Figure B.1. Histogram for the raw figures on IGOs and INGOs by country and year.

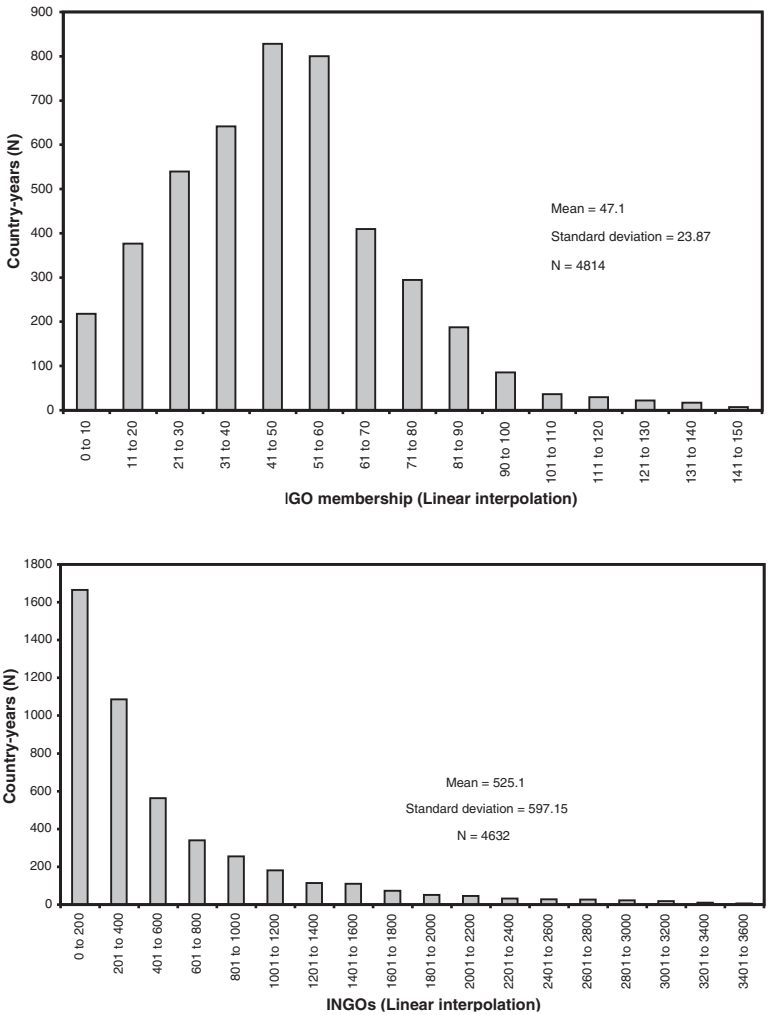

Figure B.2. Histogram for IGOs and INGOs by country and year, linear interpolation.

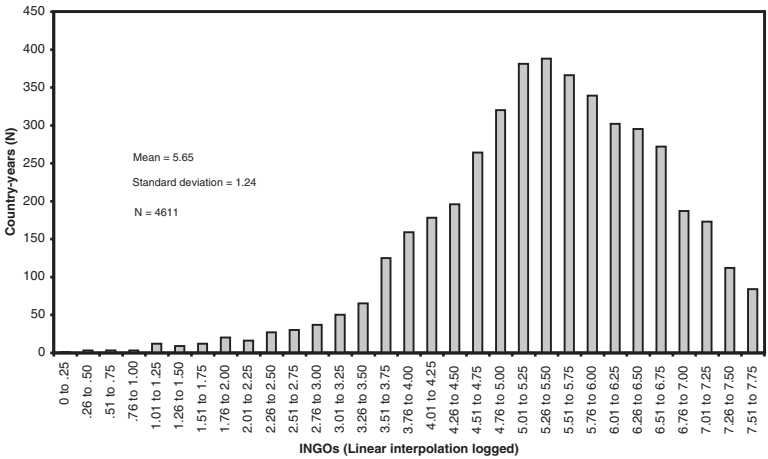

Figure B.3. Histogram for INGOs by country and year, linear interpolation and log transformation.

number of observations increases dramatically, and the standard deviation is reduced slightly. Again, it is clear that the distribution for INGOs is skewed (skewness = 2.09 and kurtosis = 4.71). Figure B.3 shows the histogram for the logged transformation of the INGO numbers after linear interpolation, where it is clear that the distribution is much more normal (skewness = −.60 and kurtosis = .68). Using these transformed versions of IGO and INGO figures does not change their basic properties but does make them more tractable for the analysis conducted in the study. Russett and O'Neal (2001) have used similar transformations for their IGO figures.