

Webappendix: Robustness Test of

Bussmann & Schneider: When Globalization Discontent Turns Violent

We examined our basic model of civil war for collinearity of openness or liberalization with any of the control variables to see if this influences our results. For example, one could expect that the variable democracy distorts the effect of openness, because democratic states are presumably more active free traders (Bliss and Russett, 1998). Excluding any of the control variables does not affect the results of liberalization. The story is only a little different with openness. When the democracy variables or the variable for civil war in the neighborhood are excluded, the significance of the level of trade openness declines slightly. In turn, if we omit the level of development or population, the openness variable increases to be highly significant. No change can be observed when estimating regressions not controlling for economic growth or peace years.

In order to avoid omitted variable bias, we investigated a variety of additional variables that the still growing literature on civil war emphasizes. We controlled for the proportion of the country that is mountainous. A rough terrain is not just favourable to civil wars as it provides a hideout for insurgents (Fearon and Laitin, 2003). Mountainous terrain might also be related to lower levels of trade as difficult transport conditions inhibit economic exchanges. Indeed, the inclusion of mountainous terrain, although itself insignificant, slightly reduces the significance of openness ($p < .09$). A similar behaviour can be observed with instability, measured as a change of three or more points on the Polity scale, which itself is also not significant. Alternatively, we tested the number of years since the last change in the polity score. This variable has the expected negative coefficient, is statistically significant and the level of openness remains significant at $p < .04$. Throughout the additional tests, our liberalization variable in the form of growth in openness is highly significant and positively related to the onset of civil war. Other variables such as inflation, military personnel, or

ethnolinguistic fractionalization were significant but had no effect on our variables of main interest.¹

Adding regional control variables to allow for geographical differences does not affect the results. We also evaluated different time periods by splitting the sample into the time period before and after the 1973 oil crisis. The pacifying effect of the level of openness is not significant in the earlier time period but significant at $p < .06$ for the sample after 1973. The growth rate of trade openness remains an important destabilizing factor during both time periods. Between 1950 and 1973 our control variables are only marginally significant; however, the democracy and economic development variables perform better in the latter period.

We furthermore analyzed whether our results hold when using different levels of civil war. The data set on armed conflict provides information on various levels of violence (see footnote 8). If using the category of intermediate levels to define our dependent variable or if we limit our tests to the most severe cases, when the casualties exceed 1000 deaths per year, the growth rate of openness continues to significantly increase the likelihood of a civil war onset. The level of openness retains its negative coefficient but is statistically not significant. We made a variety of additional tests of robustness which are reported in the respective footnotes and will not be repeated here.

References

- Bliss, Harry and Bruce Russett (1998) Democratic trading partners: The liberal connection, 1962-1989. *Journal of Politics* **60**:1126-47.
- Fearon, James D. and David D. Laitin (2003) Ethnicity, Insurgency, and Civil War. *American Political Science Review* **97**:75–90.
- Singer, J. David, Stuart Bremer, and John Stuckey (1972) “Capability Distribution, Uncertainty, and Major Power War, 1820-1965”. In *Peace, War and Numbers*, edited by B. Russett. Beverly Hills: Sage.
- World Bank (2004) *World Development Indicators 2004 CD-ROM*. Washington, DC: World Bank.

Notes

¹ Data for mountainous terrain, instability, and ethnolinguistic fractionalization comes from Fearon and Laitin, 2003). For the duration of a regime, we relied on the variable Durable from Polity IV. For military personnel we used data from the Correlates of War National Capability Data version 3.0 (Singer, Bremer and Stuckey 1972). Data on inflation are from the World Bank (2004).