

Online Appendix for "What Can We Learn about the Effects of Democracy Using Cross-National Data?"

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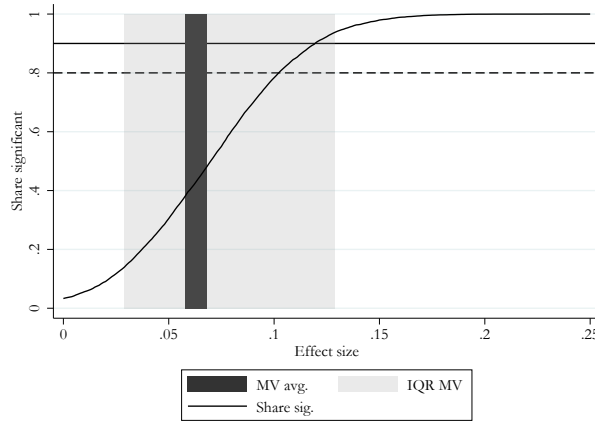
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Results using V-Dem's Polyarchy variable

I examine power at different effect sizes for V-Dem's (2022) interval scaled measure of democracy (*v2x polyarchy*). Effect sizes are for a standard deviation increase in the polyarchy index. Figure 1 shows the results when using the V-Dem measure. Similar power issues persist when using the polyarchy measure of democracy.

Figure 1: Interval scaled measure of democracy and statistical power

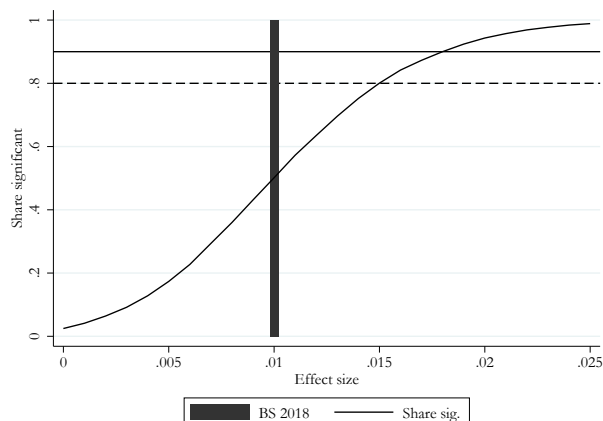


Note: simulations are based on 10000 repetitions. The black line shows the share of estimates that are significant at the 0.05 level across different effect sizes. The dashed vertical line corresponds to a power level of 80%, while the black line corresponds to a power level of 90%. The light gray area shows the interquartile range of multiverse estimates for the effect of democracy where the democracy measure is fixed as the polyarchy index. The lightest gray horizontal bar shows the average effect across the multiverse estimates.

Democracy and civil war

According to Bartusevicius and Skaaning (2018), democracy reduces the risk of civil war onset by about 1% percentage point. Many studies on the effects of democracy examine event outcomes with limited variation as there are only a few cases of 1 in the sample. This section uses civil war to investigate the effect size needed for studies to be powered in such scenarios. I use a similar simulation approach as earlier changing my outcome to a measure of civil war onset (data on civil conflict from Bartusevicius and Skaaning 2018). Figure 2 show the main findings. The true effect of democracy must be a reduction in the risk of civil war of around 1.5%-points or larger to reach a power level of 80%. This is quite massive given that the average probability of civil war in the sample is 1.8%. Thus, power issues persist.

Figure 2: Event outcome (civil war) and statistical power



Note: simulations are based on 10000 repetitions. The black line shows the share of estimates that are significant at the 0.05 level across different effect sizes. The dashed vertical line corresponds to a power level of 80%, while the black line corresponds to a power level of 90%. The light gray area shows the interquartile range of multiverse estimates for the effect of democracy. The lightest gray horizontal bar shows the average effect across the multiverse estimates. The black horizontal bar shows the effect reported in Bartusevicius and Skaaning 2018.

References

- Bartusevicius, Henrikas and Svend-Erik Skaaning (2018) “Revisiting Democratic Civil Peace: Electoral Regimes and Civil Conflict.” *Journal of Peace Research* 55(5): 625–640.
- Coppedge, Michael , John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, Nazifa Alizada, David Altman, Michael Bernhard, Agnes Cornell, M. Steven Fish, Lisa Gastaldi, Haakon Gjerløw, Adam Glynn, Sandra Grahn, Allen Hicken, Garry Hindle, Nina Ilchenko, Katrin Kinzelbach, Joshua Krusell, Kyle L. Marquardt, Kelly McMann, Valeriya Mechkova, Juraj Medzihorsky, Pamela Paxton, Daniel Pemstein, Josefine Pernes, Oskar Ryden, Johannes von Romer, Brigitte Seim, Rachel Sigman, Svend-Erik Skaaning, Jeffrey Staton, Aksel Sundstrom, Eitan Tzelgov, Yi ting Wang, Tore Wig, Steven Wilson, and Daniel Ziblatt (2022) “V-Dem [Country-Year/Country-Date] Dataset v12.” *Varieties of Democracy (V-Dem) Project*: <https://doi.org/10.23696/vdemds22>.