**Appendix to**

**Fighting Collective Threats: Socialist Revolutions and the management of the Covid-19 pandemic**

***European Political Science Review***

**Appendix I. List of socialist revolutionary regimes, and their duration**

Afghanistan, 1978-1992

Albania, 1946-1992

Algeria, 1962-1991

Angola, 1975-1990/91

Cambodia, 1975-1979

Cape Verde, 1975-1991

China, 1945--

Congo, 1963-1991

Cuba, 1959--

Ethiopia, 1974-1991

Laos, 1975--

Madagascar, 1975-1992

Mongolia, 1924-1992

Mozambique, 1975-1990

North Korea, 1953--

Nepal, 2008--

Nicaragua, 1979-1990

Russia, 1917-1991

Serbia, 1945-1991

Venezuela, 1997--

Vietnam, 1954--

South Yemen, 1967-1990

Sources: Bjørnskov & Rode 2020, Muravchik 2019, Smith 1989.

**Appendix II. Robustness checks**

In this appendix I offer additional results that prove the robustness of the findings reported in the article. I first plot in Figure AII.1 the relationship between the two key dependent variables (Covid-related death rates as measured by WHO’s excess deaths and as compiled by the Johns Hopkins University database. The p-corr value is high (0.70) and the graph shows that socialist countries are not alone in their underreporting of fatalities.

Secondly, I replicate the main results with additional independent variables, such as major pre-pandemic death causes and public spending on health as a share of GDP (Tables AII.1-2).

I then replicate in Tables AII3-4 the main results in Table 1 with different dependent variables. In addition to the date point used in the main analyses (May 1st, 2022), I include here covid-related deaths as of February 28th, 2021 (data from the Johns Hopkins University). The goal is to show that the impact of socialist revolutionary legacies was also present before the vaccination programs as well as some policy learning started to flatten the growth curves. Following Bosancianu et al. (2021), I log the absolute number of covid-related deaths for the two time points (02/28/2021 & 05/01/2022) in Columns 2 and 3. For each dependent variable, I run models with the two key independent variables (socialist revolutionary dummy, and duration).

In general, the results are very consistent. The impact of having a socialist revolutionary experience seems to be comparatively stronger for earlier time periods. On the other side, its effect over the logged dependent variable in 2022 vanishes into non-significant levels.

I next offer models controlling for one of the most visible policy tools governments used to contain the spread of the pandemic: the lockdowns. The goal is to check if the positive impact of revolutionary regimes over pandemic management is a consequence of certain countries adopting specific policies that may have resulted in a more successful containment of the pandemic. I measure the extent of lockdown policies through the country stringency index compiled by Hale et al. (2021). The cut point is 31 December 2020, which is the peak average of stringency measures implemented per country. Table AII.5 replicates the models reported in Table 1 in the paper, with the addition of the stringency index. The results indicate that, even if lockdowns syphon off a little bit of the impact of socialist revolutionary legacies, they do not fully cancel them. There does not seem to be a connection between socialism and more stringency lockdown policies implemented during the first year of the pandemic (p-corr value = -0.08 with the socialist revolutionary dummy; and +0.02 with the socialist revolutionary duration indicator).

I also run some sensitivity analysis by excluding from the sample two of the most successful socialist countries in dealing with the pandemic: China (Table AII.6) and Vietnam (Table AII.7). The results are basically the same.

Finally, I include full tables with confidence intervals for the mediation analysis reported in the main body of the paper (Table AII.8-9) and rerun the analysis with WHO data (Tables AII10-11). Results by and large remain unchanged. As discussed in the paper, I also run the models with an earlier cut-point for death rates (February 2021), when the vaccination rollout had not yet started (Tables AII12-13).

**Figure AII.1. Scatterplot of the two main dependent variables**

**A graph showing the number of covid-19 death rate

Description automatically generated**

**Table AII.1. Regression analysis of COVID-related death rates with additional control variables: major pre-pandemic death causes**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|  | JHU data | WHO data | JHU data | WHO data | JHU data | WHO data | JHU data | WHO data |
| Soc. rev. dummy | -53.57\*\* | -90.20\* |  |  | -47.30\* | -73.05 |  |  |
|  | (-2.89) | (-2.06) |  |  | (-2.25) | (-1.52) |  |  |
| SR duration |  |  | -20.87\* | -52.00\*\* |  |  | -17.98+ | -48.75\*\* |
|  |  |  | (-2.43) | (-3.56) |  |  | (-1.88) | (-3.09) |
| Hypertension | 0.78 | 0.77 | 0.52 | 0.31 | 0.81 | 0.77 | 0.60 | 0.41 |
|  | (1.38) | (0.80) | (0.94) | (0.35) | (1.31) | (0.73) | (0.98) | (0.42) |
| Ischemic heart  disease | 0.79\*\* | 1.72\*\* | 0.88\*\* | 1.87\*\* | 0.87\*\* | 1.76\*\* | 0.94\*\* | 1.89\*\* |
|  | (3.09) | (3.80) | (3.55) | (4.79) | (3.10) | (3.44) | (3.46) | (4.14) |
| Diabetes | 0.03 | -0.35 | 0.15 | -0.19 | -0.05 | -0.10 | 0.07 | 0.08 |
|  | (0.09) | (-0.60) | (0.44) | (-0.33) | (-0.09) | (-0.14) | (0.15) | (0.12) |
| Social trust Index |  |  |  |  | -1.65\*\* | -2.95\*\* | -1.68\*\* | -2.82\*\* |
|  |  |  |  |  | (-2.88) | (-3.15) | (-3.05) | (-3.17) |
| Liberal democracy  index | 61.46 | -95.32 | 60.03 | -117.00 | 91.81 | -54.31 | 94.50 | -68.93 |
|  | (1.08) | (-1.05) | (1.05) | (-1.27) | (1.40) | (-0.53) | (1.45) | (-0.67) |
| GDP per capita (log) | 18.61 | 116.68\* | 10.88 | 107.94\* | -10.70 | 76.57+ | -16.31 | 74.87+ |
|  | (0.70) | (2.41) | (0.40) | (2.32) | (-0.40) | (1.66) | (-0.60) | (1.66) |
| GDP per capita  sq (log) | -0.97 | -6.74\*\* | -0.51 | -6.16\*\* | 0.49 | -4.32\* | 0.85 | -4.14\* |
|  | (-0.80) | (-2.88) | (-0.42) | (-2.80) | (0.48) | (-2.19) | (0.84) | (-2.28) |
| Social globalization  index | 0.98 | 0.49 | 1.06 | 0.41 | 1.14 | 0.03 | 1.29 | 0.16 |
|  | (1.02) | (0.29) | (1.08) | (0.24) | (0.99) | (0.01) | (1.13) | (0.08) |
| Level of federalism | -4.99 | -24.36 | -7.04 | -26.71 | 4.22 | -8.81 | 3.16 | -7.24 |
|  | (-0.28) | (-0.77) | (-0.39) | (-0.85) | (0.22) | (-0.26) | (0.16) | (-0.21) |
| Female prime minister | -80.40\*\* | -110.17\*\* | -77.65\*\* | -103.27\*\* | -81.06\*\* | -117.98\*\* | -79.22\*\* | -113.41\*\* |
|  | (-3.13) | (-2.97) | (-2.98) | (-2.69) | (-3.55) | (-3.43) | (-3.42) | (-3.16) |
| % of population  aged 65 + | 3.66 | 1.77 | 4.51 | 4.18 | 3.89 | 2.51 | 4.27 | 3.43 |
|  | (1.04) | (0.37) | (1.17) | (0.80) | (0.93) | (0.45) | (0.97) | (0.59) |
| Population density | 0.00 | 0.00 | 0.00 | -0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
|  | (0.25) | (0.05) | (0.06) | (-0.22) | (0.34) | (0.64) | (0.26) | (0.42) |
| Asia | 47.92\* | 60.36 | 44.48\* | 58.59 | 71.16\*\* | 106.09\* | 68.17\*\* | 106.50\* |
|  | (2.22) | (1.45) | (2.02) | (1.39) | (2.98) | (2.25) | (2.81) | (2.28) |
| Europe | 162.71\*\* | 266.21\*\* | 149.05\*\* | 239.65\*\* | 183.88\*\* | 321.61\*\* | 173.47\*\* | 304.63\*\* |
|  | (3.48) | (4.11) | (3.02) | (3.52) | (3.49) | (4.74) | (3.18) | (4.37) |
| North America | 96.89\*\* | 158.88\*\* | 91.05\*\* | 154.13\*\* | 111.29\*\* | 188.97\*\* | 103.37\*\* | 176.53\*\* |
|  | (3.11) | (2.98) | (2.89) | (2.88) | (3.58) | (3.59) | (3.34) | (3.42) |
| Oceania | -8.65 | -1.32 | -17.26 | -15.29 | 20.48 | 106.35 | 10.29 | 90.10 |
|  | (-0.26) | (-0.03) | (-0.49) | (-0.32) | (0.40) | (1.49) | (0.20) | (1.28) |
| South America | 243.01\*\* | 330.13\*\* | 242.02\*\* | 332.98\*\* | 234.72\*\* | 318.79\*\* | 233.11\*\* | 323.12\*\* |
|  | (4.73) | (3.68) | (4.71) | (3.72) | (4.51) | (3.40) | (4.49) | (3.49) |
| Constant | -216.91+ | -496.92\* | -196.30 | -467.65\* | -63.92 | -282.93 | -57.27 | -296.14 |
|  | (-1.80) | (-2.32) | (-1.61) | (-2.19) | (-0.49) | (-1.35) | (-0.43) | (-1.40) |
| R2 | 0.66 | 0.49 | 0.66 | 0.50 | 0.68 | 0.52 | 0.67 | 0.53 |
| p | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| N | 148 | 149 | 148 | 149 | 131 | 132 | 131 | 132 |

*t* statistics in parentheses; + *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01

**Table AII.2. Regression analysis of COVID-related death rates with additional control variables: government’s expenditures as share of GDP**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|  | JHU  data | WHO  data | JHU  data | WHO  data | JHU  data | WHO  data | JHU  data | WHO  data |
| Soc. rev. dummy | -43.20\* | -85.90\* |  |  | -42.60+ | -76.08+ |  |  |
|  | (-2.18) | (-2.16) |  |  | (-1.75) | (-1.68) |  |  |
| SR duration |  |  | -17.24+ | -53.09\*\* |  |  | -17.89 | -54.59\*\* |
|  |  |  | (-1.67) | (-3.25) |  |  | (-1.58) | (-3.12) |
| Govt health  expenditure as %GDP | -12.42+ | -17.99 | -12.36+ | -16.88 | -11.54 | -14.61 | -12.50 | -17.38 |
|  | (-1.81) | (-1.44) | (-1.76) | (-1.35) | (-1.49) | (-1.10) | (-1.61) | (-1.34) |
| Social trust index |  |  |  |  | -1.43\* | -2.84\*\* | -1.43\* | -2.67\*\* |
|  |  |  |  |  | (-2.40) | (-3.24) | (-2.50) | (-3.24) |
| Liberal democracy index | 63.33 | -160.97 | 60.48 | -193.96+ | 90.21 | -132.44 | 88.75 | -160.25 |
|  | (1.03) | (-1.49) | (0.97) | (-1.73) | (1.30) | (-1.08) | (1.29) | (-1.30) |
| GDP per capita  (log) | 20.15 | 145.13\*\* | 14.86 | 140.15\*\* | -4.87 | 114.56\* | -7.66 | 118.82\* |
|  | (0.76) | (2.94) | (0.55) | (2.83) | (-0.17) | (2.31) | (-0.26) | (2.36) |
| GDP per capita  sq (log) | -1.62 | -8.71\*\* | -1.32 | -8.37\*\* | -0.56 | -6.71\*\* | -0.34 | -6.73\*\* |
|  | (-1.37) | (-3.81) | (-1.12) | (-3.69) | (-0.53) | (-3.45) | (-0.32) | (-3.49) |
| Social globalization  index | 1.23 | 1.10 | 1.33 | 1.05 | 1.21 | -0.03 | 1.41 | 0.30 |
|  | (1.26) | (0.60) | (1.34) | (0.59) | (0.98) | (-0.01) | (1.14) | (0.13) |
| Level of federalism | -20.09 | -44.12 | -21.13 | -43.97 | -11.70 | -32.24 | -12.19 | -29.27 |
|  | (-1.01) | (-1.30) | (-1.06) | (-1.31) | (-0.56) | (-0.88) | (-0.59) | (-0.80) |
| Female prime  minister | -83.31\*\* | -121.40\*\* | -82.08\*\* | -117.01\*\* | -92.01\*\* | -132.86\*\* | -90.24\*\* | -127.05\*\* |
|  | (-3.25) | (-3.19) | (-3.16) | (-3.03) | (-4.02) | (-3.74) | (-3.87) | (-3.40) |
| % of population  aged 65 + | 6.05 | 5.23 | 6.51 | 7.03 | 6.14 | 5.71 | 6.46 | 6.77 |
|  | (1.54) | (0.81) | (1.60) | (1.05) | (1.36) | (0.79) | (1.41) | (0.92) |
| Population density | -0.01 | -0.02 | -0.01 | -0.02 | -0.01 | -0.01 | -0.01 | -0.01 |
|  | (-1.31) | (-1.05) | (-1.39) | (-1.21) | (-0.83) | (-0.59) | (-0.96) | (-0.86) |
| Diabetes prevalence | 4.38+ | -0.18 | 4.28+ | -1.17 | 4.15 | -0.20 | 3.81 | -1.66 |
|  | (1.81) | (-0.05) | (1.76) | (-0.30) | (1.49) | (-0.04) | (1.34) | (-0.36) |
| Asia | 22.97 | 38.84 | 24.50 | 49.35 | 48.68+ | 74.66 | 48.62+ | 80.05+ |
|  | (1.12) | (1.07) | (1.16) | (1.32) | (1.85) | (1.61) | (1.85) | (1.75) |
| Europe | 153.30\*\* | 266.13\*\* | 147.30\*\* | 252.25\*\* | 184.11\*\* | 318.47\*\* | 176.83\*\* | 303.09\*\* |
|  | (3.02) | (3.56) | (2.84) | (3.31) | (3.20) | (4.01) | (3.00) | (3.75) |
| North America | 58.92+ | 111.93\* | 59.34+ | 120.38\* | 71.79\* | 137.07\*\* | 69.48\* | 134.79\*\* |
|  | (1.83) | (2.23) | (1.83) | (2.35) | (2.15) | (2.73) | (2.09) | (2.68) |
| Oceania | -48.81 | -33.35 | -48.91 | -29.21 | 10.08 | 88.61 | 4.58 | 78.59 |
|  | (-1.45) | (-0.59) | (-1.48) | (-0.55) | (0.19) | (1.14) | (0.09) | (1.00) |
| South America | 211.64\*\* | 281.48\*\* | 214.29\*\* | 292.74\*\* | 208.46\*\* | 264.87\*\* | 210.04\*\* | 275.30\*\* |
|  | (4.06) | (3.09) | (4.17) | (3.28) | (3.92) | (2.81) | (4.00) | (2.97) |
| Constant | -115.90 | -439.75+ | -101.49 | -421.01+ | 37.00 | -227.84 | 35.10 | -266.85 |
|  | (-0.91) | (-1.90) | (-0.78) | (-1.79) | (0.24) | (-0.94) | (0.22) | (-1.07) |
| R2 | 0.64 | 0.43 | 0.63 | 0.44 | 0.64 | 0.45 | 0.64 | 0.47 |
| p | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| N | 146 | 147 | 146 | 147 | 129 | 130 | 129 | 130 |

*t* statistics in parentheses; + *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01

**Table AII.3. Models with different dependent variables**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | JHU as of  02/28/21 | | Log (JHU  02/28/21) | | Log (JHU  05/01/22) | |  |
| Socialist revolutionary | -20.25\*\* |  | -1.45\* |  | -0.27 |  |  |
|  | (-3.12) |  | (-2.09) |  | (-0.61) |  |  |
| Socialist duration |  | -8.59\*\* |  | -0.88\*\* |  | -0.19 |  |
|  |  | (-2.76) |  | (-2.79) |  | (-0.97) |  |
| Liberal democracy index | 37.02+ | 35.13 | 1.38 | 0.89 | 0.73 | 0.59 |  |
|  | (1.76) | (1.62) | (1.10) | (0.68) | (0.75) | (0.59) |  |
| GDP per capita (log) | 53.49+ | 56.50\* | 4.54\* | 4.93\*\* | 6.45\*\* | 6.55\*\* |  |
|  | (1.89) | (2.01) | (2.32) | (2.67) | (4.30) | (4.40) |  |
| GDP per capita sq (log) | -2.92+ | -3.08+ | -0.22\* | -0.24\* | -0.34\*\* | -0.35\*\* |  |
|  | (-1.75) | (-1.85) | (-2.09) | (-2.39) | (-4.17) | (-4.27) |  |
| Social globalization index | 0.16 | 0.22 | -0.02 | -0.02 | 0.00 | 0.00 |  |
|  | (0.50) | (0.66) | (-0.94) | (-0.96) | (0.03) | (0.02) |  |
| Level of federalism | 1.95 | 1.62 | 1.32\*\* | 1.33\*\* | 1.03\*\* | 1.03\*\* |  |
|  | (0.24) | (0.20) | (3.53) | (3.61) | (3.58) | (3.62) |  |
| Female prime minister | -36.07\*\* | -35.15\*\* | -0.84 | -0.73 | -0.74 | -0.72 |  |
|  | (-2.86) | (-2.77) | (-1.43) | (-1.23) | (-1.57) | (-1.51) |  |
| % of population aged 65 + | 0.03 | 0.27 | 0.02 | 0.05 | 0.08+ | 0.08+ |  |
|  | (0.03) | (0.22) | (0.30) | (0.76) | (1.74) | (1.79) |  |
| Population density | 0.00 | 0.00 | -0.00\*\* | -0.00\*\* | -0.00 | -0.00 |  |
|  | (0.33) | (0.29) | (-2.76) | (-2.89) | (-0.75) | (-0.80) |  |
| Diabetes prevalence | 0.85 | 0.80 | 0.02 | 0.00 | 0.02 | 0.01 |  |
|  | (0.89) | (0.82) | (0.23) | (0.05) | (0.38) | (0.29) |  |
| Asia | 7.45 | 6.94 | 1.09 | 1.14 | 1.20\* | 1.22\* |  |
|  | (1.00) | (0.95) | (1.53) | (1.65) | (2.29) | (2.39) |  |
| Europe | 81.57\*\* | 77.61\*\* | 1.91\* | 1.58+ | 0.75 | 0.69 |  |
|  | (4.90) | (4.52) | (2.07) | (1.71) | (1.07) | (0.97) |  |
| North America | 23.68 | 23.13 | 1.23 | 1.30 | 0.62 | 0.65 |  |
|  | (1.60) | (1.56) | (1.45) | (1.54) | (1.06) | (1.08) |  |
| Oceania | -24.68+ | -25.62+ | -3.24\* | -3.25\*\* | -1.79\* | -1.78\*\* |  |
|  | (-1.68) | (-1.78) | (-2.43) | (-2.64) | (-2.61) | (-2.64) |  |
| South America | 55.77\*\* | 56.08\*\* | 2.11\*\* | 2.22\*\* | 1.81\*\* | 1.84\*\* |  |
|  | (3.82) | (3.88) | (2.74) | (2.92) | (2.88) | (2.95) |  |
| Constant | -248.35\* | -266.98\* | -15.31+ | -17.27\* | -22.83\*\* | -23.29\*\* |  |
|  | (-2.05) | (-2.21) | (-1.72) | (-2.06) | (-3.42) | (-3.52) |  |
| R2 | 0.66 | 0.66 | 0.49 | 0.51 | 0.55 | 0.56 |  |
| p | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |  |
| N | 147 | 147 | 147 | 147 | 147 | 147 |  |

*t* statistics in parentheses; + *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01

**Table AII.4. Models with different dependent variables and social trust**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | JHU as of  02/28/21 | | Log (JHU  02/28/21) | | Log (JHU  05/01/22) | |  |
| Socialist revolutionary | -17.40\* |  | -1.65\* |  | -0.42 |  |  |
|  | (-2.12) |  | (-1.99) |  | (-0.81) |  |  |
| Socialist duration |  | -6.29+ |  | -0.97\* |  | -0.30 |  |
|  |  | (-1.66) |  | (-2.36) |  | (-1.13) |  |
| Liberal democracy index | 40.30+ | 40.77+ | 1.00 | 0.64 | 0.69 | 0.54 |  |
|  | (1.74) | (1.73) | (0.75) | (0.47) | (0.76) | (0.59) |  |
| Social trust index | -0.56\* | -0.56\* | -0.02 | -0.02 | -0.01 | -0.00 |  |
|  | (-2.20) | (-2.32) | (-1.25) | (-0.85) | (-0.55) | (-0.42) |  |
| GDP per capita (log) | 5.82 | 14.03 | 3.07 | 4.36 | 6.92\*\* | 7.33\*\* |  |
|  | (0.15) | (0.36) | (1.12) | (1.63) | (3.45) | (3.70) |  |
| GDP per capita sq (log) | -0.24 | -0.67 | -0.13 | -0.20 | -0.35\*\* | -0.37\*\* |  |
|  | (-0.11) | (-0.30) | (-0.84) | (-1.30) | (-3.12) | (-3.34) |  |
| Social globalization index | 0.01 | 0.10 | -0.05+ | -0.04 | -0.02 | -0.02 |  |
|  | (0.03) | (0.23) | (-1.66) | (-1.47) | (-0.92) | (-0.80) |  |
| Level of federalism | 3.27 | 3.06 | 1.48\*\* | 1.53\*\* | 1.11\*\* | 1.13\*\* |  |
|  | (0.38) | (0.35) | (3.79) | (4.00) | (3.89) | (3.95) |  |
| Female prime minister | -38.86\*\* | -37.85\*\* | -0.65 | -0.50 | -0.55 | -0.51 |  |
|  | (-2.97) | (-2.85) | (-1.19) | (-0.89) | (-1.33) | (-1.21) |  |
| % of population aged 65 + | 0.68 | 0.70 | 0.04 | 0.04 | 0.05 | 0.05 |  |
|  | (0.43) | (0.43) | (0.53) | (0.57) | (0.95) | (0.97) |  |
| Population density | 0.00 | 0.00 | -0.00\*\* | -0.00\*\* | -0.00 | -0.00 |  |
|  | (0.14) | (0.16) | (-2.80) | (-2.81) | (-0.86) | (-0.90) |  |
| Diabetes prevalence | 0.59 | 0.49 | 0.02 | 0.00 | 0.01 | 0.00 |  |
|  | (0.56) | (0.45) | (0.27) | (0.03) | (0.18) | (0.03) |  |
| Asia | 16.66+ | 15.31+ | 1.10 | 1.05 | 1.11\* | 1.10\* |  |
|  | (1.81) | (1.68) | (1.40) | (1.38) | (2.26) | (2.36) |  |
| Europe | 88.56\*\* | 85.03\*\* | 2.11\* | 1.74+ | 0.84 | 0.73 |  |
|  | (4.42) | (4.14) | (2.10) | (1.72) | (1.18) | (1.05) |  |
| North America | 34.18\* | 31.98\* | 1.45+ | 1.25 | 0.50 | 0.44 |  |
|  | (2.20) | (2.06) | (1.66) | (1.44) | (0.83) | (0.72) |  |
| Oceania | -5.76 | -9.38 | -1.70 | -2.08+ | -1.49+ | -1.59+ |  |
|  | (-0.24) | (-0.39) | (-1.43) | (-1.73) | (-1.71) | (-1.83) |  |
| South America | 57.38\*\* | 56.30\*\* | 1.96\* | 1.94\* | 1.48\* | 1.48\* |  |
|  | (3.79) | (3.75) | (2.40) | (2.51) | (2.37) | (2.44) |  |
| Constant | -25.77 | -69.13 | -8.07 | -14.38 | -24.75\*\* | -26.70\*\* |  |
|  | (-0.15) | (-0.40) | (-0.65) | (-1.18) | (-2.75) | (-3.00) |  |
| R2 | 0.66 | 0.65 | 0.48 | 0.50 | 0.54 | 0.55 |  |
| p | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |  |
| N | 131 | 131 | 131 | 131 | 130 | 130 |  |

*t* statistics in parentheses; + *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01

**Table AII.5. Models with 2020 stringency index**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
|  | JHU data | JHU data | JHU data | JHU data | WHO data | WHO data |
| Soc. rev. dummy | -41.01\* |  | -36.75 |  | -71.24 |  |
|  | (-2.15) |  | (-1.59) |  | (-1.62) |  |
| SR duration |  | -19.46\* |  | -18.52+ |  | -57.12\*\* |
|  |  | (-2.11) |  | (-1.76) |  | (-3.54) |
| Stringency index 2020 | 0.77+ | 0.80+ | 0.80+ | 0.83+ | -0.19 | -0.15 |
|  | (1.88) | (1.91) | (1.84) | (1.91) | (-0.24) | (-0.21) |
| Liberal democracy index | 44.67 | 38.93 | 68.42 | 63.35 | -173.44 | -206.14+ |
|  | (0.73) | (0.63) | (0.99) | (0.93) | (-1.51) | (-1.77) |
| Social trust index |  |  | -0.74 | -0.68 | -1.33+ | -1.03 |
|  |  |  | (-1.37) | (-1.29) | (-1.76) | (-1.30) |
| GDP per capita (log) | 235.22\*\* | 242.01\*\* | 209.67\* | 233.14\* | 601.02\*\* | 676.70\*\* |
|  | (3.12) | (3.14) | (2.28) | (2.47) | (3.89) | (4.19) |
| GDP per capita sq (log) | -14.29\*\* | -14.65\*\* | -12.87\* | -14.11\*\* | -34.06\*\* | -38.07\*\* |
|  | (-3.24) | (-3.25) | (-2.47) | (-2.64) | (-4.00) | (-4.29) |
| Social globalization index | 1.44 | 1.53 | 0.98 | 1.16 | 0.91 | 1.25 |
|  | (1.45) | (1.54) | (0.88) | (1.03) | (0.40) | (0.57) |
| Level of federalism | -12.20 | -12.60 | -11.55 | -11.08 | -18.48 | -13.32 |
|  | (-0.65) | (-0.68) | (-0.56) | (-0.54) | (-0.53) | (-0.38) |
| Female prime minister | -74.69\*\* | -72.57\*\* | -82.56\*\* | -79.60\*\* | -110.03\*\* | -101.35\*\* |
|  | (-3.39) | (-3.28) | (-3.67) | (-3.48) | (-3.33) | (-2.89) |
| % of population aged 65 + | 2.66 | 3.24 | 3.28 | 3.38 | -0.20 | 0.18 |
|  | (0.86) | (0.97) | (0.81) | (0.82) | (-0.03) | (0.03) |
| Population density | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 |
|  | (0.59) | (0.56) | (0.69) | (0.69) | (0.77) | (0.69) |
| Diabetes prevalence | 4.86\* | 4.70\* | 4.71+ | 4.33+ | -1.05 | -2.54 |
|  | (2.18) | (2.12) | (1.85) | (1.69) | (-0.24) | (-0.60) |
| Asia | 6.72 | 6.73 | 22.90 | 20.68 | 35.35 | 36.23 |
|  | (0.36) | (0.36) | (0.96) | (0.88) | (0.89) | (0.96) |
| Europe | 155.37\*\* | 147.15\*\* | 172.55\*\* | 164.02\*\* | 306.57\*\* | 288.13\*\* |
|  | (3.58) | (3.30) | (3.37) | (3.14) | (4.28) | (4.01) |
| North America | 29.24 | 29.10 | 43.54 | 38.60 | 96.16+ | 86.92+ |
|  | (0.97) | (0.96) | (1.36) | (1.21) | (1.93) | (1.75) |
| Oceania | -47.22 | -48.06 | -2.14 | -9.94 | 35.05 | 17.44 |
|  | (-1.43) | (-1.50) | (-0.04) | (-0.19) | (0.52) | (0.26) |
| South America | 176.09\*\* | 177.34\*\* | 178.00\*\* | 176.62\*\* | 229.16\* | 232.10\*\* |
|  | (3.39) | (3.46) | (3.37) | (3.38) | (2.56) | (2.68) |
| Constant | -1066.31\*\* | -1106.77\*\* | -929.37\* | -1047.72\* | -2410.98\*\* | -2768.71\*\* |
|  | (-3.32) | (-3.36) | (-2.29) | (-2.51) | (-3.50) | (-3.84) |
| R2 | 0.66 | 0.66 | 0.65 | 0.65 | 0.45 | 0.48 |
| p | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| N | 142 | 142 | 128 | 128 | 129 | 129 |

*t* statistics in parentheses; + *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01

**Table AII.6. Sensitivity analysis: Models excluding China**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|  | JHU | WHO | JHU | WHO | JHU | WHO | JHU | WHO |
| Soc. rev. dummy | -46.61\* | -87.13\* |  |  | -44.73+ | -75.18+ |  |  |
|  | (-2.52) | (-2.26) |  |  | (-1.90) | (-1.68) |  |  |
| SR duration |  |  | -19.56+ | -54.71\*\* |  |  | -19.46 | -56.26\*\* |
|  |  |  | (-1.86) | (-3.29) |  |  | (-1.46) | (-3.00) |
| Liberal democracy index | 46.99 | -185.50+ | 46.54 | -206.80+ | 75.61 | -150.42 | 76.84 | -166.84 |
|  | (0.75) | (-1.70) | (0.74) | (-1.86) | (1.07) | (-1.21) | (1.10) | (-1.34) |
| Social trust index |  |  |  |  | -1.57\* | -2.96\*\* | -1.65\*\* | -3.04\*\* |
|  |  |  |  |  | (-2.54) | (-3.15) | (-2.78) | (-3.37) |
| GDP per capita (log) | 20.30 | 139.13\*\* | 16.53 | 138.21\*\* | -4.79 | 106.64\* | -7.08 | 111.04\* |
|  | (0.73) | (2.75) | (0.58) | (2.69) | (-0.17) | (2.22) | (-0.24) | (2.24) |
| GDP per capita sq (log) | -1.80 | -8.84\*\* | -1.56 | -8.63\*\* | -0.64 | -6.69\*\* | -0.43 | -6.75\*\* |
|  | (-1.38) | (-3.61) | (-1.16) | (-3.49) | (-0.57) | (-3.33) | (-0.37) | (-3.32) |
| Social globalization index | 0.79 | 0.70 | 0.88 | 0.71 | 0.52 | -0.48 | 0.70 | -0.20 |
|  | (0.82) | (0.39) | (0.91) | (0.41) | (0.44) | (-0.21) | (0.59) | (-0.09) |
| Level of federalism | -16.56 | -34.94 | -18.55 | -38.30 | -12.13 | -28.26 | -13.09 | -27.14 |
|  | (-0.84) | (-1.04) | (-0.95) | (-1.15) | (-0.59) | (-0.78) | (-0.64) | (-0.75) |
| Female prime minister | -87.12\*\* | -127.84\*\* | -85.23\*\* | -121.71\*\* | -95.24\*\* | -138.82\*\* | -92.97\*\* | -132.17\*\* |
|  | (-3.11) | (-3.26) | (-2.98) | (-3.03) | (-3.91) | (-3.97) | (-3.72) | (-3.61) |
| % of population aged 65 + | 3.88 | 2.23 | 4.26 | 3.69 | 4.72 | 3.89 | 4.77 | 3.96 |
|  | (1.03) | (0.40) | (1.07) | (0.63) | (0.97) | (0.56) | (0.97) | (0.56) |
| Population density | -0.01 | -0.01 | -0.01 | -0.01 | -0.00 | -0.00 | -0.00 | -0.00 |
|  | (-0.70) | (-0.66) | (-0.76) | (-0.80) | (-0.28) | (-0.18) | (-0.33) | (-0.31) |
| Diabetes prevalence | 4.57\* | 0.03 | 4.51\* | -0.81 | 4.40+ | 0.02 | 4.02 | -1.44 |
|  | (2.09) | (0.01) | (2.04) | (-0.22) | (1.73) | (0.01) | (1.55) | (-0.33) |
| Asia | 29.10 | 52.46 | 28.16 | 55.95 | 56.20\* | 90.78+ | 55.40\* | 96.52\* |
|  | (1.51) | (1.39) | (1.45) | (1.45) | (2.38) | (1.91) | (2.35) | (2.05) |
| Europe | 160.44\*\* | 276.58\*\* | 153.38\*\* | 262.90\*\* | 192.11\*\* | 330.29\*\* | 186.03\*\* | 323.49\*\* |
|  | (3.12) | (3.68) | (2.92) | (3.41) | (3.22) | (4.08) | (3.06) | (3.95) |
| North America | 48.50 | 98.47\* | 48.46 | 106.81\* | 70.19\* | 137.31\*\* | 67.65\* | 136.79\*\* |
|  | (1.59) | (2.14) | (1.55) | (2.25) | (2.14) | (2.81) | (2.05) | (2.79) |
| Oceania | -55.75+ | -42.18 | -57.01+ | -39.49 | 8.01 | 86.49 | 2.20 | 80.38 |
|  | (-1.68) | (-0.78) | (-1.75) | (-0.76) | (0.15) | (1.09) | (0.04) | (1.01) |
| South America | 203.75\*\* | 272.20\*\* | 206.07\*\* | 283.32\*\* | 202.25\*\* | 261.40\*\* | 202.68\*\* | 270.51\*\* |
|  | (3.98) | (3.11) | (4.06) | (3.28) | (3.86) | (2.85) | (3.91) | (3.02) |
| Constant | -93.33 | -381.50 | -89.13 | -389.63 | 64.42 | -161.59 | 59.99 | -196.91 |
|  | (-0.72) | (-1.64) | (-0.67) | (-1.63) | (0.44) | (-0.69) | (0.40) | (-0.81) |
| R2 | 0.62 | 0.41 | 0.62 | 0.42 | 0.63 | 0.44 | 0.62 | 0.45 |
| p | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| N | 147 | 148 | 147 | 148 | 130 | 131 | 130 | 131 |

*t* statistics in parentheses; + *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01

**Table AII.7. Sensitivity analysis: Models excluding Vietnam**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|  | JHU | WHO | JHU | WHO | JHU | WHO | JHU | WHO |
| Soc. rev. dummy | -48.50\* | -83.42\* |  |  | -46.31+ | -70.51 |  |  |
|  | (-2.59) | (-2.20) |  |  | (-1.96) | (-1.58) |  |  |
| SR duration |  |  | -22.41\* | -51.79\*\* |  |  | -21.55+ | -50.96\* |
|  |  |  | (-2.12) | (-3.10) |  |  | (-1.67) | (-2.49) |
| Liberal democracy index | 49.36 | -187.79+ | 46.69 | -207.03+ | 77.01 | -154.52 | 76.59 | -169.54 |
|  | (0.79) | (-1.74) | (0.74) | (-1.86) | (1.10) | (-1.26) | (1.10) | (-1.38) |
| Social trust index |  |  |  |  | -1.58\* | -2.93\*\* | -1.64\*\* | -2.96\*\* |
|  |  |  |  |  | (-2.59) | (-3.20) | (-2.80) | (-3.32) |
| GDP per capita (log) | 21.07 | 135.82\*\* | 18.44 | 136.42\*\* | -3.76 | 103.56\* | -4.45 | 110.41\* |
|  | (0.75) | (2.67) | (0.65) | (2.65) | (-0.13) | (2.12) | (-0.15) | (2.20) |
| GDP per capita sq (log) | -1.84 | -8.84\*\* | -1.60 | -8.59\*\* | -0.64 | -6.66\*\* | -0.45 | -6.67\*\* |
|  | (-1.42) | (-3.58) | (-1.21) | (-3.48) | (-0.58) | (-3.28) | (-0.39) | (-3.27) |
| Social globalization index | 0.76 | 1.05 | 0.75 | 0.81 | 0.42 | -0.16 | 0.48 | -0.26 |
|  | (0.77) | (0.59) | (0.76) | (0.46) | (0.34) | (-0.07) | (0.40) | (-0.11) |
| Level of federalism | -17.23 | -38.96 | -17.90 | -38.54 | -11.38 | -30.53 | -10.88 | -25.95 |
|  | (-0.89) | (-1.19) | (-0.93) | (-1.18) | (-0.56) | (-0.86) | (-0.53) | (-0.72) |
| Female prime minister | -86.81\*\* | -128.14\*\* | -84.58\*\* | -122.39\*\* | -95.00\*\* | -139.55\*\* | -92.33\*\* | -133.08\*\* |
|  | (-3.09) | (-3.26) | (-2.95) | (-3.07) | (-3.90) | (-4.00) | (-3.67) | (-3.67) |
| % of population aged 65 + | 3.74 | 1.83 | 4.38 | 3.61 | 4.78 | 3.72 | 5.01 | 4.30 |
|  | (1.02) | (0.34) | (1.10) | (0.62) | (1.00) | (0.54) | (1.01) | (0.61) |
| Population density | -0.01 | -0.01 | -0.01 | -0.01 | -0.00 | -0.00 | -0.00 | -0.00 |
|  | (-0.68) | (-0.66) | (-0.77) | (-0.80) | (-0.28) | (-0.18) | (-0.37) | (-0.34) |
| Diabetes prevalence | 4.61\* | -0.28 | 4.54\* | -0.82 | 4.48+ | -0.24 | 4.16 | -1.21 |
|  | (2.10) | (-0.07) | (2.06) | (-0.22) | (1.74) | (-0.05) | (1.59) | (-0.27) |
| Asia | 28.73 | 54.52 | 27.82 | 56.15 | 55.74\* | 92.16+ | 54.32\* | 94.08\* |
|  | (1.48) | (1.44) | (1.43) | (1.45) | (2.38) | (1.94) | (2.34) | (2.01) |
| Europe | 162.20\*\* | 279.25\*\* | 153.40\*\* | 262.43\*\* | 192.38\*\* | 329.56\*\* | 184.36\*\* | 317.75\*\* |
|  | (3.22) | (3.77) | (2.93) | (3.43) | (3.29) | (4.14) | (3.06) | (3.88) |
| North America | 49.24 | 99.08\* | 49.65 | 105.44\* | 70.46\* | 136.52\*\* | 67.43\* | 134.08\*\* |
|  | (1.62) | (2.14) | (1.60) | (2.23) | (2.16) | (2.78) | (2.06) | (2.74) |
| Oceania | -55.19+ | -37.79 | -57.44+ | -39.50 | 8.41 | 85.35 | 1.12 | 75.37 |
|  | (-1.68) | (-0.71) | (-1.78) | (-0.77) | (0.16) | (1.09) | (0.02) | (0.95) |
| South America | 204.38\*\* | 274.54\*\* | 206.63\*\* | 282.46\*\* | 201.93\*\* | 262.38\*\* | 201.88\*\* | 267.46\*\* |
|  | (4.02) | (3.15) | (4.12) | (3.28) | (3.87) | (2.87) | (3.92) | (2.98) |
| Constant | -96.05 | -367.40 | -96.42 | -382.97 | 60.68 | -150.34 | 48.61 | -197.75 |
|  | (-0.74) | (-1.57) | (-0.73) | (-1.60) | (0.42) | (-0.63) | (0.32) | (-0.81) |
| R2 | 0.62 | 0.42 | 0.62 | 0.42 | 0.63 | 0.44 | 0.63 | 0.45 |
| p | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| N | 147 | 148 | 147 | 148 | 130 | 131 | 130 | 131 |

*t* statistics in parentheses; + *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01

**Table AII.8. Mediation analysis, full table with confidence intervals, SR dummy, JHU data**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Autocracy  (V-dem) | Constraints on management | State capabilities  (Hanson & Sigman) | Govt health expenditures as % of GDP | State capabilities (ICRG) | Share of population vaccinated as of 12/01/2021 | Equal opportunity |
| ACME | -12.95 [-30.89, -0.42] | -8.69 [-23.51, 0.89] | -6.11 [-19.86, 2.23] | -7.09 [-22.06, 1.85] | -3.49 [-17.75, 7.54] | -12.81 [-29.52, -0.80] | -9.22 [-24.45, 0.88] |
| Direct effect | -42.25 [-87.06, -4.34] | -37.58 [-80.85, 2.96] | -43.76 [-91.74, 1.21] | -42.08 [-91.13, 3.89] | -43.35 [-90.28, 0.62] | -33.87 [-82.40, 11.59] | -36.61 [-79.90, -87.45] |
| Total effect | -55.19 [-102.36, -7.39] | -46.28 [-90.85] | -49.87 [-97.53, -4.73] | -49.16 [-97.29, -2.94] | -46.85 [-95.11, -3.54] | -46.69 [-92.66, -0.06] | -45.82 [-87.45, -4.10] |
| % of total effect mediated | 0.23 [0.12, 1.13] | 0.19 [0.09, 1.30] | 0.12 [0.06, 0.73] | 0.14 [0.06, 0.95] | 0.07 [0.03, 0.46] | 0.26 [-0.27, 1.95] | 0.20 [0.09, 1.18] |
| Rho at which ACME = 0 | -0.16 | 0.11 | -0.17 | -0.17 | -0.21 | -0.22 | -0.20 |
| N | 146 | 123 | 146 | 144 | 144 | 146 | 123 |

Confidence intervals of 95% are based on nonparametric bootstrap with 1,000 resamples. “Autocracy” models are estimated with logit equations; the three other models were estimated with least squares. The results are computed via the “Medeff” package in Stata (Hicks & Tingley, 2011). ACME = Average Causal Mediation Effect.

**Table AII.9. Mediation analysis, full table with confidence intervals, SR duration, JHU data**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Autocracy  (V-dem) | Constraints on management | State capabilities  (Hanson & Sigman) | Govt health expenditures as % of GDP | State capabilities (ICRG) | Share of population vaccinated as of 12/01/2021 | Equal opportunity |
| ACME | -7.35 [-22.29, 2.84] | -5.84 [-13.40, -0.19] | -5.30 [-13.38, 0.13] | -4.67 [-12.32, 0.19] | -3.42 [-10.26, 0.87] | -9.25 [-18.36, -1.68] | -6.73 [-15.07, -0.39] |
| Direct effect | -19.22 [-40.99, 2.82] | -18.05 [-38.52, 1.13] | -14.84 [-37.35, 6.25] | -16.60 [-39.04, 4.49] | -17.09 [-38.55, 3.01] | -9.35 [-32.44, 12.30] | -16.21 [-37.11, 3.38] |
| Total effect | -26.57 [-50.19, -1.33] | -23.90 [-44.93, -3.97] | -20.14 [-41.74, 0.84] | -21.24 [-42.82, -0.17] | -20.52 [-41.55, -0.61] | -18.60 [-40.74, 2.98] | -22.94 [-43.22, -3.31] |
| % of total effect mediated | 0.27 [0.12, 1.28] | 0.24 [0.13, 1.120 | 0.26 [-1.13, 1.87] | 0.22 [0.08, 1.74] | 0.17 [0.07, 1.35] | 0.47 [-2.84, 3.62] | 0.29 [0.15, 1.74] |
| Rho at which ACME = 0 | -0.18 | 0.10 | -0.16 | -0.17 | -0.20 | -0.22 | -0.18 |
| N | 146 | 123 | 146 | 144 | 144 | 146 | 123 |

Confidence intervals of 95% are based on nonparametric bootstrap with 1,000 resamples. “Autocracy” models are estimated with logit equations; the three other models were estimated with least squares. The results are computed via the “Medeff” package in Stata (Hicks & Tingley, 2011). ACME = Average Causal Mediation Effect.

**Table AII.10. Mediation analysis, with socialist revolutionary dummy, WHO data**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Autocracy  (V-dem) | Constraints on management | State capabilities  (Hanson & Sigman) | Govt health expenditures as % of GDP | State capabilities (ICRG) | Share of population vaccinated as of 12/01/2021 | Equal opportunity |
| ACME | -1.75 [-26.66, 21.04] | -15.60 [-42.87, 1.89] | -5.25 [-24.41, 6.29] | -10.10 [-34.40, 3.87] | -6.36 [-31.96, 13.55] | -28.31 [-61.17, -3.74] | -9.36 [-32.00, 5.70] |
| Direct effect | -77.54 [-160.02, 8.21] | -75.33 [-156.91, 1.12] | -90.04 [-176.84, -8.71] | -86.36 [-174.47, -3.80] | -86.33 [-169.51, -8.39] | -63.98 [-149.49, 16.14] | -78.68 [-161.67, -0.91] |
| Total effect | -79.29 [-163.64, 5.04] | -90.92 [-174.3, -9.85] | -95.29 [-180.70, -14.34] | -96.46 [-183.81, -13.69] | -92.69 [-178.24, -15.97] | -92.29 [-175.21, -8.02] | -88.03 [-168.08, -9.62] |
| % of total effect mediated | 0.02 [-0.07, 0.14] | 0.17 [0.08, 0.95] | 0.05 [0.03, 0.30] | 0.11 [0.05, 0.55] | 0.07 [0.03, 0.32] | 0.30 [0.15, 1.54] | 0.11 [0.05, 0.70] |

Confidence intervals of 95% are based on nonparametric bootstrap with 1,000 resamples. “Autocracy” models are estimated with logit equations; the three other models were estimated with least squares. The results are computed via the “Medeff” package in Stata (Hicks & Tingley, 2011). ACME = Average Causal Mediation Effect.

**Table AII.11. Mediation analysis, with socialist revolutionary duration, WHO data**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Autocracy  (V-dem) | Constraints on management | State capabilities  (Hanson & Sigman) | Govt health expenditures as % of GDP | State capabilities (ICRG) | Share of population vaccinated as of 12/01/2021 | Equal opportunity |
| ACME | -0.63 [-12.36, 10.27] | -9.81 [-23.16, 0.22] | -3.30 [-14.96, 6.60] | -6.42 [-19.01, 1.28] | -5.87 [-17.61, 1.46] | -18.59 [-35.23, -4.50] | -4.73 [-18.09, 7.29] |
| Direct effect | -43.42 [-80.39, -4.97] | -49.88 [-87.89, -14.26] | -51.88 [-91.99, -14.30] | -53.25 [-93.01, -16.00] | -52.24 [-89.66, -17.17] | -36.01 [-76.38, 1.81] | -52.20 [-91.57, -15.31] |
| Total effect | -44.05 [-81.69, -5.61] | -59.68 [-98.42, -22.82] | -55.18 [-93.62, -17.19] | -59.67 [-97.96, -22.59] | -58.11 [-94.84, -23.32] | -54.61 [-92.92, -16.74] | -56.93 [-94.59, -20.36] |
| % of total effect mediated | 0.01 [0.01, 0.08] | 0.17 [0.10, 0.43] | 0.06 [0.04, 0.19] | 0.11 [0.07, 0.28] | 0.10 [0.06, 0.25] | 0.34 [0.20, 1.08] | 0.08 [0.05, 0.23] |

Confidence intervals of 95% are based on nonparametric bootstrap with 1,000 resamples. “Autocracy” models are estimated with logit equations; the three other models were estimated with least squares. The results are computed via the “Medeff” package in Stata (Hicks & Tingley, 2011). ACME = Average Causal Mediation Effect.

**Table AII.12. Mediation analysis for COVID-19 death rates by February 28, 2021, with a socialist revolutionary dummy as treatment.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Autocracy  (V-dem) | Constraints on management | State capabilities  (Hanson & Sigman) | Govt health expenditures as % of GDP | State capabilities (ICRG) | Share of population vaccinated as of 12/01/2021 | Equal opportunity |
| ACME | -2.14 [-7.65, 1.21] | -1.87 [-6.51, 1.20] | -0.85 [-4.81, 1.98] | 1.58 [-1.29, 6.12] | -0.38 [-3.50, 1.61] | -1.53 [-6.83, 2.87] | -3.37 [-9.12, 0.32] |
| Direct effect | -20.95 [-38.96, -2.22] | -18.39 [-35.83, -2.05] | -19.29 [-38.42, -1.36] | -21.03 [-40.49, -2.80] | -19.91 [-39.48, -1.58] | -18.31 [-37.84, -.02] | -17.07 [-34.31, -0.90] |
| Total effect | -23.09 [-41.48, -4.06] | -20.26 [-38.35, -3.62] | -20.14 [-38.86, -2.12] | -19.46 [-38.69, -0.44] | -20.29 [-39.84, -2.01] | -19.85 [-38.45, -1.63] | -20.43 [-36.87, -3.99] |
| % of total effect mediated | 0.09 [0.05, 0.43] | 0.09 [0.05, 0.42] | 0.04 [0.02, 0.28] | -0.08 [-0.56, -0.03] | 0.02 [0.01, 0.13] | 0.07 [0.04, 0.55] | 0.16 [0.09, 0.77] |
| Rho at which ACME = 0 | -0.05 | 0.06 | -0.06 | 0.11 | -0.06 | -0.06 | -0.20 |
| N | 146 | 124 | 146 | 144 | 145 | 146 | 124 |

**Table AII.13. Mediation analysis for COVID-19 death rates by February 28, 2021, with a socialist revolutionary duration as treatment.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Autocracy  (V-dem) | Constraints on management | State capabilities  (Hanson & Sigman) | Govt health expenditures as % of GDP | State capabilities (ICRG) | Share of population vaccinated as of 12/01/2021 | Equal opportunity |
| ACME | -0.95 [-3.76, 0.85] | -1.21 [-3.71, 0.86] | -0.56 [-3.11, 1.68] | 1.14 [-0.53, 3.74] | -0.31 [-2.09, 1.04] | -0.82 [-4.02, 2.19] | -2.43 [-5.62, 0.06] |
| Direct effect | -9.26 [-17.42, -0.77] | -8.26 [-16.53, -0.50] | -7.90 [-16.88, 0.51] | -8.77 [-17.71, -0.40] | -7.97 [-16.93, 0.42] | -7.49 [-16.82, 1.26] | -6.98 [-15.34, 0.85] |
| Total effect | -10.20 [-18.72, -1.41] | -9.47 [-17.85, -1.84] | -8.47 [-17.06, 0.05] | -7.63 [-16.45, 1.09] | -8.28 [-17.00, 0.09] | -8.31 [-16.95, 0.14] | -9.41 [-17.43, -1.60] |
| % of total effect mediated | 0.09 [0.05, 0.50] | 0.13 [0.06, 0.56] | 0.07 [-0.04, 0.51] | -0.14 [-1.17, 1.01] | 0.04 [-0.09, 0.28] | 0.10 [-0.30, 0.81] | 0.26 [0.14, 1.31] |
| Rho at which ACME = 0 | -0.07 | 0.05 | -0.04 | 0.11 | -0.04 | -0.05 | -0.17 |
| N | 146 | 124 | 146 | 144 | 145 |  | 124 |

**References**

Bjørnskov, C., & Rode, M. 2020. Regime types and regime change: A new dataset on democracy, coups, and political institutions. *Review of International Organizations* 15 (2): 531–551

Bosancianu, Constantin, Hilbig, Hanno, Humphreys, Macartan, KC, Sampada, Lieber, Nils, and Alexandra Scacco. 2021. Political and Social Correlates of Covid-19 Mortality. Working Paper.

Hale, Thomas, Noam Angrist, Noam, Goldszmidt, Rafael, Kira, Beatriz, Petherick, Anna, Phillips, Toby, Webster, Samuel, Cameron-Blake, Emily, Hallas, Laura, Majumdar, Saptarshi, and Helen Tatlow. (2021). “A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker).” *Nature Human Behaviour*.

Muravchik, Joshua. 2019. *Heaven on Earth. The Rise, Fall, and Afterlife of Socialism*. New York: Encounter Books.

Smith, Graham. 1989. *Planned Development in the Socialist World.* Cambridge: Cambridge University Press.