# Supplementary information

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**Fig. S1.** Correlation between economic, social and political dimensions of globalisation indices with **a)** travel restriction policy implementation-first confirmed case gap and **b)** number of cases at restriction implementation. Coefficients estimates obtained using OLS with robust SEs, controlling for number of confirmed case at time of implementation, population density and economic risk rating. † *p* < .10; \* *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001.

**Table S1.** Robustness – Relationship between globalization and policy-first case time gap: Foreign international restriction policy weights using 2018 gross bilateral import and export

|  |  |
| --- | --- |
| *Dependent variable* | **Days between policy introduction and first case** |
|  | *Import* |  | *Export*  |
| *Independent variable* | First policy | Screening | Quarantine  | Ban (high risk) | Border closure |  | First policy | Screening | Quarantine  | Ban (high risk) | Border closure |
| KOF Globalization Index | 1.14\*\*\* | 0.91† | 1.11\*\* | 1.33\*\*\* | 1.17\*\* |  | 1.05\*\*\* | 0.91† | 1.10\*\* | 1.12\*\* | 1.22\*\* |
|  | (0.224) | (0.454) | (0.365) | (0.312) | (0.398) |  | (0.211) | (0.449) | (0.342) | (0.330) | (0.414) |
| Case per 1,000 people in population | 0.018\*\*\* | 1.18 | 0.018\*\*\* | 0.029\*\* | 0.12\* |  | 0.019\*\*\* | 0.93 | 0.018\*\*\* | 0.034\*\* | 0.11\* |
| (0.00161) | (1.123) | (0.00177) | (0.00953) | (0.0462) |  | (0.00120) | (1.118) | (0.00163) | (0.0117) | (0.0480) |
| Democracy | -9.21† | -12.4 | 7.73 | -14.0\* | -8.92† |  | -6.72 | -11.6 | 5.81 | -12.5† | -9.56† |
|  | (4.672) | (9.917) | (5.699) | (5.523) | (5.125) |  | (5.393) | (10.72) | (6.577) | (6.451) | (5.016) |
| Foreign international restriction policy  | 16.2\*\*\* | 37.3\*\*\* | 35.1\*\*\* | 39.1\*\*\* | 17.7\* |  | 16.8\*\*\* | 35.3\*\*\* | 36.8\*\*\* | 29.3\*\*\* | 25.5\* |
| (1.603) | (8.011) | (5.299) | (6.925) | (8.184) |  | (1.633) | (8.867) | (5.152) | (7.653) | (11.89) |
| *ln(*Population density) | 2.19† | 5.08† | 4.08† | 4.10\* | 3.45\* |  | 3.54\* | 7.05\* | 5.35\* | 5.74\*\* | 2.94\* |
|  | (1.269) | (2.702) | (2.099) | (1.771) | (1.332) |  | (1.355) | (2.806) | (2.065) | (2.005) | (1.379) |
| Economic risk rating | 0.23 | 0.90 | -0.17 | 0.12 | -0.33 |  | 0.45 | 0.93 | -0.032 | 0.45 | -0.47 |
|  | (0.384) | (0.597) | (0.523) | (0.520) | (0.523) |  | (0.323) | (0.553) | (0.450) | (0.688) | (0.474) |
| Physicians per 1,000 people | -0.92 | 0.25 | -1.87 | -1.47 | -4.24† |  | -0.61 | 0.90 | -1.63 | -1.74 | -5.69\* |
|  | (1.865) | (5.358) | (2.749) | (2.280) | (2.487) |  | (1.578) | (5.650) | (2.557) | (2.492) | (2.679) |
| Landlocked | -8.59\* | -16.5\* | -10.9 | -7.11 | -4.10 |  | -6.84† | -18.9\* | -9.07 | -3.87 | -6.13† |
|  | (3.767) | (7.784) | (6.547) | (4.430) | (3.618) |  | (3.793) | (8.364) | (6.647) | (4.778) | (3.563) |
| *Continent* |  |  |  |  |  |  |  |  |  |  |  |
| Africa | (ref.) | (ref.) | (ref.) | (ref.) | (ref.) |  | (ref.) | (ref.) | (ref.) | (ref.) | (ref.) |
| America | 5.09 | 5.16 | -5.51 | 7.90 | 8.69 |  | 4.80 | 8.24 | -3.81 | 2.61 | 15.0\* |
|  | (6.623) | (11.92) | (12.02) | (7.301) | (5.463) |  | (7.524) | (12.02) | (11.95) | (9.796) | (5.909) |
| Asia | 4.95 | -3.67 | 14.4 | -1.42 | 17.4\*\* |  | 2.63 | -6.72 | 9.70 | -10.5 | 23.0\*\*\* |
|  | (5.794) | (12.71) | (9.889) | (6.569) | (6.177) |  | (6.176) | (14.02) | (9.875) | (8.147) | (6.182) |
| Europe | 7.61 | 2.25 | 1.57 | -0.46 | 1.81 |  | 1.49 | -1.13 | 1.63 | -7.38 | 7.33 |
|  | (9.243) | (15.75) | (11.74) | (9.840) | (7.951) |  | (9.036) | (15.52) | (12.10) | (13.09) | (8.056) |
| Pacific | -7.36 |  |  | -19.9† | 20.2† |  | -14.5 |  |  | -28.5\* | 24.7\* |
|  | (12.43) |  |  | (10.60) | (10.50) |  | (16.75) |  |  | (13.93) | (11.43) |
| *ln(*Area in sq. kms) | 5.02\*\*\* | 5.09\* | 4.67\*\* | 6.65\*\*\* | 6.08\*\*\* |  | 5.13\*\*\* | 5.00\* | 5.50\*\*\* | 7.07\*\*\* | 5.64\*\*\* |
|  | (1.006) | (1.874) | (1.480) | (1.409) | (1.069) |  | (0.981) | (1.911) | (1.472) | (1.676) | (1.145) |
| Constant | -183.8\*\*\* | -207.7\*\*\* | -163.2\*\*\* | -196.2\*\*\* | -135.3\*\*\* |  | -192.5\*\*\* | -214.8\*\*\* | -183.9\*\*\* | -194.8\*\*\* | -128.3\*\*\* |
|  | (18.76) | (43.02) | (31.63) | (31.07) | (28.58) |  | (19.70) | (43.81) | (32.60) | (36.78) | (26.12) |
| N | 98 | 43 | 41 | 78 | 73 |  | 98 | 43 | 41 | 78 | 73 |
| Prob. > *F* | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |  | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| *R2* | 0.805 | 0.681 | 0.891 | 0.651 | 0.630 |  | 0.796 | 0.666 | 0.899 | 0.550 | 0.641 |

Notes: OLS estimates. Standard errors (robust) in parentheses. † *p* < .10; \* *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001.

**Table S2.** Robustness – Relationship between globalization and policy-first case time gap: Hospital beds and nurses and midwives as proxy for health system capacity

|  |  |
| --- | --- |
| *Dependent variable* | **Days between policy introduction and first case** |
|  | *Hospital beds (per 1,000 people)* |  | *Nurses and midwives (per 1,000 people)* |
| *Independent variable* | First policy | Screening | Quarantine  | Ban (high risk) | Border closure |  | First policy | Screening | Quarantine  | Ban (high risk) | Border closure |
| KOF Globalization Index | 0.80\*\*\* | 0.94\* | 1.09\*\* | 0.89\*\*\* | 0.87\* |  | 0.78\*\*\* | 0.67† | 1.11\* | 0.85\*\* | 0.86\* |
|  | (0.204) | (0.389) | (0.387) | (0.258) | (0.361) |  | (0.220) | (0.391) | (0.424) | (0.289) | (0.409) |
| Case per 1,000 people in population | 0.022\*\*\* | 1.12\* | 0.018\*\*\* | 0.048\*\*\* | 0.043† |  | 0.021\*\*\* | 1.19\* | 0.019\*\*\* | 0.043\*\* | 0.043† |
| (0.00166) | (0.525) | (0.00216) | (0.0119) | (0.0247) |  | (0.00136) | (0.441) | (0.00216) | (0.0140) | (0.0250) |
| Democracy | -12.4\*\* | -22.6\*\* | 5.55 | -16.5\*\* | -8.99 |  | -12.1\*\* | -20.9\*\* | 4.17 | -16.2\*\* | -8.96 |
|  | (4.146) | (7.845) | (8.150) | (5.090) | (5.415) |  | (4.180) | (7.648) | (9.047) | (5.264) | (5.613) |
| Foreign international restriction policy  | 13.4\*\*\* | 35.5\*\*\* | 29.9\*\*\* | 22.4\*\*\* | 7.41 |  | 13.3\*\*\* | 35.6\*\*\* | 28.5\*\* | 22.4\*\*\* | 7.48 |
| (1.625) | (7.811) | (7.653) | (5.991) | (8.994) |  | (1.683) | (6.883) | (8.094) | (5.946) | (9.011) |
| *ln(*Population density) | 3.59\* | 6.94\*\* | 4.39† | 7.09\*\*\* | 7.23\*\*\* |  | 3.73\* | 7.25\*\* | 4.02 | 7.07\*\*\* | 7.23\*\*\* |
|  | (1.580) | (2.543) | (2.458) | (1.867) | (1.813) |  | (1.647) | (2.445) | (2.777) | (1.859) | (1.629) |
| Economic risk rating | 0.41 | 0.99 | -0.44 | 0.36 | 0.27 |  | 0.30 | 0.80 | -0.22 | 0.31 | 0.26 |
|  | (0.338) | (0.627) | (0.645) | (0.442) | (0.465) |  | (0.352) | (0.563) | (0.605) | (0.448) | (0.455) |
| Health system capacity | 1.09 | 1.12 | -1.13 | 0.45 | 0.071 |  | 0.48 | 1.63† | -0.71 | 0.33 | 0.057 |
|  | (0.671) | (1.269) | (1.022) | (0.793) | (1.398) |  | (0.507) | (0.851) | (0.692) | (0.601) | (0.771) |
| Landlocked | -10.4\* | -20.6\* | -15.2† | -4.66 | -2.61 |  | -9.62\* | -22.5\*\* | -16.8\* | -4.40 | -2.57 |
|  | (4.173) | (7.632) | (7.632) | (5.237) | (4.734) |  | (4.132) | (7.511) | (7.812) | (5.240) | (4.868) |
| *Continent* |  |  |  |  |  |  |  |  |  |  |  |
| Africa | (ref.) | (ref.) | (ref.) | (ref.) | (ref.) |  | (ref.) | (ref.) | (ref.) | (ref.) | (ref.) |
| America | 6.26 | 7.13 | -10.1 | -4.13 | 2.39 |  | 6.36 | 7.08 | -9.24 | -4.24 | 2.43 |
|  | (5.423) | (8.984) | (12.95) | (5.497) | (5.694) |  | (5.454) | (9.205) | (13.10) | (5.438) | (5.723) |
| Asia | -4.25 | -7.86 | 18.0 | -11.6† | 6.56 |  | -2.63 | -7.06 | 16.5 | -10.8† | 6.64 |
|  | (5.746) | (8.147) | (12.36) | (6.305) | (7.851) |  | (5.592) | (7.781) | (12.09) | (5.944) | (7.244) |
| Europe | 6.49 | 4.44 | 2.18 | -4.82 | -5.27 |  | 8.36 | 5.18 | 2.79 | -3.95 | -5.16 |
|  | (7.149) | (8.274) | (14.72) | (8.271) | (10.31) |  | (7.537) | (8.577) | (15.08) | (8.059) | (9.114) |
| Pacific | -8.74 | 7.58 | -21.6\* | -24.6\*\* | 6.95 |  | -8.47 | 10.8 | -26.1\*\* | -25.0\*\* | 6.86 |
|  | (11.07) | (8.372) | (8.551) | (8.189) | (9.562) |  | (11.22) | (7.942) | (9.377) | (8.382) | (9.664) |
| *ln(*Area in sq. kms) | 4.82\*\*\* | 5.86\*\*\* | 5.25\*\*\* | 7.43\*\*\* | 6.20\*\*\* |  | 4.93\*\*\* | 5.97\*\*\* | 5.47\*\*\* | 7.39\*\*\* | 6.19\*\*\* |
|  | (1.157) | (1.640) | (1.343) | (1.601) | (1.197) |  | (1.167) | (1.621) | (1.372) | (1.671) | (1.246) |
| Constant | -164.5\*\*\* | -223.4\*\*\* | -154.3\*\*\* | -185.4\*\*\* | -151.8\*\*\* |  | -161.6\*\*\* | -206.3\*\*\* | -163.0\*\*\* | -181.2\*\*\* | -151.2\*\*\* |
|  | (24.51) | (37.76) | (37.07) | (30.04) | (29.55) |  | (26.26) | (36.68) | (37.13) | (35.40) | (34.35) |
| N | 117 | 51 | 47 | 92 | 89 |  | 117 | 51 | 47 | 92 | 89 |
| Prob. > *F* | 0.000 | . | . | 0.000 | 0.000 |  | 0.000 | . | . | 0.000 | 0.000 |
| *R2* | 0.715 | 0.681 | 0.823 | 0.550 | 0.471 |  | 0.712 | 0.700 | 0.823 | 0.550 | 0.471 |

Notes: OLS estimates. Standard errors (robust) in parentheses. † *p* < .10; \* *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001.