

A Internet Appendix

A.1 Compulsory Containment Index

The Compulsory Containment Index expresses the strength of the government policies aimed at restricting activities and the movement of individuals during the COVID pandemic. Eight indicators presented in the Oxford Covid-19 Government Response Tracker integrate our Compulsory Containment Index: School Closing (*C1*), Workplace Closing (*C2*), Cancel of Public Events (*C3*), Restrictions on Gatherings Size (*C4*), Close of Public Transport (*C5*), Stay at Home Requirements (*C6*), Restrictions on Internal Movement (*C7*), and Restrictions on International Travel (*C8*).

The computation of the index requires two steps: The construction of an individual sub-index for each variable and the construction of a composite index based on the previously calculated sub-indices. Both steps follow the methodology applied in the Oxford Covid-19 Government Response Tracker for the computation of the composite indices.

All eight variables that integrate the index are ordinal variables; the higher the value, the greater the restriction. Some of these variables have a binary Flag (F_j) that indicates if the measure applies only to a sub-region of a jurisdiction or to the whole jurisdiction (Hale *et al.*, 2020). Table A1 describes the values associated with the variables used in the construction of the index.

Each sub-index score (I) for a given indicator (j) on any day (t) is calculated with equation (7). For both the equation (7) and Table A1, N_j is the maximum value of the indicator, F_j indicates if the variable has an assigned flag, $v_{j,t}$ is the recorded value, and f_j is the recorded value for the binary flag. The procedure normalizes the different ordinal scales, producing sub-indices scores between 0 and 100.

$$I_{j,t} = 100 \frac{v_{j,t} - 0.5(F_j - f_{j,t})}{N_j} \quad (7)$$

The Compulsory Containment Index is the simple average of the individual indicators as described in equation (8).

$$Comp\ Containment = \frac{1}{k} \sum_{j=1}^k I_j, \quad k = 8 \quad (8)$$

Table A1: Containment measures description

| Variable | Description | Max (N_j) | Flag? (F_j) |
|----------|---|-------------------|-----------------|
| $C1$ | C1=1: Recommend closing, or all schools open with alterations resulting in significant differences compared to usual, non-Covid-19 operations; C1=2: Require closing (only some levels or categories, e.g. only high school, or only public schools); C1=3: Require closing all levels. | 3 (0, 1, 2, 3) | YES=1 |
| $C2$ | C2=1: Recommend closing (or work from home); C2=2: Require closing (or work from home) for some sectors or categories of workers; C2=3: Require closing (or work from home) all-but-essential workplaces. | 3 (0, 1, 2, 3) | YES=1 |
| $C3$ | C3=1: Recommend cancelling; C3=2: Require cancelling. | 2 (0, 1, 2) | YES=1 |
| $C4$ | C4=1: Restrictions on very large gatherings (the limit is above 1000 people); C4=2: Restrictions on gatherings between 101-1000 people; C4=3: Restrictions on gatherings between 11-100 people ; C4=4: Restrictions on gatherings of 10 people or less. | 4 (0, 1, 2, 3, 4) | YES=1 |
| $C5$ | C5=1: Recommend closing (or significantly reduce volume/route/means of transport available); C5=2: Require closing (or prohibit most citizens from using it). | 2 (0, 1, 2) | YES=1 |
| $C6$ | C6=1: Recommend not leaving the house; C6=2: Require not leaving the house with exceptions for daily exercise, grocery shopping, and 'essential' trips; C6=3: Require not leaving the house with minimal exceptions (e.g. allowed to leave only once a week, or only one person can leave at a time, etc.). | 3 (0, 1, 2, 3) | YES=1 |
| $C7$ | C7=1: Recommend not to travel between regions/cities; C7=2: Internal movement restrictions in place. | 2 (0, 1, 2) | YES=1 |
| $C8$ | C8=1: Screening; C8=2: Quarantine arrivals from high-risk regions; C8=3: Ban on arrivals from some regions; C8=4: Ban on all regions or total border closure. | 4 (0, 1, 2, 3, 4) | NO=0 |

Notes: For all the variables (C_i), the value 0 means No Measure. The variable description is a verbatim copy of Hale *et al.* (2020).

A.2 Additional tables

Table A2: Correlation matrix

| Variables | $W_C \times \text{Comp Containment}$ | $W_G \times \text{Comp Containment}$ | $W_E \times \text{Comp Containment}$ |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| $W_C \times \text{Comp Containment}$ | 1 | | |
| $W_G \times \text{Comp Containment}$ | 0.483 | 1 | |
| $W_E \times \text{Comp Containment}$ | 0.259 | 0.687 | 1 |

Notes: $W_C \times \text{Comp Containment}$, $W_G \times \text{Comp Containment}$, $W_E \times \text{Comp Containment}$ refer to the average compulsory containment measures of the countries which are linked in cultural, geographic, or economic and administrative terms, respectively, to a given country i . In each average containment measure, we only include the five closest neighbors, according to one source of proximity.

Table A3: Panel regression estimations of BCI accounting for political and institutional arrangements, and uncertainty: Robustness check

| Variables | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|--------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Deaths/Million | -0.391** (0.147) | -0.390*** (0.145) | -0.384*** (0.146) | -0.383** (0.149) | -0.385** (0.148) | -0.310** (0.123) | -0.345** (0.135) |
| Trend | 0.006*** (0.002) | 0.005*** (0.002) | 0.005*** (0.002) | 0.006*** (0.002) | 0.006*** (0.002) | 0.007*** (0.002) | 0.006*** (0.002) |
| Deaths/Million#Trend | 0.002*** (0.001) | 0.002*** (0.001) | 0.002*** (0.001) | 0.002*** (0.001) | 0.002*** (0.001) | 0.001*** (0.001) | 0.001** (0.001) |
| Comp Containment | -1.150*** (0.120) | -1.236*** (0.118) | -1.220*** (0.117) | -1.168*** (0.135) | -1.162*** (0.120) | -1.110*** (0.119) | -1.001*** (0.128) |
| Dom Mon Policy Rate | -0.613*** (0.200) | -0.655*** (0.202) | -0.602*** (0.171) | -0.696*** (0.229) | -0.620*** (0.200) | -0.396*** (0.140) | -0.451*** (0.145) |
| Gov Consumption | -1.146*** (0.408) | -0.190 (0.229) | -0.190 (0.238) | -1.076** (0.427) | -1.193*** (0.393) | -0.785** (0.370) | -1.128*** (0.397) |
| Gov System, Presidential | | 0.315 (0.519) | | | | | |
| Pol Orientation, Center | | | 0.954** (0.392) | | | | |
| Pol Orientation, Left | | | -0.432* (0.251) | | | | |
| Trust in Gov | | | | -0.008 (0.021) | | | |
| FPC Govce Indicators | | | | | 1.451 (1.256) | | |
| FPC Eco Freedom | | | | | | 2.269*** (0.408) | |
| PUI | | | | | | | -0.035*** (0.007) |
| Observations | 1,532 | 1,532 | 1,496 | 1,413 | 1,532 | 1,532 | 1,460 |
| R ² | 0.382 | 0.374 | 0.381 | 0.426 | 0.386 | 0.480 | 0.441 |
| Number of countries | 43 | 43 | 42 | 40 | 43 | 43 | 41 |
| Random or fixed effects | FE | RE | RE | FE | FE | FE | FE |

Notes: Standard errors are in parentheses. Errors are clustered at country level. Intercept is not reported. *** p<0.01, ** p<0.05, * p<0.1. Deaths/Million corresponds to the deaths per million of inhabitants, and Trend, to the trend pandemic variable after the 100th COVID case is registered. Comp Containment stands for the compulsory containment measure. Mon Policy Rate corresponds to the real monetary policy interest rate. Gov Consumption refers to general government final consumption as a proportion of GDP. Gov System describes the government system (presidential or parliamentary system), with the base category being the parliamentary system; Pol Orientation describes the political orientation of the chief executive (left, center or right), with the base category being right. Trust in Gov stands for trust in government. The first

principal component (FPC) of the governance indicators and economic freedom variables are named FPC Govce Ind and FPC Eco Freedom, respectively. We lag FPC Govce Ind and FPC Eco Freedom one period. PUI is the acronym of pandemic uncertainty index. The R^2 that the Table reports is the within R^2 . FE (RE) stands for fixed effects (random-effects).

Table A4: FE panel regression estimations of BCI accounting for the interaction between political and institutional arrangements and the containment measures: First part

| Variables | (1) | (2) | (3) |
|--------------------------------|----------------------|----------------------|----------------------|
| Deaths/Million | -0.391** (0.147) | | |
| Trend | 0.006*** (0.002) | 0.006*** (0.002) | 0.006*** (0.002) |
| Deaths/Million#Trend | 0.002*** (0.001) | 0.002*** (0.001) | 0.002*** (0.001) |
| Comp Containment | -1.150*** (0.120) | | |
| Presidential#Comp Containment | | -0.794*** (0.150) | |
| Parliamentary#Comp Containment | | -1.371*** (0.157) | |
| Presidential#Deaths/Million | | -0.544** (0.204) | |
| Parliamentary#Deaths/Million | | -0.376** (0.156) | |
| Right#Comp Containment | | | -1.172*** (0.172) |
| Center#Comp Containment | | | -1.326*** (0.350) |
| Left#Comp Containment | | | -1.070*** (0.145) |
| Right#Deaths/Million | | | -0.419** (0.185) |
| Center#Deaths/Million | | | -0.291* (0.164) |
| Left#Deaths/Million | | | -0.387* (0.203) |
| Observations | 1,532 | 1,532 | 1,496 |
| R ² | 0.382 | 0.397 | 0.380 |
| Number of countries | 43 | 43 | 42 |

Notes: Standard errors are in parentheses. Errors are clustered at country level and all specifications include country fixed effects. Intercept is not reported. Estimates for Mon Policy Rate and Gov Consumption are omitted. *** p<0.01, ** p<0.05, * p<0.1. Deaths/Million corresponds to the deaths per million of inhabitants, and Trend, to the trend pandemic

variable after the 100th COVID case is registered. Comp Containment stands for the compulsory containment measure. Mon Policy Rate corresponds to the real monetary policy interest rate. Gov Consumption refers to general government final consumption as a proportion of GDP. Presidential and Parliamentary are the categories of the variable Gov System; Left, Center and Right are the categories of the variable Pol Orientation. # denotes an interaction term. The R² that the Table reports is the within R².

Table A5: FE panel regression estimations of BCI accounting for the interaction between political and institutional arrangements and the containment measures: Second part

| Variables | (1) | (2) | (3) | (4) |
|---|----------------------|----------------------|----------------------|----------------------|
| Trend | 0.006*** (0.002) | 0.006*** (0.002) | 0.006*** (0.002) | 0.006*** (0.002) |
| Deaths/Million#Trend | 0.002*** (0.001) | 0.002*** (0.001) | 0.002*** (0.001) | 0.002*** (0.001) |
| Trust in Gov - Below median#Comp Containment | -1.071*** (0.155) | | | |
| Trust in Gov - Above median#Comp Containment | -1.271*** (0.176) | | | |
| Trust in Gov - Below median#Deaths/Million | -0.377** (0.151) | | | |
| Trust in Gov - Above median#Deaths/Million | -0.461*** (0.159) | | | |
| FPC Govce Ind - Below median#Comp Containment | | -1.027*** (0.128) | | |
| FPC Govce Ind - Above median#Comp Containment | | -1.343*** (0.185) | | |
| FPC Govce Ind - Above median#Deaths/Million | | -0.458*** (0.161) | | |
| FPC Govce Ind - Above median#Deaths/Million | | -0.342** (0.152) | | |
| FPC Eco Freedom - Below median#Comp Containment | | | -1.153*** (0.132) | |
| FPC Eco Freedom - Above median#Comp Containment | | | -1.136*** (0.190) | |
| FPC Eco Freedom - Below median#Deaths/Million | | | -0.445*** (0.153) | |
| FPC Eco Freedom - Above median#Deaths/Million | | | -0.369** (0.155) | |
| PUI - Below median#Comp Containment | | | | -1.161*** (0.152) |
| PUI - Above median#Comp Containment | | | | -1.043*** (0.160) |
| PUI - Below median#Deaths/Million | | | | -0.560*** (0.197) |
| PUI - Above median#Deaths/Million | | | | -0.355** (0.144) |
| Observations | 1,413 | 1,532 | 1,532 | 1,460 |
| R ² | 0.429 | 0.387 | 0.382 | 0.382 |
| Number of countries | 40 | 43 | 43 | 41 |

Notes: Standard errors are in parentheses. Errors are clustered at country level and all specifications include country fixed

effects. Intercept is not reported. Estimates for Mon Policy Rate and Gov Consumption are omitted. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Deaths/Million corresponds to the deaths per million of inhabitants, and Trend, to the trend pandemic variable after the 100th COVID case is registered. Comp Containment stands for the compulsory containment measure. Mon Policy Rate corresponds to the real monetary policy interest rate. Gov Consumption refers to general government final consumption as a proportion of GDP. The first principal component (FPC) of the governance indicators and economic freedom variables are named FPC Govce Ind and FPC Eco Freedom, respectively. We lag FPC Govce Ind and FPC Eco Freedom one period. PUI is the acronym of pandemic uncertainty index. The variable - Above (Below) median # the compulsory or voluntary containment measure corresponds to the interaction between the indicator variable for above (below) median of the given variable, and the compulsory or voluntary containment measure, when corresponding. The R^2 that the Table reports is the within R^2 .

Table A6: FE panel regression estimates of BCI accounting for the interaction between PUI and the containment measures

| Variables | (1) | (2) |
|--|----------------------|----------------------|
| Deaths/Million | -0.391** (0.147) | |
| Trend | 0.006*** (0.002) | 0.006*** (0.002) |
| Deaths/Million#Trend | 0.002*** (0.001) | 0.002*** (0.001) |
| Comp Containment | -1.150*** (0.120) | |
| PUI - Below median#Emerging#Comp Containment | | -0.723*** (0.166) |
| PUI - Below median#Advanced#Comp Containment | | -1.436*** (0.201) |
| PUI - Above median#Emerging#Comp Containment | | -0.557** (0.251) |
| PUI - Above median#Advanced#Comp Containment | | -1.320*** (0.161) |
| PUI - Below median#Emerging#Deaths/Million | | -0.897 (0.750) |
| PUI - Below median#Advanced#Deaths/Million | | -0.481** (0.198) |
| PUI - Above median#Emerging#Deaths/Million | | -0.644 (0.389) |
| PUI - Above median#Advanced#Deaths/Million | | -0.331** (0.155) |
| Observations | 1,532 | 1,460 |
| R ² | 0.382 | 0.405 |
| Number of countries | 43 | 41 |

Notes: Standard errors are in parentheses. Errors are clustered at country level and all specifications include country fixed effects. Intercept is not reported. Estimates for Mon Policy Rate and Gov Consumption are omitted. *** p<0.01, ** p<0.05, * p<0.1. Deaths/Million corresponds to the deaths per million of inhabitants, and Trend, to the trend pandemic variable after the 100th COVID case is registered. Comp Containment stands for the compulsory containment measure. Mon Policy Rate corresponds to the real monetary policy interest rate. Gov Consumption refers to general government final consumption as a proportion of GDP. PUI is the acronym of pandemic uncertainty index. PUI - Above or Below median # Emerging or Advanced # the compulsory or voluntary containment measure correspond to the triple interaction between the indicator variable for above or below median of the variable PUI, the dummy variable for emerging or advanced economies, and the compulsory or voluntary containment measure, when corresponding. The R² that the Table reports is the within R².

Table A7: FE panel regression estimates of BCI accounting for regional heterogeneity

| Variables | (1) | (2) |
|---|----------------------|------------------------|
| Deaths/Million | -0.391** (0.147) | |
| Trend | 0.006*** (0.002) | 0.006*** (0.002) |
| Deaths/Million#Trend | 0.002*** (0.001) | 0.002*** (0.001) |
| Comp Containment | -1.150*** (0.120) | |
| North America#Comp Containment | | -1.419*** (0.320) |
| South & Central America #Comp Containment | | -0.475** (0.210) |
| Europe#Comp Containment | | -1.561*** (0.155) |
| Middle East & South Africa#Comp Containment | | -0.570*** (0.089) |
| Asia & Oceania#Comp Containment | | -0.898*** (0.129) |
| China#Comp Containment | | -0.462*** (0.033) |
| North America#Deaths/Million | | -0.272 (0.233) |
| South & Central America #Deaths/Million | | -0.566 (0.388) |
| Europe#Deaths/Million | | -0.340** (0.159) |
| Middle East & South Africa#Deaths/Million | | -0.536* (0.274) |
| Asia & Oceania#Deaths/Million | | 0.476 (0.432) |
| China#Deaths/Million | | -121.653*** (1.946) |
| Observations | 1,532 | 1,532 |
| R ² | 0.382 | 0.429 |
| Number of countries | 43 | 43 |

Notes: Standard errors are in parentheses. Errors are clustered at country level and all specifications include country fixed effects. Intercept is not reported. Estimates for Mon Policy Rate and Gov Consumption are omitted. *** p<0.01, **

$p < 0.05$, * $p < 0.1$. Deaths/Million corresponds to the deaths per million of inhabitants, and Trend, to the trend pandemic variable after the 100th COVID case is registered. Comp Containment stands for the compulsory containment measure. Mon Policy Rate corresponds to the real monetary policy interest rate. Gov Consumption refers to general government final consumption as a proportion of GDP. The specification reported in column (2) includes the interaction between the regions and the compulsory or the voluntary containment measure, when corresponding. The R^2 that the Table reports is the within R^2 .