Handout for Thesis Defense

Thesis: *Where did people die? An international assessment of a potentially positive relationship between economic development and the severity of COVID-19 outbreaks*.

by Jean-Baptiste Marigo

(1) Importance.

The COVID-19 crisis is a global pandemic with a heavy human and economic toll. Studying country level weaknesses to such an outbreak is crucial in order to:

- Identify the characteristics that make certain countries vulnerable to this type of pandemic shock, and their stakes for the future.
- Provide evidence and insights for policy design to correct these weaknesses, in anticipation of futures crises.

(2) Problem formulation.

It is widely accepted in the development economics literature that development increases a country's resilience to diseases. This relationship is questioned regarding a pandemic such as the COVID-19 one.

- There is a positive correlation between development indicators (using the HDI components) and COVID-19 severity (measured in deaths per million), with correlation coefficients around 0.46 to 0.71.
- My main hypothesis is that the pre-crisis characteristics of development are positive causal factors of COVID-19 severity at the country level.

(3) Methodology & Data.

Bayesian Model Averaging (BMA) is a method that allows to include many candidate variables and test all possible linear regression specifications to solve the model uncertainty issue, and compute weighted coefficients.

- This study uses data from the Johns Hopkins University, the WHO, UN programs, and other databases.
- With respect to previous papers, this work uses actualised data and a larger sample, up to 159 countries on the 01/01/2020 – 30/10/2022 period.
- Eight different BMA settings are used as robustness tests, increasing the reliability of the conclusions.

(4) Contribution.

- This thesis chooses an original perspective by trying to assess how country characteristics related to development acted as parameter of the severity of the pandemic, while the literature mainly focuses on the inverse relationship.
- The choice of a BMA approach that includes many candidate variables, the use of actualised data, and the careful choice of the temporal sequence of the predictors allow for the assessment of a causal relationship, beyond correlation. Thus, a reliable interpretation of the results can be made with respect to future policy recommendations.

(5) Response to Comments from Reviewers. *Prepare careful answers to all comments raised in the reports. This may take quite a lot of time at the defense*.

- *TBD when reports are available*.

Code_Jean-Baptiste_Marigo

April 27, 2023

[3]:
```
install.packages("remotes")
```

```
Installation du package dans 'C:/Users/admin/Documents/R/win-library/4.1'
(car 'lib' n'est pas spécifié)


package 'remotes' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
        C:\Users\admin\AppData\Local\Temp\RtmpopKEp9\downloaded_packages
```

[4]:
```
library("remotes")
```

```
Warning message:
"le package 'remotes' a été compilé avec la version R 4.1.3"
```

[2]:
```
install.packages("BMS")
```

```
  There is a binary version available but the source version is later:
    binary source needs_compilation
BMS  0.3.4  0.3.5             FALSE


installing the source package 'BMS'
```

[8]:
```
install.packages("ggplot2", repos='http://cran.us.r-project.org',␣
↪dependencies=TRUE, lib="C:/Users/admin/anaconda3/envs/r_env/Lib/R/library")
```

```
package 'ggplot2' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
        C:\Users\admin\AppData\Local\Temp\RtmpopKEp9\downloaded_packages
```

[5]:
```
install_gitlab("matmo/dilutbms2")
```

```
Skipping install of 'dilutBMS2' from a gitlab remote, the SHA1 (9daa95dd) has
not changed since last install.
```

```
Use `force = TRUE` to force installation
```

[7]:
```
library("BMS")
```

[6]:
```
library("dilutBMS2")
```

[9]:
```
library("ggplot2")
library("scales")
```

```
Warning message:
"le package 'ggplot2' a été compilé avec la version R 4.1.3"
Warning message:
"le package 'scales' a été compilé avec la version R 4.1.3"
```

[1]:
```
library("readxl")
```

[28]:
```
data <- read_excel("data.xlsx", sheet="data_0G_simple") #no Gini variable, no␣
 ↪government response variable
#using the largest dataset, based on the availability of data for the smallest␣
 ↪data column (which is for the democracy_average variable)
```

[29]:
```
data_log <- data
```

[30]:
```
data_log$total_deaths_per_million <- log(data_log$total_deaths_per_million) #ln␣
 ↪applied to tdpm
```

[31]:
```
data_gini <- read_excel("data.xlsx", sheet="data_1G_simple") #includes Gini␣
 ↪variable
```

[32]:
```
data_log_gini <- data_gini
```

[33]:
```
data_log_gini$total_deaths_per_million <-␣
 ↪log(data_gini$total_deaths_per_million) #ln applied to tdpm
```

[34]:
```
data_resp <- read_excel("data.xlsx", sheet="data_0G_resp_simple") #includes␣
 ↪government response variable
```

[35]:
```
data_resp_log <- data_resp
```

[36]:
```
data_resp_log$total_deaths_per_million <-␣
 ↪log(data_resp$total_deaths_per_million) #ln applied to tdpm
```

[37]:
```
data_gini_resp <- read_excel("data.xlsx", sheet="data_1G_resp_simple")␣
 ↪#includes Gini variable and government response variables
```

[38]:
```
data_gini_resp_log <- data_gini_resp
```

[39]:
```
data_gini_resp_log$total_deaths_per_million <-␣
↪log(data_gini_resp$total_deaths_per_million)
```

[40]:
```
cor_log <- data.frame(cor(data_resp_log, use="complete.obs")) #correlation␣
↪matrix for the dataset that includes the government response variables
#the correlation coefficients related to the Gini variable are computed␣
↪separately using the Gini variable sample
```

[41]:
```
cor_log
```

A data.frame: 21 × 21

	total_deaths_per_million <dbl>	le_average <dbl>	eys_average <dbl>
total_deaths_per_million	1.000000000	0.68046198	0.67730896
le_average	0.680461980	1.00000000	0.80528666
eys_average	0.677308965	0.80528666	1.00000000
mys_average	0.708533800	0.78510189	0.80616383
gnipc_average	0.463607381	0.75732093	0.69190678
pop_average	-0.163287796	0.01448002	-0.03333999
density_average	-0.007427224	0.17231188	0.09270464
median_age_average	0.717900054	0.85698061	0.81924029
democracy_average	0.582681647	0.59254859	0.64424736
CPI_average	0.448016758	0.68085474	0.70430500
CHE_average	0.361748277	0.61832968	0.63460287
overweight_prevalence_average	0.680767693	0.68897732	0.62967385
media_freedom_average	0.341498542	0.28626847	0.39958225
concentration_fpm_average	-0.513118596	-0.39268157	-0.48678992
stringency_period	0.274683656	0.16449044	0.11653680
vacc_rate_p1	0.509467004	0.78365306	0.68201396
hcq_cq	-0.462273831	-0.31393420	-0.33581697
iver	0.056117441	0.03437718	-0.09457496
remd	0.379860505	0.38502132	0.47523627
Favipiravir	0.083682932	0.09886111	0.08800536
Acetaminophen	0.392955092	0.50019546	0.56056659

[47]:
```
cor_log_gini <- cor_log <- data.frame(cor(data_gini_resp_log$Gini_average,␣
↪data_gini_resp_log, use="complete.obs"))
```

[49]:
```
cor_log_gini #computation of the correlation coefficients for the Gini␣
↪variable, based on the Gini sample
```

A data.frame: 1 × 22

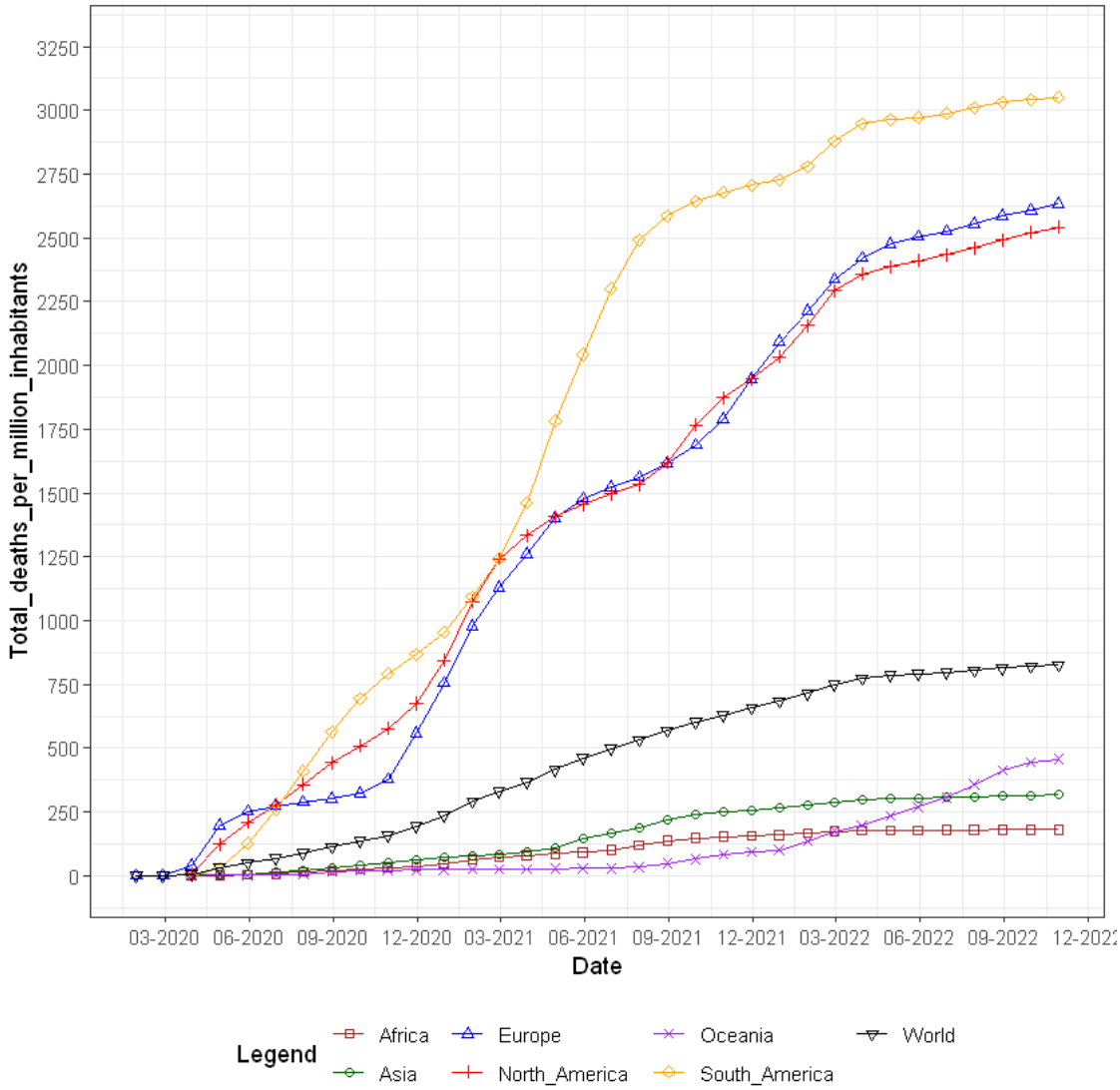
total_deaths_per_million <dbl>	le_mean <dbl>	eys_mean <dbl>	mys_mean <dbl>	gnipc_mean <dbl>	pop_me <dbl>
-0.1050422	-0.407914	-0.3179438	-0.3938593	-0.4368812	0.010897

[50]:
```
data_graph_tdpm <- read_excel("data.xlsx", sheet ="data_graph_tdpm")
```

[25]:
```
colors <- c("Africa" = "brown", "Asia" = "darkgreen", "Europe" = "blue",␣
 ↪"North_America"="red", "South_America"="orange",
                                  "Oceania"="purple", "World"="black")
data_graph_tdpm$Date <- as.Date(data_graph_tdpm$Date, '%d/%m/%Y')
require(ggplot2)
ggplot(data=data_graph_tdpm, aes(Date)) +
theme_bw()+
xlim(min(data_graph_tdpm$Date), max(data_graph_tdpm$Date))+
scale_y_continuous(limits = c(0, 3250), breaks = seq(0, 3250, by = 250))+
scale_x_date(date_breaks="3 months", labels = date_format("%m-%Y"))+
geom_point(aes(y=data_graph_tdpm$Africa, color="Africa", shape="Africa")) +
geom_line(aes(y=data_graph_tdpm$Africa, color="Africa")) +
geom_point(aes(y=data_graph_tdpm$Asia, color="Asia", shape="Asia")) +
geom_line(aes(y=data_graph_tdpm$Asia, color="Asia"))+
geom_point(aes(y=data_graph_tdpm$Europe, color="Europe", shape="Europe")) +
geom_line(aes(y=data_graph_tdpm$Europe, color="Europe"))+
geom_point(aes(y=data_graph_tdpm$North_America, color="North_America",␣
 ↪shape="North_America")) +
geom_line(aes(y=data_graph_tdpm$North_America, color="North_America"))+
geom_point(aes(y=data_graph_tdpm$South_America, color="South_America",␣
 ↪shape="South_America")) +
geom_line(aes(y=data_graph_tdpm$South_America, color="South_America"))+
geom_point(aes(y=data_graph_tdpm$Oceania, color="Oceania", shape="Oceania")) +
geom_line(aes(y=data_graph_tdpm$Oceania, color="Oceania"))+
geom_point(aes(y=data_graph_tdpm$World, color="World", shape="World")) +
geom_line(aes(y=data_graph_tdpm$World, color="World"))+
labs(y="Total_deaths_per_million_inhabitants")+
scale_colour_manual(name="Legend", values = colors)+
scale_shape_manual(name= "Legend", values = c(0, 1, 2, 3, 4, 5, 6, 7))+
theme(legend.position = "bottom")
```

```
Warning message in as.POSIXlt.POSIXct(x, tz = tz):
"unknown timezone '%d/%m/%Y'"
Scale for x is already present.
Adding another scale for x, which will replace the existing scale.
Warning message:
"Use of `data_graph_tdpm$Africa` is discouraged.
i Use `Africa` instead."
Warning message:
"Use of `data_graph_tdpm$Africa` is discouraged.
i Use `Africa` instead."
Warning message:
"Use of `data_graph_tdpm$Asia` is discouraged.
i Use `Asia` instead."
Warning message:
"Use of `data_graph_tdpm$Asia` is discouraged.
i Use `Asia` instead."
```

```
Warning message:
"Use of `data_graph_tdpm$Europe` is discouraged.
i Use `Europe` instead."
Warning message:
"Use of `data_graph_tdpm$Europe` is discouraged.
i Use `Europe` instead."
Warning message:
"Use of `data_graph_tdpm$North_America` is discouraged.
i Use `North_America` instead."
Warning message:
"Use of `data_graph_tdpm$North_America` is discouraged.
i Use `North_America` instead."
Warning message:
"Use of `data_graph_tdpm$South_America` is discouraged.
i Use `South_America` instead."
Warning message:
"Use of `data_graph_tdpm$South_America` is discouraged.
i Use `South_America` instead."
Warning message:
"Use of `data_graph_tdpm$Oceania` is discouraged.
i Use `Oceania` instead."
Warning message:
"Use of `data_graph_tdpm$Oceania` is discouraged.
i Use `Oceania` instead."
Warning message:
"Use of `data_graph_tdpm$World` is discouraged.
i Use `World` instead."
Warning message:
"Use of `data_graph_tdpm$World` is discouraged.
i Use `World` instead."
Warning message:
"Removed 2 rows containing missing values (`geom_point()`)."
Warning message:
"Removed 2 rows containing missing values (`geom_line()`)."
Warning message:
"Removed 2 rows containing missing values (`geom_point()`)."
Warning message:
"Removed 2 rows containing missing values (`geom_line()`)."
Warning message:
"Removed 2 rows containing missing values (`geom_point()`)."
Warning message:
"Removed 2 rows containing missing values (`geom_line()`)."
Warning message:
"Removed 2 rows containing missing values (`geom_point()`)."
Warning message:
"Removed 2 rows containing missing values (`geom_line()`)."
```

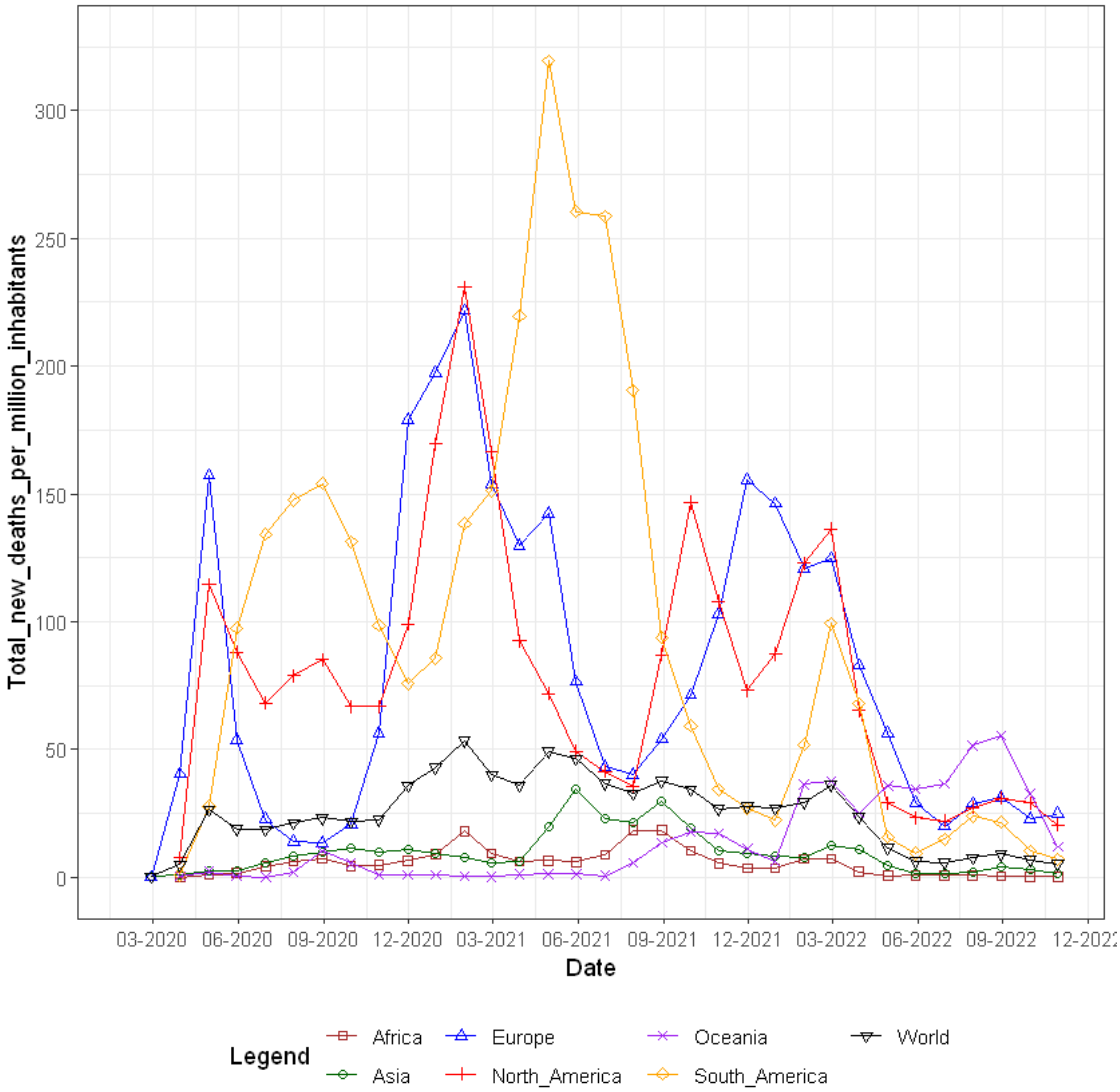


[90]:
```
data_graph_tdpm_new <- read_excel("data.xlsx", sheet ="data_graph_tdpm_new")
```

[106]:
```
colors <- c("Africa" = "brown", "Asia" = "darkgreen", "Europe" = "blue",␣
 ↪"North_America"="red", "South_America"="orange",
                                "Oceania"="purple", "World"="black")
data_graph_tdpm_new$Date <- as.Date(data_graph_tdpm_new$Date, '%d/%m/%Y')
require(ggplot2)
ggplot(data=data_graph_tdpm_new, aes(Date)) +
theme_bw()+
xlim(min(data_graph_tdpm_new$Date), max(data_graph_tdpm_new$Date))+
scale_y_continuous(limits = c(0, 325), breaks = seq(0, 325, by = 50))+
scale_x_date(date_breaks="3 months", labels = date_format("%m-%Y"))+
geom_point(aes(y=data_graph_tdpm_new$Africa, color="Africa", shape="Africa")) +
```

```
geom_line(aes(y=data_graph_tdpm_new$Africa, color="Africa")) +
geom_point(aes(y=data_graph_tdpm_new$Asia, color="Asia", shape="Asia")) +
geom_line(aes(y=data_graph_tdpm_new$Asia, color="Asia"))+
geom_point(aes(y=data_graph_tdpm_new$Europe, color="Europe", shape="Europe")) +
geom_line(aes(y=data_graph_tdpm_new$Europe, color="Europe"))+
geom_point(aes(y=data_graph_tdpm_new$North_America, color="North_America",␣
 ↪shape="North_America")) +
geom_line(aes(y=data_graph_tdpm_new$North_America, color="North_America"))+
geom_point(aes(y=data_graph_tdpm_new$South_America, color="South_America",␣
 ↪shape="South_America")) +
geom_line(aes(y=data_graph_tdpm_new$South_America, color="South_America"))+
geom_point(aes(y=data_graph_tdpm_new$Oceania, color="Oceania",␣
 ↪shape="Oceania")) +
geom_line(aes(y=data_graph_tdpm_new$Oceania, color="Oceania"))+
geom_point(aes(y=data_graph_tdpm_new$World, color="World", shape="World")) +
geom_line(aes(y=data_graph_tdpm_new$World, color="World"))+
labs(y="Total_new_deaths_per_million_inhabitants")+
scale_colour_manual(name="Legend", values = colors)+
scale_shape_manual(name= "Legend", values = c(0, 1, 2, 3, 4, 5, 6, 7))+
theme(legend.position = "bottom")
```

```
Scale for 'x' is already present. Adding another scale for 'x', which will
replace the existing scale.
Warning message:
"Removed 2 rows containing missing values (geom_point)."Warning message:
"Removed 2 rows containing missing values (geom_path)."Warning message:
"Removed 1 rows containing missing values (geom_point)."Warning message:
"Removed 1 rows containing missing values (geom_path)."Warning message:
"Removed 1 rows containing missing values (geom_point)."Warning message:
"Removed 1 rows containing missing values (geom_path)."Warning message:
"Removed 2 rows containing missing values (geom_point)."Warning message:
"Removed 2 rows containing missing values (geom_path)."Warning message:
"Removed 2 rows containing missing values (geom_point)."Warning message:
"Removed 2 rows containing missing values (geom_path)."Warning message:
"Removed 2 rows containing missing values (geom_point)."Warning message:
"Removed 2 rows containing missing values (geom_path)."Warning message:
"Removed 1 rows containing missing values (geom_point)."Warning message:
"Removed 1 rows containing missing values (geom_path)."
```



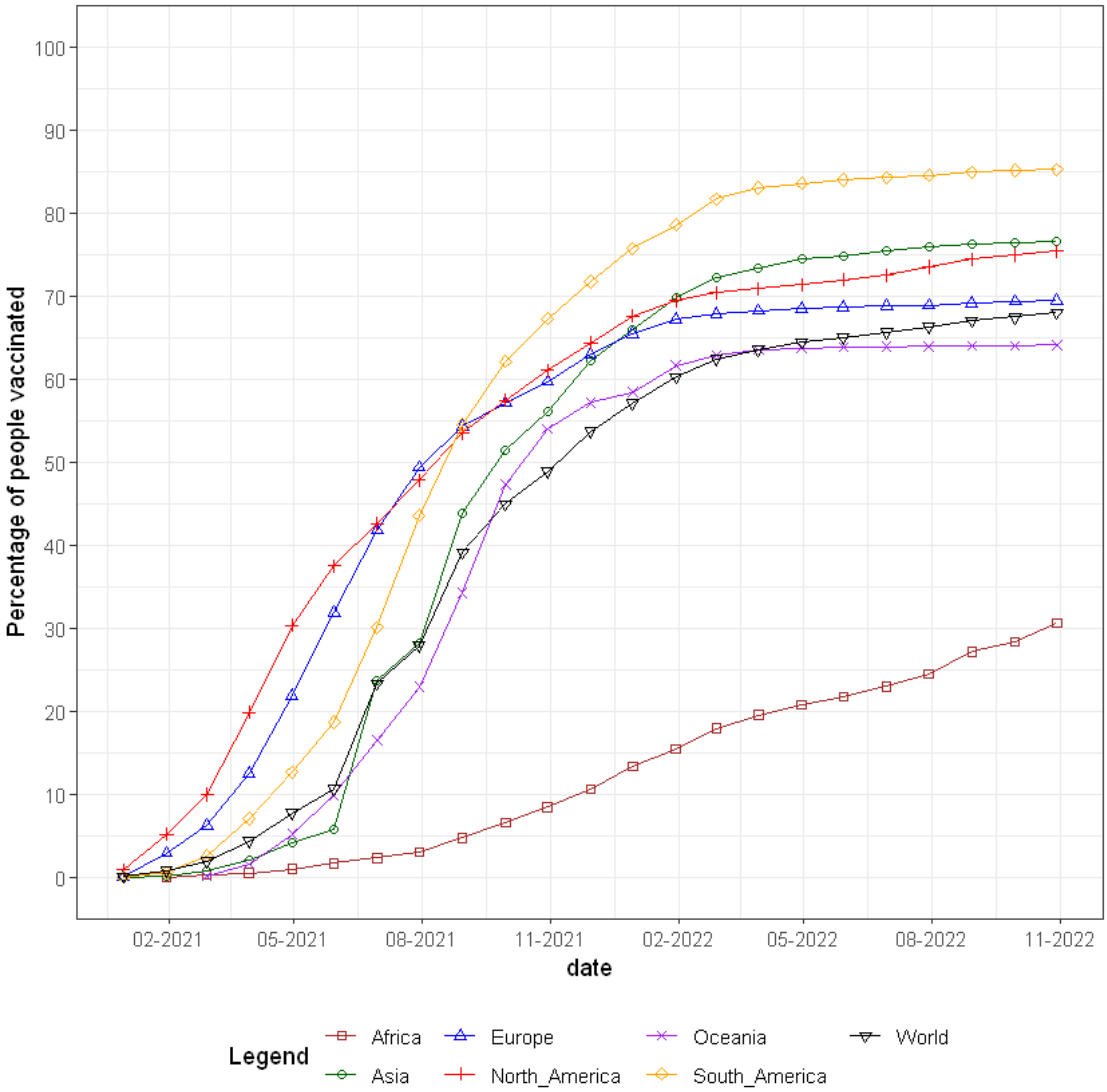
[62]:
```
data_graph_vacc <- read_excel("data.xlsx", sheet ="data_graph_vacc")
```

[58]:
```
colors <- c("Africa" = "brown", "Asia" = "darkgreen", "Europe" = "blue",␣
 ↪"North_America"="red", "South_America"="orange",
                                "Oceania"="purple", "World"="black")
data_graph_vacc$date <- as.Date(data_graph_vacc$date, '%d/%m/%Y')
require(ggplot2)
ggplot(data=data_graph_vacc, aes(date)) +
theme_bw()+
xlim(min(data_graph_vacc$date), max(data_graph_vacc$date))+
scale_y_continuous(limits = c(0, 100), breaks = seq(0, 100, by = 10))+
scale_x_date(date_breaks="3 months", labels = date_format("%m-%Y"))+
geom_point(aes(y=data_graph_vacc$Africa, color="Africa", shape="Africa")) +
```

```
geom_line(aes(y=data_graph_vacc$Africa, color="Africa")) +
geom_point(aes(y=data_graph_vacc$Asia, color="Asia", shape="Asia")) +
geom_line(aes(y=data_graph_vacc$Asia, color="Asia"))+
geom_point(aes(y=data_graph_vacc$Europe, color="Europe", shape="Europe")) +
geom_line(aes(y=data_graph_vacc$Europe, color="Europe"))+
geom_point(aes(y=data_graph_vacc$North_America, color="North_America",␣
 ↪shape="North_America")) +
geom_line(aes(y=data_graph_vacc$North_America, color="North_America"))+
geom_point(aes(y=data_graph_vacc$South_America, color="South_America",␣
 ↪shape="South_America")) +
geom_line(aes(y=data_graph_vacc$South_America, color="South_America"))+
geom_point(aes(y=data_graph_vacc$Oceania, color="Oceania", shape="Oceania")) +
geom_line(aes(y=data_graph_vacc$Oceania, color="Oceania"))+
geom_point(aes(y=data_graph_vacc$World, color="World", shape="World")) +
geom_line(aes(y=data_graph_vacc$World, color="World"))+
labs(y="Percentage of people vaccinated")+
scale_colour_manual(name="Legend", values = colors)+
scale_shape_manual(name= "Legend", values = c(0, 1, 2, 3, 4, 5, 6, 7))+
theme(legend.position = "bottom")
```

```
Warning message in as.POSIXlt.POSIXct(x, tz = tz):
"unknown timezone '%d/%m/%Y'"
Scale for x is already present.
Adding another scale for x, which will replace the existing scale.
Warning message:
"Use of `data_graph_vacc$Africa` is discouraged.
i Use `Africa` instead."
Warning message:
"Use of `data_graph_vacc$Africa` is discouraged.
i Use `Africa` instead."
Warning message:
"Use of `data_graph_vacc$Asia` is discouraged.
i Use `Asia` instead."
Warning message:
"Use of `data_graph_vacc$Asia` is discouraged.
i Use `Asia` instead."
Warning message:
"Use of `data_graph_vacc$Europe` is discouraged.
i Use `Europe` instead."
Warning message:
"Use of `data_graph_vacc$Europe` is discouraged.
i Use `Europe` instead."
Warning message:
"Use of `data_graph_vacc$North_America` is discouraged.
i Use `North_America` instead."
Warning message:
"Use of `data_graph_vacc$North_America` is discouraged.
```

```
i Use `North_America` instead."
Warning message:
"Use of `data_graph_vacc$South_America` is discouraged.
i Use `South_America` instead."
Warning message:
"Use of `data_graph_vacc$South_America` is discouraged.
i Use `South_America` instead."
Warning message:
"Use of `data_graph_vacc$Oceania` is discouraged.
i Use `Oceania` instead."
Warning message:
"Use of `data_graph_vacc$Oceania` is discouraged.
i Use `Oceania` instead."
Warning message:
"Use of `data_graph_vacc$World` is discouraged.
i Use `World` instead."
Warning message:
"Use of `data_graph_vacc$World` is discouraged.
i Use `World` instead."
Warning message:
"Removed 1 rows containing missing values (`geom_point()`)."
Warning message:
"Removed 1 row containing missing values (`geom_line()`)."
Warning message:
"Removed 2 rows containing missing values (`geom_point()`)."
Warning message:
"Removed 2 rows containing missing values (`geom_line()`)."
```



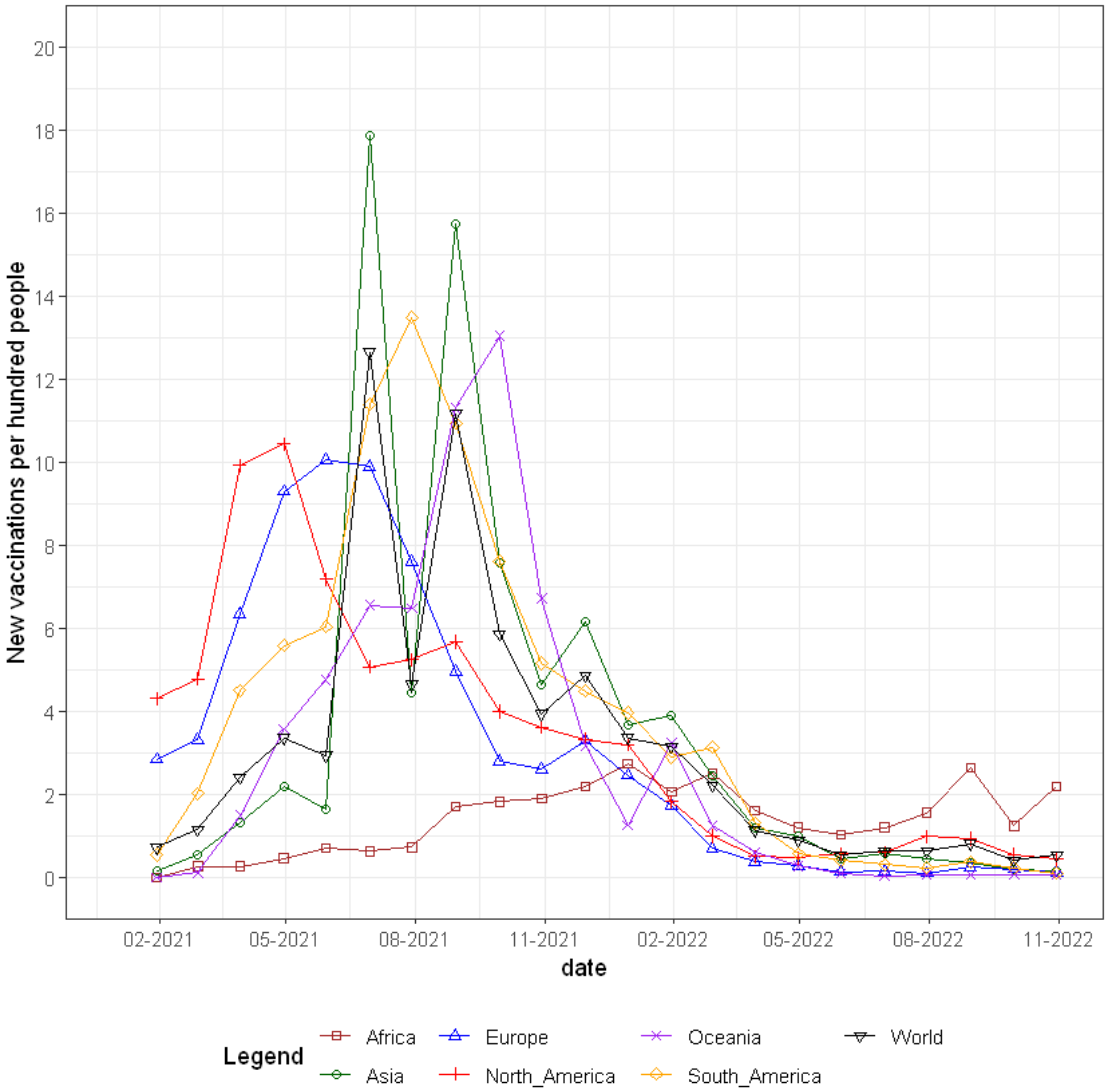
[61]:
```
data_graph_vacc_new <- read_excel("data.xlsx", sheet ="data_graph_vacc_new")
```

[67]:
```
colors <- c("Africa" = "brown", "Asia" = "darkgreen", "Europe" = "blue",␣
 ↪"North_America"="red", "South_America"="orange",
                                "Oceania"="purple", "World"="black")
data_graph_vacc_new$date <- as.Date(data_graph_vacc_new$date, '%d/%m/%Y')
require(ggplot2)
ggplot(data=data_graph_vacc_new, aes(date)) +
theme_bw()+
xlim(min(data_graph_vacc_new$date), max(data_graph_vacc_new$date))+
scale_y_continuous(limits = c(0, 20), breaks = seq(0, 20, by = 2))+
scale_x_date(date_breaks="3 months", labels = date_format("%m-%Y"))+
geom_point(aes(y=data_graph_vacc_new$Africa, color="Africa", shape="Africa")) +
```

```
geom_line(aes(y=data_graph_vacc_new$Africa, color="Africa")) +
geom_point(aes(y=data_graph_vacc_new$Asia, color="Asia", shape="Asia")) +
geom_line(aes(y=data_graph_vacc_new$Asia, color="Asia"))+
geom_point(aes(y=data_graph_vacc_new$Europe, color="Europe", shape="Europe")) +
geom_line(aes(y=data_graph_vacc_new$Europe, color="Europe"))+
geom_point(aes(y=data_graph_vacc_new$North_America, color="North_America",␣
 ↪shape="North_America")) +
geom_line(aes(y=data_graph_vacc_new$North_America, color="North_America"))+
geom_point(aes(y=data_graph_vacc_new$South_America, color="South_America",␣
 ↪shape="South_America")) +
geom_line(aes(y=data_graph_vacc_new$South_America, color="South_America"))+
geom_point(aes(y=data_graph_vacc_new$Oceania, color="Oceania",␣
 ↪shape="Oceania")) +
geom_line(aes(y=data_graph_vacc_new$Oceania, color="Oceania"))+
geom_point(aes(y=data_graph_vacc_new$World, color="World", shape="World")) +
geom_line(aes(y=data_graph_vacc_new$World, color="World"))+
labs(y="New vaccinations per hundred people")+
scale_colour_manual(name="Legend", values = colors)+
scale_shape_manual(name= "Legend", values = c(0, 1, 2, 3, 4, 5, 6, 7))+
theme(legend.position = "bottom")
```

```
Scale for x is already present.
Adding another scale for x, which will replace the existing scale.
Warning message:
"Use of `data_graph_vacc_new$Africa` is discouraged.
i Use `Africa` instead."
Warning message:
"Use of `data_graph_vacc_new$Africa` is discouraged.
i Use `Africa` instead."
Warning message:
"Use of `data_graph_vacc_new$Asia` is discouraged.
i Use `Asia` instead."
Warning message:
"Use of `data_graph_vacc_new$Asia` is discouraged.
i Use `Asia` instead."
Warning message:
"Use of `data_graph_vacc_new$Europe` is discouraged.
i Use `Europe` instead."
Warning message:
"Use of `data_graph_vacc_new$Europe` is discouraged.
i Use `Europe` instead."
Warning message:
"Use of `data_graph_vacc_new$North_America` is discouraged.
i Use `North_America` instead."
Warning message:
"Use of `data_graph_vacc_new$North_America` is discouraged.
i Use `North_America` instead."
```

```
Warning message:
"Use of `data_graph_vacc_new$South_America` is discouraged.
i Use `South_America` instead."
Warning message:
"Use of `data_graph_vacc_new$South_America` is discouraged.
i Use `South_America` instead."
Warning message:
"Use of `data_graph_vacc_new$Oceania` is discouraged.
i Use `Oceania` instead."
Warning message:
"Use of `data_graph_vacc_new$Oceania` is discouraged.
i Use `Oceania` instead."
Warning message:
"Use of `data_graph_vacc_new$World` is discouraged.
i Use `World` instead."
Warning message:
"Use of `data_graph_vacc_new$World` is discouraged.
i Use `World` instead."
Warning message:
"Removed 1 rows containing missing values (`geom_point()`)."
Warning message:
"Removed 1 row containing missing values (`geom_line()`)."
Warning message:
"Removed 1 rows containing missing values (`geom_point()`)."
Warning message:
"Removed 1 row containing missing values (`geom_line()`)."
Warning message:
"Removed 1 rows containing missing values (`geom_point()`)."
Warning message:
"Removed 1 row containing missing values (`geom_line()`)."
Warning message:
"Removed 1 rows containing missing values (`geom_point()`)."
Warning message:
"Removed 1 row containing missing values (`geom_line()`)."
Warning message:
"Removed 1 rows containing missing values (`geom_point()`)."
Warning message:
"Removed 1 row containing missing values (`geom_line()`)."
Warning message:
"Removed 1 rows containing missing values (`geom_point()`)."
Warning message:
"Removed 1 row containing missing values (`geom_line()`)."
Warning message:
"Removed 1 rows containing missing values (`geom_point()`)."
Warning message:
"Removed 1 row containing missing values (`geom_line()`)."
```



[36]:
```
results_log <- bms(data_log, mcmc="enumerate", mprior="uniform", g="UIP", user.
↪int=F)
```

```
Warning message in bms(data_log, mcmc = "enumerate", mprior = "uniform", g =
"UIP", :
"Argument 'X.data' contains NAs. The corresponding rows have not been taken into
account."
```

[37]:
```
results_log_dilut <- bms(data_log, mcmc="enumerate", mprior="dilut", g="UIP",␣
↪user.int=F)
```

```
Warning message in bms(data_log, mcmc = "enumerate", mprior = "dilut", g =
"UIP", :
```

```
"Argument 'X.data' contains NAs. The corresponding rows have not been taken into
account."
```

[38]:
```
results_log
```

```
                                    PIP     Post Mean      Post SD
overweight_prevalence_average 0.99999071  4.089223e-02 7.299625e-03
democracy_average             0.99907922  3.189874e-01 8.192958e-02
median_age_average            0.99741019  8.450809e-02 1.950977e-02
CPI_average                   0.68436523 -1.735752e-02 1.441372e-02
CHE_average                   0.67384954 -1.433783e-04 1.216122e-04
pop_average                   0.66375665 -9.098095e-07 7.861474e-07
mys_average                   0.34597604  3.266759e-02 5.336564e-02
media_freedom_average         0.25367995 -3.828924e-03 8.026425e-03
concentration_fpm_average     0.23600980 -2.885674e-03 6.397070e-03
gnipc_average                 0.15800072 -1.912667e-06 6.145948e-06
eys_average                   0.10365334  4.587437e-03 2.190039e-02
density_average               0.08303353 -3.031994e-06 3.856093e-05
le_average                    0.07826287 -1.022574e-05 6.641710e-03
                              Cond.Pos.Sign Idx
overweight_prevalence_average    1.00000000  11
democracy_average                1.00000000   8
median_age_average               1.00000000   7
CPI_average                      0.00001014   9
CHE_average                      0.00000000  10
pop_average                      0.00000001   5
mys_average                      1.00000000   3
media_freedom_average            0.00098845  12
concentration_fpm_average        0.00000000  13
gnipc_average                    0.02278606   4
eys_average                      0.99995096   2
density_average                  0.24410851   6
le_average                       0.55693857   1

Mean no. regressors              Draws             Burnins                Time
          "6.2771"              "8192"                "0"    "0.5585389 secs"
 No. models visited      Modelspace 2^K          % visited         % Topmodels
            "8192"              "8192"              "100"               "6.1"
          Corr PMP           No. Obs.        Model Prior             g-Prior
              "NA"              "159"    "uniform / 6.5"               "UIP"
    Shrinkage-Stats
        "Av=0.9938"
```

[39]:
```
results_log_dilut
```

```
                                    PIP     Post Mean      Post SD
overweight_prevalence_average 0.99999520  4.226129e-02 7.004459e-03
```

```
democracy_average             0.99777499  3.009318e-01 7.634558e-02
median_age_average            0.99672693  8.804052e-02 1.769767e-02
pop_average                   0.60768767 -8.048772e-07 7.710597e-07
CHE_average                   0.60065925 -1.477545e-04 1.345648e-04
CPI_average                   0.50180314 -1.464626e-02 1.604252e-02
concentration_fpm_average     0.19516460 -2.646751e-03 6.345252e-03
media_freedom_average         0.12078432 -1.882518e-03 6.013589e-03
mys_average                   0.11073152  1.072025e-02 3.489467e-02
gnipc_average                 0.07976041 -1.467428e-06 5.793881e-06
density_average               0.07732162 -3.192225e-06 3.752208e-05
eys_average                   0.02849253  1.317311e-03 1.180548e-02
le_average                    0.01593488  1.719034e-05 2.990204e-03
                              Cond.Pos.Sign Idx
overweight_prevalence_average    1.00000000  11
democracy_average                1.00000000   8
median_age_average               1.00000000   7
pop_average                      0.00000004   5
CHE_average                      0.00000000  10
CPI_average                      0.00000828   9
concentration_fpm_average        0.00000000  13
media_freedom_average            0.00366866  12
mys_average                      1.00000000   3
gnipc_average                    0.00267828   4
density_average                  0.31663045   6
eys_average                      0.99980568   2
le_average                       0.63504629   1

Mean no. regressors              Draws             Burnins                Time
          "5.3328"              "8192"                 "0"    "1.199748 secs"
 No. models visited     Modelspace 2^K          % visited         % Topmodels
            "8192"              "8192"              "100"               "6.1"
          Corr PMP           No. Obs.        Model Prior             g-Prior
             "NA"              "159"      "dilut / 6.5"               "UIP"
    Shrinkage-Stats
        "Av=0.9938"
```

[40]:
```
coef(results_log, std.coefs=T, order.by.pip=T, include.constant=T)
```

	PIP	Post Mean	Post SD	Cond.Pos.Sign	Idx
overweight_prevalence_average	0.99999071	3.671310e-01	0.06553612	1.00000000	11
democracy_average	0.99907922	3.802234e-01	0.09765760	1.00000000	8
median_age_average	0.99741019	4.377392e-01	0.10105767	1.00000000	7
CPI_average	0.68436523	-1.844715e-01	0.15318559	0.00001014	9
CHE_average	0.67384954	-1.494644e-01	0.12677438	0.00000000	10
pop_average	0.66375665	-8.083751e-02	0.06985001	0.00000001	5
mys_average	0.34597604	6.072029e-02	0.09919242	1.00000000	3
media_freedom_average	0.25367995	-3.254588e-02	0.06822467	0.00098845	12
concentration_fpm_average	0.23600980	-2.337155e-02	0.05181092	0.00000000	13
gnipc_average	0.15800072	-2.100040e-02	0.06748033	0.02278606	4
eys_average	0.10365334	7.692664e-03	0.03672472	0.99995096	2
density_average	0.08303353	-1.183731e-03	0.01505471	0.24410851	6
le_average	0.07826287	-4.652531e-05	0.03021860	0.55693857	1
(Intercept)	1.00000000	5.612335e-01	NA	NA	0

[41]:
```
coef(results_log_dilut, std.coefs=T, order.by.pip=T, include.constant=T)
```

	PIP	Post Mean	Post SD	Cond.Pos.Sign	Idx
overweight_prevalence_average	0.99999520	0.379422404	0.06288612	1.00000000	11
democracy_average	0.99777499	0.358701630	0.09100164	1.00000000	8
median_age_average	0.99672693	0.456036699	0.09167127	1.00000000	7
pop_average	0.60768767	-0.071514170	0.06850945	0.00000004	5
CHE_average	0.60065925	-0.154026377	0.14027680	0.00000000	10
CPI_average	0.50180314	-0.155656948	0.17049603	0.00000828	9
concentration_fpm_average	0.19516460	-0.021436471	0.05139125	0.00000000	13
media_freedom_average	0.12078432	-0.016001413	0.05111555	0.00366866	12
mys_average	0.11073152	0.019926074	0.06485984	1.00000000	3
gnipc_average	0.07976041	-0.016111843	0.06361476	0.00267828	4
density_average	0.07732162	-0.001246287	0.01464913	0.31663045	6
eys_average	0.02849253	0.002208997	0.01979659	0.99980568	2
le_average	0.01593488	0.000078213	0.01360489	0.63504629	1
(Intercept)	1.00000000	0.508283244	NA	NA	0

[42]:
```
results_log_gini <- bms(data_log_gini, mcmc="enumerate", mprior="uniform",␣
↪g="UIP", user.int=F) #with log10(tdpm) and with gini
```

```
Warning message in bms(data_log_gini, mcmc = "enumerate", mprior = "uniform", g
= "UIP", :
"Argument 'X.data' contains NAs. The corresponding rows have not been taken into
account."
```

[43]:
```
results_log_gini_dilut <- bms(data_log_gini, mcmc="enumerate", mprior="dilut",␣
↪g="UIP", user.int=F) #with log10(tdpm) and with gini
```

```
Warning message in bms(data_log_gini, mcmc = "enumerate", mprior = "dilut", g =
"UIP", :
"Argument 'X.data' contains NAs. The corresponding rows have not been taken into
```

account."

[44]:
```
results_log_gini
```

```
                              PIP     Post Mean      Post SD Cond.Pos.Sign
%Overweight_average       0.99763414  4.066055e-02 1.021104e-02    1.00000000
medianage_mean            0.96056724  8.533905e-02 3.343762e-02    1.00000000
democracy_average         0.85871659  2.051302e-01 1.216808e-01    1.00000000
Gini_average              0.68204638  2.778928e-02 2.306646e-02    0.99998633
concentration_fpm_average 0.60117142 -1.604529e-02 1.563287e-02    0.00000000
pop_mean                  0.58348660 -8.375634e-07 8.484703e-07    0.00013750
mys_mean                  0.56716376  7.043346e-02 7.437956e-02    1.00000000
CPI_average               0.48135223 -1.147198e-02 1.404554e-02    0.00106868
CHE_average               0.42039328 -7.969050e-05 1.107189e-04    0.00000010
gnipc_mean                0.36875513 -9.514058e-06 1.479153e-05    0.00044096
MediaFreedom_average      0.33503523 -6.281852e-03 1.093194e-02    0.03353922
density_mean              0.10405116  2.858159e-05 1.722024e-04    0.92444036
le_mean                   0.10179513  9.139263e-04 9.079904e-03    0.70832045
eys_mean                  0.08954349 -7.684294e-04 1.826608e-02    0.36099753
                          Idx
%Overweight_average        12
medianage_mean              7
democracy_average           8
Gini_average               10
concentration_fpm_average  14
pop_mean                    5
mys_mean                    3
CPI_average                 9
CHE_average                11
gnipc_mean                  4
MediaFreedom_average       13
density_mean                6
le_mean                     1
eys_mean                    2

Mean no. regressors              Draws             Burnins                Time
          "7.1517"             "16384"                 "0"   "0.9624588 secs"
 No. models visited      Modelspace 2^K          % visited         % Topmodels
           "16384"             "16384"              "100"               "3.1"
          Corr PMP           No. Obs.        Model Prior             g-Prior
              "NA"              "124"      "uniform / 7"               "UIP"
    Shrinkage-Stats
         "Av=0.992"
```

[45]:
```
results_log_gini_dilut
```

```
                              PIP     Post Mean      Post SD Cond.Pos.Sign
```

```
%Overweight_average       0.99728582  4.292888e-02 1.020413e-02    1.00000000
medianage_mean            0.93041922  8.995492e-02 3.747549e-02    1.00000000
democracy_average         0.71754434  1.612765e-01 1.258517e-01    1.00000000
Gini_average              0.62468632  2.779328e-02 2.511105e-02    0.99995972
concentration_fpm_average 0.55819773 -1.684599e-02 1.700820e-02    0.00000000
pop_mean                  0.51276304 -7.200469e-07 8.221019e-07    0.00095474
CHE_average               0.44342511 -9.519681e-05 1.184800e-04    0.00000001
CPI_average               0.36425032 -9.820065e-03 1.422656e-02    0.00091562
mys_mean                  0.26326762  3.688703e-02 6.919256e-02    1.00000000
gnipc_mean                0.20397106 -5.671346e-06 1.221328e-05    0.00009169
MediaFreedom_average      0.15603960 -2.754911e-03 8.029182e-03    0.09003310
density_mean              0.09977148  3.372228e-05 1.800541e-04    0.96214533
le_mean                   0.02706818  5.219799e-04 5.566824e-03    0.89620182
eys_mean                  0.02142073  1.929841e-04 8.890744e-03    0.64556898
                          Idx
%Overweight_average        12
medianage_mean              7
democracy_average           8
Gini_average               10
concentration_fpm_average  14
pop_mean                    5
CHE_average                11
CPI_average                 9
mys_mean                    3
gnipc_mean                  4
MediaFreedom_average       13
density_mean                6
le_mean                     1
eys_mean                    2

Mean no. regressors              Draws             Burnins                Time
          "5.9201"              "16384"                 "0"    "2.045546 secs"
 No. models visited      Modelspace 2^K          % visited         % Topmodels
          "16384"              "16384"              "100"               "3.1"
          Corr PMP            No. Obs.        Model Prior             g-Prior
             "NA"               "124"        "dilut / 7"               "UIP"
    Shrinkage-Stats
         "Av=0.992"
```

[46]:
```
coef(results_log_gini, std.coefs=T, order.by.pip=T, include.constant=T)
```

	PIP	Post Mean	Post SD	Cond.Pos.Sign	Idx
%Overweight_average	0.99763414	0.348113773	0.08742142	1.00000000	12
medianage_mean	0.96056724	0.449891180	0.17627672	1.00000000	7
democracy_average	0.85871659	0.230897130	0.13696545	1.00000000	8
Gini_average	0.68204638	0.120367088	0.09991058	0.99998633	10
concentration_fpm_average	0.60117142	-0.121610732	0.11848492	0.00000000	14
pop_mean	0.58348660	-0.083000563	0.08408141	0.00013750	5
mys_mean	0.56716376	0.133192231	0.14065446	1.00000000	3
CPI_average	0.48135223	-0.118242802	0.14476874	0.00106868	9
CHE_average	0.42039328	-0.089314068	0.12408955	0.00000010	11
gnipc_mean	0.36875513	-0.097059494	0.15089864	0.00044096	4
MediaFreedom_average	0.33503523	-0.049546591	0.08622300	0.03353922	13
density_mean	0.10405116	0.003203117	0.01929860	0.92444036	6
le_mean	0.10179513	0.004187438	0.04160241	0.70832045	1
eys_mean	0.08954349	-0.001317461	0.03131693	0.36099753	2
(Intercept)	1.00000000	0.352002176	NA	NA	0

[47]:
```
coef(results_log_gini_dilut, std.coefs=T, order.by.pip=T, include.constant=T)
```

	PIP	Post Mean	Post SD	Cond.Pos.Sign	Idx
%Overweight_average	0.99728582	0.3675340076	0.08736229	1.00000000	12
medianage_mean	0.93041922	0.4742251530	0.19756363	1.00000000	7
democracy_average	0.71754434	0.1815348168	0.14166027	1.00000000	8
Gini_average	0.62468632	0.1203844373	0.10876653	0.99995972	10
concentration_fpm_average	0.55819773	-0.1276794286	0.12890880	0.00000000	14
pop_mean	0.51276304	-0.0713549560	0.08146837	0.00095474	5
CHE_average	0.44342511	-0.1066929534	0.13278790	0.00000001	11
CPI_average	0.36425032	-0.1012163897	0.14663456	0.00091562	9
mys_mean	0.26326762	0.0697547219	0.13084564	1.00000000	3
gnipc_mean	0.20397106	-0.0578573308	0.12459615	0.00009169	4
MediaFreedom_average	0.15603960	-0.0217286978	0.06332824	0.09003310	13
density_mean	0.09977148	0.0037792315	0.02017853	0.96214533	6
le_mean	0.02706818	0.0023916136	0.02550614	0.89620182	1
eys_mean	0.02142073	0.0003308685	0.01524306	0.64556898	2
(Intercept)	1.00000000	0.3358309712	NA	NA	0

[48]:
```
results_resp_log <- bms(data_resp_log, mcmc="enumerate", mprior="uniform",␣
↪g="UIP", user.int=F)
```

```
Warning message in bms(data_resp_log, mcmc = "enumerate", mprior = "uniform", g
= "UIP", :
"Argument 'X.data' contains NAs. The corresponding rows have not been taken into
account."
```

[49]:
```
results_resp_log_dilut <- bms(data_resp_log, mcmc="enumerate", mprior="dilut",␣
↪g="UIP", user.int=F)
```

```
Warning message in bms(data_resp_log, mcmc = "enumerate", mprior = "dilut", g =
```

```
"UIP", :
"Argument 'X.data' contains NAs. The corresponding rows have not been taken into
account."
```

[50]:
```
results_resp_log
```

```
                                    PIP     Post Mean      Post SD
overweight_prevalence_average 0.99999748  3.711770e-02 6.261863e-03
stringency_period             0.99997983  4.213231e-02 7.744195e-03
median_age_average            0.99987498  8.132488e-02 1.508318e-02
democracy_average             0.99895002  2.558398e-01 6.926465e-02
pop_average                   0.99225895 -1.895488e-06 5.167306e-07
hcq_cq                        0.98371772 -6.587272e-01 1.983675e-01
CHE_average                   0.72772370 -1.390218e-04 1.010513e-04
gnipc_average                 0.32039866 -5.112796e-06 8.792777e-06
CPI_average                   0.21102047 -2.933024e-03 7.136902e-03
vacc_rate_p1                  0.20346990 -1.384413e-02 3.446185e-02
media_freedom_average         0.19888211 -2.722847e-03 6.938711e-03
mys_average                   0.14829874  7.983385e-03 2.554826e-02
le_average                    0.10557357 -1.779599e-03 8.819423e-03
density_average               0.10400791 -7.484783e-06 4.400735e-05
Acetaminophen                 0.10252176 -1.950069e-02 9.707497e-02
Favipiravir                   0.09171555  1.742738e-02 1.057613e-01
concentration_fpm_average     0.08869714 -2.912606e-04 2.296217e-03
iver                          0.08729745 -1.222480e-02 8.711275e-02
remd                          0.08166879  5.828561e-03 7.099898e-02
eys_average                   0.07828301  7.631802e-04 1.378714e-02
                              Cond.Pos.Sign Idx
overweight_prevalence_average    1.00000000  11
stringency_period                1.00000000  14
median_age_average               1.00000000   7
democracy_average                1.00000000   8
pop_average                      0.00000000   5
hcq_cq                           0.00000000  16
CHE_average                      0.00001416  10
gnipc_average                    0.00002306   4
CPI_average                      0.00046750   9
vacc_rate_p1                     0.00002070  15
media_freedom_average            0.00324860  12
mys_average                      1.00000000   3
le_average                       0.02539096   1
density_average                  0.15117649   6
Acetaminophen                    0.00037205  20
Favipiravir                      0.99968626  19
concentration_fpm_average        0.17581797  13
iver                             0.00313975  17
remd                             0.84143168  18
eys_average                      0.79644351   2
```

```
Mean no. regressors              Draws             Burnins                Time
          "8.5243"          "1048576"                "0"    "1.009265 mins"
 No. models visited      Modelspace 2^K          % visited         % Topmodels
          "1048576"             "1e+06"              "100"             "0.048"
           Corr PMP           No. Obs.        Model Prior             g-Prior
               "NA"              "152"     "uniform / 10"               "UIP"
   Shrinkage-Stats
       "Av=0.9935"
```

[51]:
```
results_resp_log_dilut
```

```
                                    PIP     Post Mean      Post SD
overweight_prevalence_average 0.99999805  3.699891e-02 6.088057e-03
stringency_period             0.99998207  4.232435e-02 7.646716e-03
median_age_average            0.99986850  8.060352e-02 1.380759e-02
democracy_average             0.99792362  2.401609e-01 5.954535e-02
pop_average                   0.99121614 -1.871502e-06 5.105246e-07
hcq_cq                        0.98485859 -6.712134e-01 1.970704e-01
CHE_average                   0.71276890 -1.463209e-04 1.043728e-04
gnipc_average                 0.25312076 -4.837993e-06 8.974056e-06
vacc_rate_p1                  0.10235668 -6.508905e-03 2.387235e-02
CPI_average                   0.09908539 -1.773225e-03 6.071470e-03
density_average               0.09642475 -7.309195e-06 4.231529e-05
Favipiravir                   0.08471341  1.636796e-02 1.022969e-01
iver                          0.07657679 -9.417408e-03 7.881045e-02
media_freedom_average         0.06066176 -7.529177e-04 3.824025e-03
Acetaminophen                 0.05349948 -9.594778e-03 6.757836e-02
concentration_fpm_average     0.05144845 -2.042681e-04 1.834676e-03
remd                          0.05107744  2.818162e-03 5.184222e-02
mys_average                   0.03837247  2.060483e-03 1.348507e-02
le_average                    0.02133139 -3.685740e-04 3.947746e-03
eys_average                   0.02026184  1.566812e-04 6.864638e-03
                              Cond.Pos.Sign Idx
overweight_prevalence_average    1.00000000  11
stringency_period                1.00000000  14
median_age_average               1.00000000   7
democracy_average                1.00000000   8
pop_average                      0.00000000   5
hcq_cq                           0.00000000  16
CHE_average                      0.00001530  10
gnipc_average                    0.00000217   4
vacc_rate_p1                     0.00003593  15
CPI_average                      0.00053594   9
density_average                  0.14746836   6
Favipiravir                      0.99919703  19
iver                             0.00603730  17
```

```
media_freedom_average            0.01489559  12
Acetaminophen                    0.00070817  20
concentration_fpm_average        0.16855542  13
remd                             0.87646524  18
mys_average                      1.00000000   3
le_average                       0.01156015   1
eys_average                      0.79662177   2

Mean no. regressors                Draws              Burnins                 Time
          "7.6955"            "1048576"                  "0"     "2.430795 mins"
 No. models visited      Modelspace 2^K           % visited         % Topmodels
          "1048576"             "1e+06"                "100"             "0.048"
           Corr PMP          No. Obs.          Model Prior             g-Prior
               "NA"             "152"         "dilut / 10"               "UIP"
   Shrinkage-Stats
       "Av=0.9935"
```

[52]:
```
coef(results_resp_log, std.coefs=T, order.by.pip=T, include.constant=T)
```

	PIP	Post Mean	Post SD	Cond.Pos.Sign	Idx
overweight_prevalence_average	0.99999748	0.333922236	0.05633365	1.00000000	11
stringency_period	0.99997983	0.239290507	0.04398317	1.00000000	14
median_age_average	0.99987498	0.424237520	0.07868255	1.00000000	7
democracy_average	0.99895002	0.303420207	0.08214631	1.00000000	8
pop_average	0.99225895	-0.172897910	0.04713385	0.00000000	5
hcq_cq	0.98371772	-0.160787184	0.04841905	0.00000000	16
CHE_average	0.72772370	-0.148258647	0.10776535	0.00001416	10
gnipc_average	0.32039866	-0.057245145	0.09844786	0.00002306	4
CPI_average	0.21102047	-0.031368972	0.07632986	0.00046750	9
vacc_rate_p1	0.20346990	-0.018543826	0.04616068	0.00002070	15
media_freedom_average	0.19888211	-0.022501987	0.05734248	0.00324860	12
mys_average	0.14829874	0.014889405	0.04764875	1.00000000	3
le_average	0.10557357	-0.008149093	0.04038567	0.02539096	1
density_average	0.10400791	-0.003002328	0.01765242	0.15117649	6
Acetaminophen	0.10252176	-0.004800905	0.02389904	0.00037205	20
Favipiravir	0.09171555	0.002435442	0.01477994	0.99968626	19
concentration_fpm_average	0.08869714	-0.002408553	0.01898835	0.17581797	13
iver	0.08729745	-0.001992723	0.01419995	0.00313975	17
remd	0.08166879	0.001369126	0.01667762	0.84143168	18
eys_average	0.07828301	0.001287627	0.02326148	0.79644351	2
(Intercept)	1.00000000	-0.205245695	NA	NA	0

[53]:
```
coef(results_resp_log_dilut, std.coefs=T, order.by.pip=T, include.constant=T)
```

	PIP	Post Mean	Post SD	Cond.Pos.Sign	Idx
overweight_prevalence_average	0.99999805	0.3328535886	0.05477003	1.00000000	11
stringency_period	0.99998207	0.2403811752	0.04342954	1.00000000	14
median_age_average	0.99986850	0.4204744602	0.07202836	1.00000000	7
democracy_average	0.99792362	0.2848253538	0.07061943	1.00000000	8
pop_average	0.99121614	-0.1707099976	0.04656777	0.00000000	5
hcq_cq	0.98485859	-0.1638349084	0.04810246	0.00000000	16
CHE_average	0.71276890	-0.1560427538	0.11130751	0.00001530	10
gnipc_average	0.25312076	-0.0541683259	0.10047754	0.00000217	4
vacc_rate_p1	0.10235668	-0.0087184951	0.03197634	0.00003593	15
CPI_average	0.09908539	-0.0189648116	0.06493497	0.00053594	9
density_average	0.09642475	-0.0029318956	0.01697369	0.14746836	6
Favipiravir	0.08471341	0.0022873912	0.01429579	0.99919703	19
iver	0.07657679	-0.0015350996	0.01284662	0.00603730	17
media_freedom_average	0.06066176	-0.0062222178	0.03160228	0.01489559	12
Acetaminophen	0.05349948	-0.0023621531	0.01663722	0.00070817	20
concentration_fpm_average	0.05144845	-0.0016891760	0.01517168	0.16855542	13
remd	0.05107744	0.0006619848	0.01217771	0.87646524	18
mys_average	0.03837247	0.0038429009	0.02515032	1.00000000	3
le_average	0.02133139	-0.0016877644	0.01807742	0.01156015	1
eys_average	0.02026184	0.0002643504	0.01158192	0.79662177	2
(Intercept)	1.00000000	-0.2888574337	NA	NA	0

[60]:
```
results_gini_resp <- bms(data_gini_resp, mcmc="enumerate", mprior="uniform",␣
↪g="UIP", user.int=F)
```

```
Warning message in bms(data_gini_resp, mcmc = "enumerate", mprior = "uniform", g
= "UIP", :
"Argument 'X.data' contains NAs. The corresponding rows have not been taken into
account."
```

[61]:
```
results_gini_resp_dilut <- bms(data_gini_resp, mcmc="enumerate",␣
↪mprior="dilut", g="UIP", user.int=F)
```

```
Warning message in bms(data_gini_resp, mcmc = "enumerate", mprior = "dilut", g =
"UIP", :
"Argument 'X.data' contains NAs. The corresponding rows have not been taken into
account."
```

[62]:
```
results_gini_resp
```

```
                             PIP      Post Mean      Post SD Cond.Pos.Sign
medianage_mean          0.99998578  1.120800e+02 2.105626e+01    1.00000000
%Overweight_average     0.99900328  3.955043e+01 9.265038e+00    1.00000000
gnipc_mean              0.77981436 -2.375213e-02 1.536820e-02    0.00000232
Gini_average            0.65946365  2.055781e+01 1.797082e+01    0.99999958
vacc_rate_p1            0.37478026 -4.061843e+01 6.311574e+01    0.00026080
democracy_average       0.33084057  4.300749e+01 7.581408e+01    0.99323898
```

```
MediaFreedom_average      0.31605507  4.544849e+00 8.300655e+00    0.99290326
le_mean                   0.27008138 -1.096244e+01 2.248086e+01    0.00017055
CPI_average               0.26006458 -4.736606e+00 1.012991e+01    0.00709236
iver                      0.24397588 -1.155848e+02 2.529281e+02    0.00013167
CHE_average               0.21288502 -2.726956e-02 7.038594e-02    0.02614463
remd                      0.20920356  7.601442e+01 1.898319e+02    0.99995614
stringency_period         0.20652111  2.674972e+00 6.795178e+00    0.99914260
eys_mean                  0.20451892 -1.608985e+01 4.096015e+01    0.00008912
density_mean              0.18238096 -1.012988e-01 2.826111e-01    0.00000001
Acetaminophen             0.16283415  4.982370e+01 1.574683e+02    0.99561290
pop_mean                  0.13426945 -6.414286e-05 2.459332e-04    0.00442257
concentration_fpm_average 0.11704388 -6.535691e-01 3.661551e+00    0.13006629
hcq_cq                    0.10235667 -1.287149e+01 7.832049e+01    0.01371912
Favipiravir               0.09493756 -9.055960e+00 1.092657e+02    0.34476591
mys_mean                  0.09338241  1.666867e+00 1.694741e+01    0.84160885
                          Idx
medianage_mean              7
%Overweight_average        12
gnipc_mean                  4
Gini_average               10
vacc_rate_p1               16
democracy_average           8
MediaFreedom_average       13
le_mean                     1
CPI_average                 9
iver                       18
CHE_average                11
remd                       19
stringency_period          15
eys_mean                    2
density_mean                6
Acetaminophen              21
pop_mean                    5
concentration_fpm_average  14
hcq_cq                     17
Favipiravir                20
mys_mean                    3

Mean no. regressors              Draws             Burnins                Time
          "6.9544"          "2097152"                "0"     "2.140874 mins"
 No. models visited      Modelspace 2^K          % visited         % Topmodels
          "2097152"          "2097152"              "100"             "0.024"
           Corr PMP           No. Obs.        Model Prior             g-Prior
              "NA"              "119"   "uniform / 10.5"               "UIP"
    Shrinkage-Stats
        "Av=0.9917"
```

[63]:
```
results_gini_resp_dilut
```

	PIP	Post Mean	Post SD	Cond.Pos.Sign
medianage_mean	0.99996609	1.079512e+02	2.008104e+01	1.00000000
%Overweight_average	0.99707221	3.809009e+01	9.072476e+00	1.00000000
gnipc_mean	0.73777109	-2.372047e-02	1.596118e-02	0.00000023
Gini_average	0.62393366	2.010565e+01	1.848007e+01	0.99999883
vacc_rate_p1	0.34250640	-4.045502e+01	6.424949e+01	0.00000832
MediaFreedom_average	0.25643798	3.716867e+00	7.487791e+00	0.99814612
CHE_average	0.19205069	-3.386360e-02	7.647032e-02	0.00654448
iver	0.18596333	-8.172391e+01	2.148513e+02	0.00062808
density_mean	0.17202514	-9.903181e-02	2.807657e-01	0.00000006
stringency_period	0.15581930	1.810479e+00	5.714759e+00	0.99678055
democracy_average	0.15471962	1.815086e+01	5.058752e+01	0.99330719
remd	0.15429194	6.251472e+01	1.766363e+02	0.99998799
pop_mean	0.11992119	-5.930689e-05	2.359510e-04	0.00290987
CPI_average	0.11557943	-2.555212e+00	8.189547e+00	0.00514316
Acetaminophen	0.10102337	3.559551e+01	1.351380e+02	0.99941662
Favipiravir	0.09512995	-1.632385e+01	1.169804e+02	0.18025960
hcq_cq	0.09073847	-1.300660e+01	7.650640e+01	0.00394757
le_mean	0.08036676	-3.502568e+00	1.372959e+01	0.00030161
concentration_fpm_average	0.07474631	-5.646191e-01	3.187165e+00	0.06827339
eys_mean	0.05434387	-4.257038e+00	2.217533e+01	0.00024216
mys_mean	0.02093570	3.135868e-01	7.919023e+00	0.81600137

	Idx
medianage_mean	7
%Overweight_average	12
gnipc_mean	4
Gini_average	10
vacc_rate_p1	16
MediaFreedom_average	13
CHE_average	11
iver	18
density_mean	6
stringency_period	15
democracy_average	8
remd	19
pop_mean	5
CPI_average	9
Acetaminophen	21
Favipiravir	20
hcq_cq	17
le_mean	1
concentration_fpm_average	14
eys_mean	2
mys_mean	3

```
Mean no. regressors              Draws             Burnins                Time
           "5.7253"          "2097152"                 "0"     "4.794735 mins"
 No. models visited     Modelspace 2^K          % visited         % Topmodels
          "2097152"          "2097152"               "100"             "0.024"
           Corr PMP           No. Obs.        Model Prior             g-Prior
               "NA"              "119"     "dilut / 10.5"               "UIP"
    Shrinkage-Stats
        "Av=0.9917"
```

[64]:
```
coef(results_gini_resp, std.coefs=T, order.by.pip=T, include.constant=T)
```

	PIP	Post Mean	Post SD	Cond.Pos.Sign	Idx
medianage_mean	0.99998578	0.769580969	0.14457975	1.00000000	7
%Overweight_average	0.99900328	0.440709998	0.10324020	1.00000000	12
gnipc_mean	0.77981436	-0.318391060	0.20600665	0.00000232	4
Gini_average	0.65946365	0.117174463	0.10242928	0.99999958	10
vacc_rate_p1	0.37478026	-0.065449424	0.10169987	0.00026080	16
democracy_average	0.33084057	0.062492735	0.11016287	0.99323898	8
MediaFreedom_average	0.31605507	0.047418205	0.08660401	0.99290326	13
le_mean	0.27008138	-0.065426727	0.13417164	0.00017055	1
CPI_average	0.26006458	-0.063653171	0.13613140	0.00709236	9
iver	0.24397588	-0.024159859	0.05286774	0.00013167	18
CHE_average	0.21288502	-0.040294425	0.10400464	0.02614463	11
remd	0.20920356	0.024322938	0.06074201	0.99995614	19
stringency_period	0.20652111	0.019085521	0.04848257	0.99914260	15
eys_mean	0.20451892	-0.036254694	0.09229408	0.00008912	2
density_mean	0.18238096	-0.014902187	0.04157527	0.00000001	6
Acetaminophen	0.16283415	0.016516259	0.05219981	0.99561290	21
pop_mean	0.13426945	-0.008405002	0.03222602	0.00442257	5
concentration_fpm_average	0.11704388	-0.006488953	0.03635367	0.13006629	14
hcq_cq	0.10235667	-0.003890362	0.02367209	0.01371912	17
Favipiravir	0.09493756	-0.001727975	0.02084907	0.34476591	20
mys_mean	0.09338241	0.004086802	0.04155142	0.84160885	3
(Intercept)	1.00000000	-2.361233020	NA	NA	0

[65]:
```
coef(results_gini_resp_dilut, std.coefs=T, order.by.pip=T, include.constant=T)
```

	PIP	Post Mean	Post SD	Cond.Pos.Sign	Idx
medianage_mean	0.99996609	0.7412310290	0.13788355	1.00000000	7
%Overweight_average	0.99707221	0.4244373564	0.10109448	1.00000000	12
gnipc_mean	0.73777109	-0.3179667762	0.21395546	0.00000023	4
Gini_average	0.62393366	0.1145972666	0.10533187	0.99999883	10
vacc_rate_p1	0.34250640	-0.0651861229	0.10352670	0.00000832	16
MediaFreedom_average	0.25643798	0.0387795474	0.07812308	0.99814612	13
CHE_average	0.19205069	-0.0500380004	0.11299512	0.00654448	11
iver	0.18596333	-0.0170821592	0.04490881	0.00062808	18
density_mean	0.17202514	-0.0145686898	0.04130378	0.00000006	6
stringency_period	0.15581930	0.0129174927	0.04077394	0.99678055	15
democracy_average	0.15471962	0.0263743962	0.07350701	0.99330719	8
remd	0.15429194	0.0200033318	0.05651971	0.99998799	19
pop_mean	0.11992119	-0.0077713182	0.03091800	0.00290987	5
CPI_average	0.11557943	-0.0343383804	0.11005573	0.00514316	9
Acetaminophen	0.10102337	0.0117996988	0.04479745	0.99941662	21
Favipiravir	0.09512995	-0.0031147674	0.02232113	0.18025960	20
hcq_cq	0.09073847	-0.0039311982	0.02312379	0.00394757	17
le_mean	0.08036676	-0.0209042392	0.08194180	0.00030161	1
concentration_fpm_average	0.07474631	-0.0056058143	0.03164373	0.06827339	14
eys_mean	0.05434387	-0.0095922351	0.04996691	0.00024216	2
mys_mean	0.02093570	0.0007688477	0.01941575	0.81600137	3
(Intercept)	1.00000000	-2.5954442624	NA	NA	0

[66]:
```
results_gini_resp_log <- bms(data_gini_resp_log, mcmc="enumerate",␣
↪mprior="uniform", g="UIP", user.int=F)
```

```
Warning message in bms(data_gini_resp_log, mcmc = "enumerate", mprior =
"uniform", :
"Argument 'X.data' contains NAs. The corresponding rows have not been taken into
account."
```

[67]:
```
results_gini_resp_log_dilut <- bms(data_gini_resp_log, mcmc="enumerate",␣
↪mprior="dilut", g="UIP", user.int=F)
```

```
Warning message in bms(data_gini_resp_log, mcmc = "enumerate", mprior = "dilut",
:
"Argument 'X.data' contains NAs. The corresponding rows have not been taken into
account."
```

[68]:
```
results_gini_resp_log
```

```
                            PIP     Post Mean      Post SD Cond.Pos.Sign
%Overweight_average     0.99996747  4.518817e-02 8.402732e-03    1.00000000
stringency_period       0.99983488  4.491340e-02 9.341850e-03    1.00000000
democracy_average       0.98821235  2.736322e-01 9.943493e-02    1.00000000
medianage_mean          0.98820620  8.438653e-02 2.401366e-02    1.00000000
pop_mean                0.95796480 -1.776211e-06 6.413571e-07    0.00000001
```

```
hcq_cq                    0.73803203 -4.082698e-01 3.019397e-01    0.00000000
CHE_average               0.70892043 -1.274034e-04 9.798380e-05    0.00000132
Gini_average              0.62584646  1.917344e-02 1.787591e-02    0.99950205
vacc_rate_p1              0.55136140 -6.661994e-02 7.192912e-02    0.00000656
MediaFreedom_average      0.39390036 -7.915363e-03 1.184196e-02    0.00518624
concentration_fpm_average 0.35212341 -6.560590e-03 1.086008e-02    0.00000003
mys_mean                  0.28125120  2.411152e-02 4.769546e-02    1.00000000
gnipc_mean                0.26166212 -4.950664e-06 1.091126e-05    0.07826466
CPI_average               0.21226525 -3.106349e-03 7.843469e-03    0.00669501
Favipiravir               0.16394568  6.138981e-02 1.890557e-01    0.99817339
Acetaminophen             0.14889071 -4.113024e-02 1.411919e-01    0.00364092
iver                      0.14175635 -4.171495e-02 1.468326e-01    0.00014886
eys_mean                  0.11984434 -5.208571e-03 2.460155e-02    0.02258918
le_mean                   0.11829203 -1.201285e-03 1.085052e-02    0.34526197
remd                      0.09669867 -3.893170e-03 8.739424e-02    0.30363323
density_mean              0.08897310  1.448318e-06 1.233499e-04    0.53294518
                          Idx
%Overweight_average        12
stringency_period          15
democracy_average           8
medianage_mean              7
pop_mean                    5
hcq_cq                     17
CHE_average                11
Gini_average               10
vacc_rate_p1               16
MediaFreedom_average       13
concentration_fpm_average  14
mys_mean                    3
gnipc_mean                  4
CPI_average                 9
Favipiravir                20
Acetaminophen              21
iver                       18
eys_mean                    2
le_mean                     1
remd                       19
density_mean                6

Mean no. regressors              Draws             Burnins                Time
          "9.9379"          "2097152"                "0"     "2.102703 mins"
 No. models visited      Modelspace 2^K          % visited         % Topmodels
          "2097152"          "2097152"              "100"              "0.024"
           Corr PMP           No. Obs.        Model Prior             g-Prior
               "NA"              "119"    "uniform / 10.5"               "UIP"
    Shrinkage-Stats
       "Av=0.9917"
```

[69]:
```
results_gini_resp_log_dilut
```

	PIP	Post Mean	Post SD	Cond.Pos.Sign
%Overweight_average	0.99994928	4.492238e-02	8.229093e-03	1.00000000
stringency_period	0.99982769	4.496905e-02	9.361415e-03	1.00000000
medianage_mean	0.97609173	8.410361e-02	2.496105e-02	1.00000000
democracy_average	0.94676067	2.285318e-01	9.510293e-02	1.00000000
pop_mean	0.94296858	-1.735823e-06	6.570824e-07	0.00000010
hcq_cq	0.76601156	-4.483276e-01	3.071897e-01	0.00000000
CHE_average	0.69517179	-1.315669e-04	1.001064e-04	0.00000023
Gini_average	0.59066114	1.937190e-02	1.888948e-02	0.99937785
vacc_rate_p1	0.34951588	-4.050080e-02	6.296720e-02	0.00001124
concentration_fpm_average	0.24343643	-5.299829e-03	1.077192e-02	0.00000010
gnipc_mean	0.15034415	-3.562184e-06	9.280568e-06	0.00865589
CPI_average	0.14013584	-2.863965e-03	7.960735e-03	0.00403919
MediaFreedom_average	0.13642575	-2.596959e-03	7.822349e-03	0.03667035
Favipiravir	0.13008706	4.514734e-02	1.651072e-01	0.98998793
iver	0.11189926	-3.017938e-02	1.271842e-01	0.00048679
mys_mean	0.08978758	9.115579e-03	3.414340e-02	1.00000000
density_mean	0.07688745	1.272205e-06	1.158503e-04	0.49655185
Acetaminophen	0.07053479	-1.857280e-02	9.632805e-02	0.00714327
remd	0.05277682	-3.567022e-03	6.199391e-02	0.17069318
eys_mean	0.02656839	-1.124125e-03	1.134290e-02	0.01834634
le_mean	0.02269577	-3.151018e-04	4.714025e-03	0.21870116

	Idx
%Overweight_average	12
stringency_period	15
medianage_mean	7
democracy_average	8
pop_mean	5
hcq_cq	17
CHE_average	11
Gini_average	10
vacc_rate_p1	16
concentration_fpm_average	14
gnipc_mean	4
CPI_average	9
MediaFreedom_average	13
Favipiravir	20
iver	18
mys_mean	3
density_mean	6
Acetaminophen	21
remd	19
eys_mean	2
le_mean	1

Mean no. regressors	Draws	Burnins	Time
"8.5185"	"2097152"	"0"	"4.842395 mins"
No. models visited	**Modelspace 2^K**	**% visited**	**% Topmodels**
"2097152"	"2097152"	"100"	"0.024"
Corr PMP	No. Obs.	Model Prior	g-Prior
"NA"	"119"	"dilut / 10.5"	"UIP"
Shrinkage-Stats			
"Av=0.9917"			

[70]:
```
coef(results_gini_resp_log, std.coefs=T, order.by.pip=T, include.constant=T)
```

	PIP	Post Mean	Post SD	Cond.Pos.Sign	Idx
%Overweight_average	0.99996747	0.3882822715	0.07220101	1.00000000	12
stringency_period	0.99983488	0.2471052013	0.05139712	1.00000000	15
democracy_average	0.98821235	0.3066010789	0.11141547	1.00000000	8
medianage_mean	0.98820620	0.4468075057	0.12714689	1.00000000	7
pop_mean	0.95796480	-0.1794755233	0.06480531	0.00000001	5
hcq_cq	0.73803203	-0.0951545620	0.07037244	0.00000000	17
CHE_average	0.70892043	-0.1451673136	0.11164575	0.00000132	11
Gini_average	0.62584646	0.0842708233	0.07856797	0.99950205	10
vacc_rate_p1	0.55136140	-0.0827766924	0.08937346	0.00000656	16
MediaFreedom_average	0.39390036	-0.0636821358	0.09527314	0.00518624	13
concentration_fpm_average	0.35212341	-0.0502281469	0.08314519	0.00000003	14
mys_mean	0.28125120	0.0455856731	0.09017388	1.00000000	3
gnipc_mean	0.26166212	-0.0511732416	0.11278575	0.07826466	4
CPI_average	0.21226525	-0.0321902346	0.08127970	0.00669501	9
Favipiravir	0.16394568	0.0090327598	0.02781724	0.99817339	20
Acetaminophen	0.14889071	-0.0105137609	0.03609165	0.00364092	21
iver	0.14175635	-0.0067236713	0.02366667	0.00014886	18
eys_mean	0.11984434	-0.0090500722	0.04274605	0.02258918	2
le_mean	0.11829203	-0.0055285986	0.04993665	0.34526197	1
remd	0.09669867	-0.0009606044	0.02156373	0.30363323	19
density_mean	0.08897310	0.0001642975	0.01399284	0.53294518	6
(Intercept)	1.00000000	-0.6433674067	NA	NA	0

[71]:
```
coef(results_gini_resp_log_dilut, std.coefs=T, order.by.pip=T, include.
↪constant=T)
```

	PIP	Post Mean	Post SD	Cond.Pos.Sign	Idx
%Overweight_average	0.99994928	0.3859983977	0.07070900	1.00000000	12
stringency_period	0.99982769	0.2474113405	0.05150477	1.00000000	15
medianage_mean	0.97609173	0.4453094846	0.13216307	1.00000000	7
democracy_average	0.94676067	0.2560667719	0.10656152	1.00000000	8
pop_mean	0.94296858	-0.1753945149	0.06639425	0.00000010	5
hcq_cq	0.76601156	-0.1044907367	0.07159603	0.00000000	17
CHE_average	0.69517179	-0.1499113752	0.11406426	0.00000023	11
Gini_average	0.59066114	0.0851430961	0.08302276	0.99937785	10
vacc_rate_p1	0.34951588	-0.0503230991	0.07823808	0.00001124	16
concentration_fpm_average	0.24343643	-0.0405757089	0.08247027	0.00000010	14
gnipc_mean	0.15034415	-0.0368210239	0.09592991	0.00865589	4
CPI_average	0.14013584	-0.0296784760	0.08249490	0.00403919	9
MediaFreedom_average	0.13642575	-0.0208935291	0.06293380	0.03667035	13
Favipiravir	0.13008706	0.0066428778	0.02429351	0.98998793	20
iver	0.11189926	-0.0048643523	0.02049971	0.00048679	18
mys_mean	0.08978758	0.0172340748	0.06455211	1.00000000	3
density_mean	0.07688745	0.0001443192	0.01314208	0.49655185	6
Acetaminophen	0.07053479	-0.0047476001	0.02462349	0.00714327	21
remd	0.05277682	-0.0008801304	0.01529643	0.17069318	19
eys_mean	0.02656839	-0.0019532064	0.01970868	0.01834634	2
le_mean	0.02269577	-0.0014501731	0.02169506	0.21870116	1
(Intercept)	1.00000000	-0.7784835929	NA	NA	0

INITIAL DATASET FOR EACH VARIABLE

iso_code	continent	location	total_deaths_per_million
ALB	Europe	Albania	1264.11
AGO	Africa	Angola	53.87
ARG	South Ame	Argentina	2856.30
ARM	Asia	Armenia	3131.12
AUS	Oceania	Australia	598.23
AUT	Europe	Austria	2346.75
BGD	Asia	Bangladesh	171.88
BLR	Europe	Belarus	746.52
BEL	Europe	Belgium	2822.77
BEN	Africa	Benin	12.21
BTN	Asia	Bhutan	26.84
BOL	South Ame	Bolivia	1819.27
BWA	Africa	Botswana	1060.72
BRA	South Ame	Brazil	3195.16
BGR	Europe	Bulgaria	5582.46
BFA	Africa	Burkina Faso	17.07
CMR	Africa	Cameroon	70.21
CAN	North Ame	Canada	1213.70
CPV	Africa	Cabo Verde	691.21
TCD	Africa	Chad	10.95
CHL	South Ame	Chile	3146.19
CHN	Asia	China	3.67
COL	South Ame	Colombia	2734.26
COM	Africa	Comoros	192.40
CRI	North Ame	Costa Rica	1735.24
CIV	Africa	Cote d'Ivoire	29.37
HRV	Europe	Croatia	4251.73
CYP	Europe	Cyprus	1332.58
CZE	Europe	Czechia	3961.60

DNK	Europe	Denmark	1244.59
DJI	Africa	Djibouti	168.62
DOM	North Ame	Dominican Republic	390.42
ECU	South Ame	Ecuador	1995.44
EGY	Africa	Egypt	223.43
SLV	North Ame	El Salvador	667.57
EST	Europe	Estonia	2065.51
SWZ	Africa	Eswatini	1183.34
ETH	Africa	Ethiopia	61.37
FIN	Europe	Finland	1185.40
FRA	Europe	France	2313.73
GAB	Africa	Gabon	128.09
GMB	Africa	Gambia	137.47
GEO	Asia	Georgia	4513.43
DEU	Europe	Germany	1841.72
GHA	Africa	Ghana	43.61
GRC	Europe	Greece	3232.94
GTM	North Ame	Guatemala	1114.44
GIN	Africa	Guinea	32.90
GNB	Africa	Guinea-Bissau	83.59
HND	North Ame	Honduras	1057.91
HUN	Europe	Hungary	4809.53
ISL	Europe	Iceland	571.19
IND	Asia	India	373.30
IDN	Asia	Indonesia	575.67
IRN	Asia	Iran	1632.64
IRL	Europe	Ireland	1601.20
ISR	Asia	Israel	1244.89
ITA	Europe	Italy	3033.68
KAZ	Asia	Kazakhstan	982.16
KEN	Africa	Kenya	105.10
KGZ	Asia	Kyrgyzstan	451.09
LAO	Asia	Laos	100.67

LVA	Europe	Latvia	3270.74
LSO	Africa	Lesotho	306.18
LBR	Africa	Liberia	55.44
LTU	Europe	Lithuania	3414.84
LUX	Europe	Luxembourg	1768.06
MWI	Africa	Malawi	131.49
MYS	Asia	Malaysia	1074.48
MDV	Asia	Maldives	588.01
MLI	Africa	Mali	32.84
MLT	Europe	Malta	1515.12
MRT	Africa	Mauritania	210.51
MUS	Africa	Mauritius	794.17
MEX	North Ame	Mexico	2591.10
MDA	Europe	Moldova	3631.84
MNG	Asia	Mongolia	627.07
MNE	Europe	Montenegro	4441.21
MOZ	Africa	Mozambique	67.46
MMR	Asia	Myanmar	359.58
NAM	Africa	Namibia	1589.39
NLD	Europe	Netherlands	1303.75
NIC	North Ame	Nicaragua	35.26
NER	Africa	Niger	11.98
NGA	Africa	Nigeria	14.44
MKD	Europe	North Macedonia	4568.20
NOR	Europe	Norway	774.34
PAK	Asia	Pakistan	129.86
PSE	Asia	Palestine	1087.22
PAN	North Ame	Panama	1929.42
PRY	South Ame	Paraguay	2890.69
PER	South Ame	Peru	6373.21
PHL	Asia	Philippines	554.12
POL	Europe	Poland	2963.69
PRT	Europe	Portugal	2456.27

ROU	Europe	Romania	3417.52
RUS	Europe	Russia	2641.30
RWA	Africa	Rwanda	106.48
LCA	North Ame	Saint Lucia	2262.72
STP	Africa	Sao Tome and Principe	338.62
SEN	Africa	Senegal	113.65
SRB	Europe	Serbia	2508.17
SYC	Africa	Seychelles	1596.12
SLE	Africa	Sierra Leone	14.64
SVK	Europe	Slovakia	3650.42
SVN	Europe	Slovenia	3248.83
SOM	Africa	Somalia	77.34
ZAF	Africa	South Africa	1708.20
KOR	Asia	South Korea	563.07
SSD	Africa	South Sudan	12.65
ESP	Europe	Spain	2419.71
LKA	Asia	Sri Lanka	768.55
SDN	Africa	Sudan	106.07
SWE	Europe	Sweden	1958.32
CHE	Europe	Switzerland	1608.84
TJK	Asia	Tajikistan	12.56
TZA	Africa	Tanzania	12.90
THA	Asia	Thailand	459.64
TLS	Asia	Timor-Leste	102.89
TGO	Africa	Togo	32.77
TON	Oceania	Tonga	112.29
TUN	Africa	Tunisia	2367.82
TUR	Asia	Turkey	1185.86
UGA	Africa	Uganda	76.83
UKR	Europe	Ukraine	2969.16
ARE	Asia	United Arab Emirates	248.70
GBR	Europe	United Kingdom	3098.97
USA	North Ame	United States	3163.75

URY	South Ame	Uruguay	2195.57
VNM	Asia	Vietnam	439.60
YEM	Asia	Yemen	64.04
ZMB	Africa	Zambia	200.67
ZWE	Africa	Zimbabwe	343.49
OWID_KOS	Europe	Kosovo	1796.74
AFG	Asia	Afghanistan	190.16
DZA	Africa	Algeria	153.24
AND	Europe	Andorra	1941.31
ATG	North Ame	Antigua and Barbuda	1556.97
AZE	Asia	Azerbaijan	960.02
BHS	North Ame	Bahamas	2031.76
BHR	Asia	Bahrain	1037.20
BRB	North Ame	Barbados	1988.31
BLZ	North Ame	Belize	1695.10
BIH	Europe	Bosnia and Herzegovina	5000.42
BRN	Asia	Brunei	501.11
BDI	Africa	Burundi	2.95
KHM	Asia	Cambodia	182.25
CAF	Africa	Central African Republic	20.25
COG	Africa	Congo	64.65
CUB	North Ame	Cuba	760.78
COD	Africa	Democratic Republic of Congo	14.59
DMA	North Ame	Dominica	1017.07
GNQ	Africa	Equatorial Guinea	109.26
ERI	Africa	Eritrea	27.96
FJI	Oceania	Fiji	944.32
GRD	North Ame	Grenada	1889.06
GUY	South Ame	Guyana	1583.97
HTI	North Ame	Haiti	73.98
HKG	Asia	Hong Kong	1386.73
IRQ	Asia	Iraq	569.89
JAM	North Ame	Jamaica	1174.23

JPN	Asia	Japan	377.10
JOR	Asia	Jordan	1251.30
KIR	Oceania	Kiribati	99.06
KWT	Asia	Kuwait	601.56
LBN	Asia	Lebanon	1950.18
LBY	Africa	Libya	944.90
LIE	Europe	Liechtenstein	2210.65
MDG	Africa	Madagascar	47.65
MHL	Oceania	Marshall Islands	408.72
FSM	Oceania	Micronesia (country)	481.70
MCO	Europe	Monaco	1781.26
MAR	Africa	Morocco	434.65
NRU	Oceania	Nauru	78.80
NPL	Asia	Nepal	393.45
NZL	Oceania	New Zealand	406.15
PRK	Asia	North Korea	0.23
OMN	Asia	Oman	1011.30
PLW	Oceania	Palau	387.08
PNG	Oceania	Papua New Guinea	65.86
QAT	Asia	Qatar	253.79
KNA	North Ame	Saint Kitts and Nevis	964.75
VCT	North Ame	Saint Vincent and the Grenadines	1115.83
WSM	Oceania	Samoa	130.40
SMR	Europe	San Marino	3532.21
SAU	Asia	Saudi Arabia	258.34
SGP	Asia	Singapore	297.32
SLB	Oceania	Solomon Islands	211.25
SUR	South Ame	Suriname	2249.02
SYR	Asia	Syria	142.96
TTO	North Ame	Trinidad and Tobago	2775.23
TUV	Oceania	Tuvalu	
UZB	Asia	Uzbekistan	47.27
VUT	Oceania	Vanuatu	42.85

VEN	South Ame	Venezuela	205.64
AIA	North Ame	Anguilla	755.81
ABW	North Ame	Aruba	2179.24
BMU	North Ame	Bermuda	2305.05
BES	North Ame	Bonaire Sint Eustatius and Saba	1404.70
VGB	North Ame	British Virgin Islands	2042.64
CYM	North Ame	Cayman Islands	494.75
COK	Oceania	Cook Islands	58.71
CUW	North Ame	Curacao	1516.95
FRO	Europe	Faeroe Islands	527.14
FLK	South Ame	Falkland Islands	
PYF	Oceania	French Polynesia	2118.89
GIB	Europe	Gibraltar	3305.08
GRL	North Ame	Greenland	371.72
IMN	Europe	Isle of Man	1372.23
MAC	Asia	Macao	8.63
MSR	North Ame	Montserrat	1812.83
NCL	Oceania	New Caledonia	1082.91
SHN	Africa	Saint Helena	
SPM	North Ame	Saint Pierre and Miquelon	169.92
TWN	Asia	Taiwan	534.54
TCA	North Ame	Turks and Caicos Islands	787.30
VAT	Europe	Vatican	
WLF	Oceania	Wallis and Futuna	603.66

INITIAL DATASET FOR EACH VARIABLE

iso3	country	hdicode	region	hdi_mean	le_mean	eys_mean	mys_mean	gnipc_mean
ALB	Albania	High	ECA	0.80	78.83	14.93	10.73	12459.48
AGO	Angola	Medium	SSA	0.59	61.12	11.86	4.99	7157.88
ARG	Argentina	Very High	LAC	0.85	76.73	17.53	10.98	22842.46
ARM	Armenia	High	ECA	0.77	74.63	13.04	11.37	12067.68
AUS	Australia	Very High		0.94	82.90	22.25	12.35	46658.05
AUT	Austria	Very High		0.91	81.49	16.01	12.11	53417.18
BGD	Banglades	Medium	SA	0.61	71.18	11.33	5.99	4160.80
BLR	Belarus	Very High	ECA	0.81	74.17	15.55	11.86	17817.02
BEL	Belgium	Very High		0.93	81.22	19.70	12.01	50394.47
BEN	Benin	Low	SSA	0.53	59.61	12.37	3.86	2991.89
BTN	Bhutan	Medium	SA	0.64	70.59	12.86	3.72	9724.25
BOL	Bolivia (Plu	Medium	LAC	0.70	67.51	14.49	9.16	7941.29
BWA	Botswana	Medium	SSA	0.71	64.81	12.31	10.07	15922.68
BRA	Brazil	High	LAC	0.76	74.60	15.48	7.69	14577.97
BGR	Bulgaria	High		0.81	74.73	14.66	11.20	20473.54
BFA	Burkina Fa	Low	SSA	0.43	59.22	8.57	1.60	1915.67
CMR	Cameroon	Medium	SSA	0.56	60.16	12.26	5.97	3556.10
CAN	Canada	Very High		0.93	81.98	16.02	13.73	47223.40
CPV	Cabo Verd	Medium	SSA	0.67	75.59	13.05	5.97	6274.53
TCD	Chad	Low	SSA	0.39	52.00	7.66	2.31	1671.55
CHL	Chile	Very High	LAC	0.85	79.96	16.41	10.43	23628.13
CHN	China	High	EAP	0.74	77.18	13.67	7.30	13408.71
COL	Colombia	High	LAC	0.76	76.43	14.35	8.23	13846.42
COM	Comoros	Medium	SSA	0.55	63.24	11.51	4.85	3016.95
CRI	Costa Rica	Very High	LAC	0.80	79.24	15.46	8.65	18798.97
CIV	CÃ´te d'Iv	Medium	SSA	0.52	58.07	9.42	4.91	4502.34
HRV	Croatia	Very High		0.85	78.03	15.22	11.79	25606.89
CYP	Cyprus	Very High		0.88	81.10	14.82	12.06	35453.02
CZE	Czechia	Very High		0.89	78.86	16.69	12.73	35022.55
DNK	Denmark	Very High		0.94	80.87	19.03	12.81	55655.55
DJI	Djibouti	Low	AS	0.50	62.32	6.85	4.05	4572.55
DOM	Dominican	High	LAC	0.75	73.02	14.11	8.49	15374.10
ECU	Ecuador	High	LAC	0.76	76.85	15.02	8.66	11499.35
EGY	Egypt	High	AS	0.71	70.88	13.15	8.81	10601.71
SLV	El Salvador	Medium	LAC	0.67	72.09	12.59	6.73	7879.92
EST	Estonia	Very High		0.88	77.75	16.05	13.53	31816.38
SWZ	Eswatini (K	Medium	SSA	0.58	56.41	13.26	5.18	7896.11
ETH	Ethiopia	Low	SSA	0.47	64.24	9.10	2.72	1883.15
FIN	Finland	Very High		0.93	81.37	19.35	12.69	46622.17
FRA	France	Very High		0.90	82.43	15.56	11.37	44889.57
GAB	Gabon	High	SSA	0.70	65.75	12.76	9.06	14083.65
GMB	Gambia	Low	SSA	0.48	62.76	8.80	4.03	2030.49
GEO	Georgia	Very High	ECA	0.79	73.38	14.73	12.77	12690.13
DEU	Germany	Very High		0.94	80.89	16.86	14.09	53227.31
GHA	Ghana	Medium	SSA	0.61	63.65	11.42	7.94	4750.57
GRC	Greece	Very High		0.88	81.02	18.68	10.59	28256.27

GTM	Guatemala	Medium	LAC	0.64	72.34	10.69	5.77	8026.69
GIN	Guinea	Low	SSA	0.45	58.65	9.32	2.00	2215.31
GNB	Guinea-Bis	Low	SSA	0.48	59.60	10.28	3.43	1865.42
HND	Honduras	Medium	LAC	0.61	72.57	9.82	6.34	5040.44
HUN	Hungary	Very High		0.84	75.97	15.22	11.91	27420.63
ISL	Iceland	Very High		0.95	82.46	19.27	13.26	51723.69
IND	India	Medium	SA	0.64	70.00	12.03	6.32	5751.26
IDN	Indonesia	High	EAP	0.70	69.86	13.34	7.98	10221.00
IRN	Iran (Islam	High	SA	0.78	75.53	14.81	10.32	13630.67
IRL	Ireland	Very High		0.93	81.66	18.83	11.36	57410.70
ISR	Israel	Very High		0.91	82.47	16.14	13.07	37812.60
ITA	Italy	Very High		0.89	82.88	16.08	10.39	40933.23
KAZ	Kazakhstar	Very High	ECA	0.81	70.97	15.23	11.94	22244.92
KEN	Kenya	Medium	SSA	0.57	62.21	10.57	6.40	3941.43
KGZ	Kyrgyzstan	Medium	ECA	0.69	70.29	12.99	11.34	4722.89
LAO	Lao People	Medium	EAP	0.60	67.05	11.02	5.11	6577.15
LVA	Latvia	Very High		0.86	74.74	16.01	12.98	27335.61
LSO	Lesotho	Low	SSA	0.51	52.04	11.99	5.74	3038.51
LBR	Liberia	Low	SSA	0.48	60.02	10.13	4.68	1452.87
LTU	Lithuania	Very High		0.87	75.09	16.52	13.07	31040.45
LUX	Luxembou	Very High		0.92	81.83	14.17	12.84	79704.20
MWI	Malawi	Low	SSA	0.50	62.15	11.99	4.22	1434.99
MYS	Malaysia	Very High	EAP	0.80	75.33	13.64	10.36	24938.98
MDV	Maldives	High	SA	0.74	79.79	12.55	6.76	16274.43
MLI	Mali	Low	SSA	0.42	58.70	7.44	1.99	2127.77
MLT	Malta	Very High		0.89	83.15	15.93	11.41	37625.93
MRT	Mauritania	Medium	SSA	0.54	64.76	8.84	4.57	4933.21
MUS	Mauritius	Very High	SSA	0.80	74.93	15.13	9.67	22642.41
MEX	Mexico	High	LAC	0.77	74.41	14.51	8.66	18963.64
MDA	Moldova (I	High	ECA	0.76	69.84	14.18	11.80	11794.02
MNG	Mongolia	High	EAP	0.73	69.97	14.85	9.67	10267.86
MNE	Montenegı	Very High	ECA	0.83	76.87	14.96	11.83	19300.64
MOZ	Mozambiq	Low	SSA	0.44	58.95	9.95	3.11	1240.98
MMR	Myanmar	Medium	EAP	0.57	65.72	10.22	5.93	3853.88
NAM	Namibia	Medium	SSA	0.63	61.42	11.84	7.02	10198.00
NLD	Netherlanc	Very High		0.93	81.63	18.23	12.20	53967.58
NIC	Nicaragua	Medium	LAC	0.65	73.29	12.03	6.79	5473.03
NER	Niger	Low	SSA	0.38	61.62	6.18	1.89	1203.62
NGA	Nigeria	Low	SSA	0.52	52.11	9.58	6.47	5157.68
MKD	North Mac	High	ECA	0.77	76.35	13.37	9.54	14904.53
NOR	Norway	Very High		0.96	82.43	17.92	12.85	67146.72
PAK	Pakistan	Low	SA	0.54	65.93	7.82	5.09	4360.67
PSE	Palestine,	High	AS	0.71	74.24	13.27	9.19	7062.67
PAN	Panama	Very High	LAC	0.80	77.61	12.86	10.12	27248.35
PRY	Paraguay	High	LAC	0.72	73.36	12.83	8.44	11773.66
PER	Peru	High	LAC	0.77	75.73	14.83	9.37	11803.63
PHL	Philippines	Medium	EAP	0.70	71.40	12.93	8.71	8585.64
POL	Poland	Very High		0.87	77.63	16.03	12.98	27839.89
PRT	Portugal	Very High		0.85	81.31	16.52	9.07	31219.94
ROU	Romania	Very High		0.82	75.41	14.42	11.06	25239.14

RUS	Russian Fe	Very High		0.83	72.65	15.17	12.61	25181.65
RWA	Rwanda	Low	SSA	0.52	65.63	11.35	4.20	1883.66
LCA	Saint Lucia	High	LAC	0.74	73.12	14.00	8.45	13673.21
STP	Sao Tome a	Medium	SSA	0.60	67.64	12.52	5.77	3877.88
SEN	Senegal	Low	SSA	0.51	67.34	9.14	2.83	3009.38
SRB	Serbia	Very High	ECA	0.80	76.11	14.61	11.06	15381.04
SYC	Seychelles	High	SSA	0.80	73.77	14.12	10.30	24612.76
SLE	Sierra Leor	Low	SSA	0.46	58.09	9.38	4.22	1605.70
SVK	Slovakia	Very High		0.85	77.04	14.60	12.69	28855.87
SVN	Slovenia	Very High		0.91	81.07	17.46	12.62	34517.03
SOM	Somalia		AS	#DIV/0!	55.24	#DIV/0!	#DIV/0!	1082.86
ZAF	South Afric	High	SSA	0.72	64.63	13.87	10.29	13581.63
KOR	Korea (Rep	Very High		0.91	82.90	16.55	12.22	40058.34
SSD	South Suda	Low	SSA	0.40	55.47	5.52	5.73	1010.18
ESP	Spain	Very High		0.89	82.94	17.54	9.97	38314.83
LKA	Sri Lanka	High	SA	0.77	75.21	13.93	10.52	11900.74
SDN	Sudan	Low	AS	0.51	64.97	7.69	3.66	4442.89
SWE	Sweden	Very High		0.94	82.34	18.95	12.42	51903.11
CHE	Switzerlan	Very High		0.96	83.27	16.25	13.71	68872.48
TJK	Tajikistan	Medium	ECA	0.66	69.64	11.52	11.37	3647.08
TZA	Tanzania (U	Low	SSA	0.53	65.29	8.42	5.96	2394.73
THA	Thailand	Very High	EAP	0.79	78.05	15.60	8.25	16067.78
TLS	Timor-Lest	Medium	EAP	0.61	67.43	12.44	5.34	5257.84
TGO	Togo	Low	SSA	0.52	59.64	12.61	4.62	1986.92
TON	Tonga	High	EAP	0.73	70.66	15.69	11.29	6352.17
TUN	Tunisia	High	AS	0.74	75.78	15.07	7.18	10860.10
TUR	Turkey	Very High	ECA	0.82	76.92	17.62	8.11	26477.91
UGA	Uganda	Low	SSA	0.52	61.59	10.53	5.55	2031.67
UKR	Ukraine	High	ECA	0.78	73.90	14.90	11.17	12009.35
ARE	United Ara	Very High	AS	0.88	79.35	13.85	11.31	65978.99
GBR	United Kin	Very High		0.93	81.09	17.39	13.07	44819.89
USA	United Sta	Very High		0.92	78.91	16.24	13.35	60355.86
URY	Uruguay	Very High	LAC	0.81	77.53	16.57	8.75	21516.25
VNM	Viet Nam	High	EAP	0.69	73.92	12.80	8.12	6382.01
YEM	Yemen	Low	AS	0.47	65.97	9.10	3.04	1739.99
ZMB	Zambia	Medium	SSA	0.56	61.63	10.93	6.81	3330.53
ZWE	Zimbabwe	Medium	SSA	0.59	60.17	11.73	8.35	3696.61
AFG	Afghanista	Low	SA	0.48	62.89	10.19	2.47	2099.62
DZA	Algeria	High	AS	0.74	75.65	14.48	7.88	11455.50
AND	Andorra	Very High		0.87	82.97	13.26	10.58	51364.37
ATG	Antigua an	High	LAC	0.79	78.14	14.47	9.21	18370.76
AZE	Azerbaijan	High	ECA	0.75	71.92	12.98	10.52	13875.79
BHS	Bahamas	Very High	LAC	0.82	73.49	12.79	12.38	34305.79
BHR	Bahrain	Very High	AS	0.86	79.57	15.74	9.49	45048.25
BRB	Barbados	High	LAC	0.79	76.79	15.55	9.74	14832.07
BLZ	Belize	Medium	LAC	0.71	73.43	13.05	9.50	6776.29
BIH	Bosnia and	High	ECA	0.77	76.54	13.88	9.55	13208.47
BRN	Brunei Dar	Very High	EAP	0.83	74.74	14.57	9.06	64277.06
BDI	Burundi	Low	SSA	0.43	60.82	11.22	2.52	807.88
KHM	Cambodia	Medium	EAP	0.58	70.18	11.28	4.73	3515.13

CAF	Central Afr	Low	SSA	0.39	52.98	7.51	4.23	914.31
COG	Congo	Medium	SSA	0.58	63.51	11.62	6.11	4359.32
CUB	Cuba	High	LAC	0.78	77.66	13.99	12.06	8259.92
COD	Congo (De	Low	SSA	0.47	59.04	9.71	6.68	1007.30
DMA	Dominica	High	LAC	0.71	69.88	13.22	8.02	12019.34
GNQ	Equatorial	Medium	SSA	0.60	60.44	9.32	5.54	18648.70
ERI	Eritrea	Low	SSA	0.49	66.31	8.18	4.75	1714.70
FJI	Fiji	High	EAP	0.74	67.41	14.53	10.49	12129.25
GRD	Grenada	High	LAC	0.79	74.87	18.70	8.69	13883.96
GUY	Guyana	High	LAC	0.69	68.41	12.03	8.41	11665.58
HTI	Haiti	Low	LAC	0.53	63.50	9.28	5.32	3130.81
HKG	Hong Kong	Very High		0.94	84.61	16.56	12.07	60408.14
IRQ	Iraq	Medium	AS	0.68	69.85	11.70	7.84	10284.04
JAM	Jamaica	High	LAC	0.71	72.22	13.19	8.88	9254.37
JPN	Japan	Very High		0.92	84.02	15.18	13.30	42181.10
JOR	Jordan	High	AS	0.72	75.26	10.44	10.16	10016.85
KIR	Kiribati	Medium	EAP	0.62	66.33	11.81	7.87	4143.62
KWT	Kuwait	Very High	AS	0.83	79.64	14.79	7.10	60619.24
LBN	Lebanon	High	AS	0.75	79.42	11.21	8.55	16086.28
LBY	Libya	High	AS	0.71	72.05	12.94	7.41	12250.19
LIE	Liechtenste	Very High		0.93	82.89	14.72	12.32	124954.10
MDG	Madagasca	Low	SSA	0.51	64.79	10.38	4.98	1519.37
MHL	Marshall Is	Medium	EAP	0.64	64.06	10.58	10.88	4689.71
FSM	Micronesia	Medium	EAP	0.63	71.46	11.30	7.63	3902.80
MCO	Monaco			#DIV/0!	85.60	#DIV/0!	#DIV/0!	#DIV/0!
MAR	Morocco	Medium	AS	0.66	73.28	13.13	5.50	7037.16
NRU	Nauru		EAP	#DIV/0!	62.60	11.07	#DIV/0!	15653.73
NPL	Nepal	Medium	SA	0.59	68.44	12.71	4.63	3479.21
NZL	New Zealar	Very High		0.93	82.09	18.70	13.24	39615.62
PRK	Korea (Der		EAP	#DIV/0!	72.91	10.77	#DIV/0!	#DIV/0!
OMN	Oman	Very High	AS	0.83	77.79	14.24	9.99	32578.35
PLW	Palau	High	EAP	0.78	63.99	16.24	12.69	19473.10
PNG	Papua New	Medium	EAP	0.55	64.82	9.63	4.60	4062.16
QAT	Qatar	Very High	AS	0.85	80.38	11.92	9.74	92170.80
KNA	Saint Kitts	High	LAC	0.78	71.36	15.17	8.42	26351.61
VCT	Saint Vince	High	LAC	0.77	74.32	14.42	10.25	11927.46
WSM	Samoa	High	EAP	0.72	72.55	12.34	11.53	6190.07
SMR	San Marinc	Very High		0.86	82.93	11.89	10.80	52178.73
SAU	Saudi Arab	Very High	AS	0.86	77.02	15.73	10.13	49072.79
SGP	Singapore	Very High	EAP	0.93	83.03	16.30	11.58	86062.29
SLB	Solomon Is	Medium	EAP	0.56	69.76	10.45	5.46	2556.14
SUR	Suriname	High	LAC	0.75	71.43	12.94	9.47	17303.70
SYR	Syrian Arat	Medium	AS	0.56	66.58	9.16	5.19	4863.12
TTO	Trinidad ar	Very High	LAC	0.81	74.21	14.13	11.24	26882.55
TUV	Tuvalu	Medium	EAP	0.64	64.11	10.50	10.11	5513.12
UZB	Uzbekistan	High	ECA	0.71	70.72	11.93	11.57	6749.55
VUT	Vanuatu	Medium	EAP	0.60	69.63	11.35	6.77	3067.18
VEN	Venezuela	Medium	LAC	0.76	72.37	13.47	10.17	14735.03
TKM	Turkmenis	High	ECA	0.74	68.78	12.55	11.16	14385.88
ZZA.VHHD	Very high h			0.89	79.28	16.29	12.04	41553.52

ZZB.HHD	High huma	0.74	75.14	13.84	7.95	12896.79
ZZC.MHD	Medium hu	0.63	69.26	11.85	6.47	5831.63
ZZD.LHD	Low humai	0.51	61.04	9.05	4.69	3017.54
ZZE.AS	Arab State	0.70	71.13	12.00	7.57	14267.84
ZZF.EAP	East Asia a	0.73	75.34	13.38	7.50	12522.54
ZZG.ECA	Europe and	0.79	73.97	15.03	10.30	16987.29
ZZH.LAC	Latin Amer	0.76	74.63	14.59	8.55	15251.69
ZZI.SA	South Asia	0.63	69.79	11.49	6.38	5778.77
ZZJ.SSA	Sub-Sahara	0.54	59.90	9.97	5.59	3770.03
ZZK.WORLI	World	0.73	72.35	12.61	8.35	15664.17

INITIAL DATASET FOR EACH VARIABLE

ISO3 Alpha-code	Region, subregion, country or area *	pop_mean	density_mean	medianage_mean
ALB	Albania	2878.759	105.072	35.5754
AGO	Angola	30223.64	24.243	16.055
ARG	Argentina	44027.81	15.7704	30.3162
ARM	Armenia	2850.702	100.1512	32.9212
AUS	Australia	24588.53	3.201	36.2986
AUT	Austria	8779.371	106.392	42.1588
BGD	Bangladesh	161721.7	1242.3888	24.7772
BLR	Belarus	9697.228	47.7906	39.2176
BEL	Belgium	11381.76	375.9086	40.5878
BEN	Benin	11604.15	102.9102	17.2672
BTN	Bhutan	755.7422	19.6838	25.9236
BOL	Bolivia (Plurinational State of)	11434.57	10.5552	22.985
BWA	Botswana	2402.108	4.2386	22.6582
BRA	Brazil	208500.4	24.9458	31.1596
BGR	Bulgaria	7181.524	66.2526	43.23
BFA	Burkina Faso	19834.75	72.4954	16.1636
CMR	Cameroon	24395.31	52.3448	17.2276
CAN	Canada	36591.57	4.0238	39.7478
CPV	Cabo Verde	564.7492	140.1362	24.6412
TCD	Chad	15109.96	11.9998	14.7932
CHL	Chile	18412.7	24.4536	33.7974
CHN	China	1408963	146.767	36.244
COL	Colombia	48512.34	43.1724	29.2954
COM	Comoros	761.0822	408.9642	19.0676
CRI	Costa Rica	4991.911	97.7656	31.0516
CIV	Côte d'Ivoire	24859.98	78.176	17.0362
HRV	Croatia	4192.254	75.001	42.7162
CYP	Cyprus	1208.27	130.7654	35.7548
CZE	Czechia	10530.83	136.4044	41.1206
DNK	Denmark	5736.9	135.3234	40.8904
DJI	Djibouti	1040.189	44.8744	22.685
DOM	Dominican Republic	10645.62	220.356	25.8784
ECU	Ecuador	16738.37	67.3956	26.1482
EGY	Egypt	101731.3	102.1962	23.397
SLV	El Salvador	6260.958	302.1698	24.6968
EST	Estonia	1319.464	30.3562	40.8802
SWZ	Eswatini	1151.578	66.3236	20.4286
ETH	Ethiopia	108242.6	108.2426	17.6476
FIN	Finland	5503.964	18.202	41.6554
FRA	France	64124.15	116.2974	40.835
GAB	Gabon	2137.947	8.2972	21.3336
GMB	Gambia	2381.064	235.283	16.2746
GEO	Georgia	3771.456	54.2734	36.077
DEU	Germany	82614.77	237.0174	44.9024
GHA	Ghana	30208.09	132.7594	19.9006

GRC	Greece	10691.18	81.7244	43.1614
GTM	Guatemala	16565.47	154.5864	20.7496
GIN	Guinea	12246.04	49.8372	17.1396
GNB	Guinea-Bissau	1879.742	66.847	17.6058
HND	Honduras	9626.765	88.259	21.993
HUN	Hungary	9799.289	108.2434	41.4296
ISL	Iceland	344.8174	3.44	35.2798
IND	India	1353563	455.2562	26.2304
IDN	Indonesia	264418.1	138.3714	28.5034
IRN	Iran (Islamic Republic of)	84356.78	51.7922	29.8426
IRL	Ireland	4776.786	69.87	36.1208
ISR	Israel	8308.089	383.8696	28.8934
ITA	Italy	59992.18	202.6936	45.1732
KAZ	Kazakhstan	18304.33	6.7804	28.9952
KEN	Kenya	48919.81	84.2386	18.2722
KGZ	Kyrgyzstan	6120.335	31.91	23.381
LAO	Lao People's Democratic Republic	6998.752	30.3238	22.5996
LVA	Latvia	1954.496	31.409	42.608
LSO	Lesotho	2171.346	71.5198	21.3588
LBR	Liberia	4797.947	49.8126	17.5364
LTU	Lithuania	2905.42	46.3968	42.6952
LUX	Luxembourg	595.3856	229.8784	38.3886
MWI	Malawi	17892.19	189.2312	16.0306
MYS	Malaysia	31954.87	97.2602	28.1434
MDV	Maldives	471.3084	1571.0284	28.0298
MLI	Mali	19325.22	15.838	14.8592
MLT	Malta	479.8004	1523.1754	39.0838
MRT	Mauritania	4162.537	4.0386	17.106
MUS	Mauritius	1294.693	637.7798	35.1098
MEX	Mexico	122721.5	62.637	27.553
MDA	Republic of Moldova	3186.869	96.9184	35.0978
MNG	Mongolia	3097.351	1.9888	26.2028
MNE	Montenegro	632.3038	45.7794	37.0976
MOZ	Mozambique	28563.73	36.323	16.4144
MMR	Myanmar	52274.17	80.0166	27.8958
NAM	Namibia	2364.583	2.8722	20.7688
NLD	Netherlands	17204.42	510.9566	41.436
NIC	Nicaragua	6480.904	53.855	23.1828
NER	Niger	21761.65	17.1798	14.401
NGA	Nigeria	193570.1	212.5346	16.7494
MKD	North Macedonia	2111.561	84.7574	36.8586
NOR	Norway	5272.987	17.3326	38.4516
PAK	Pakistan	216779.7	281.2106	19.5534
PSE	State of Palestine	4698.946	780.5558	18.595
PAN	Panama	4095.457	55.212	27.762
PRY	Paraguay	6354.665	15.7114	24.3812
PER	Peru	31695.79	24.7608	27.1782
PHL	Philippines	106719	355.7298	23.4986
POL	Poland	38526.63	125.824	39.4296
PRT	Portugal	10317.1	112.1606	43.6016

ROU	Romania	19706.75	85.6534	40.6036
RUS	Russian Federation	145324.9	8.8742	37.9398
RWA	Rwanda	12234.21	505.3368	18.4202
LCA	Saint Lucia	177.134	287.5556	31.482
STP	Sao Tome and Principe	207.947	216.6118	17.8438
SEN	Senegal	15168.2	78.7836	17.3392
SRB	Serbia	7462.508	97.249	42.0842
SYC	Seychelles	101.8066	222.7712	31.3836
SLE	Sierra Leone	7678.872	107.0374	18.0534
SVK	Slovakia	5439.147	110.9282	39.0238
SVN	Slovenia	2097.62	104.1624	42.129
SOM	Somalia	14862.67	23.6916	15.0104
ZAF	South Africa	56873.34	46.5864	25.9918
KOR	Republic of Korea	51459.35	520.0908	41.0308
SSD	South Sudan	10752.33	19.059	16.0238
ESP	Spain	46682.45	92.9276	42.3704
LKA	Sri Lanka	21499.88	342.8734	31.3696
SDN	Sudan	40691.87	23.054	17.9708
SWE	Sweden	10058.22	24.6924	39.6888
CHE	Switzerland	8439.268	211.0238	41.3916
TJK	Tajikistan	8928.008	62.39	20.9366
TZA	United Republic of Tanzania	56234.94	63.4846	16.4406
THA	Thailand	70847.04	138.6738	37.434
TLS	Timor-Leste	1243.179	83.603	19.19
TGO	Togo	7855.43	144.4278	18.2654
TON	Tonga	105.469	162.2602	20.9458
TUN	Tunisia	11807.45	75.9662	30.3448
TUR	Türkiye	81809.28	106.3006	29.4436
UGA	Uganda	40163.44	201.0112	15.0368
UKR	Ukraine	44626.29	77.0322	39.6556
ARE	United Arab Emirates	9066.257	127.6506	30.292
GBR	United Kingdom	66031.2	272.0234	39.0928
USA	United States of America	329613.8	36.0328	36.8926
URY	Uruguay	3418.847	19.7396	34.3466
VNM	Viet Nam	94008.4	299.9546	30.4744
YEM	Yemen	30032.43	56.883	17.9984
ZMB	Zambia	17306.08	23.28	16.2714
ZWE	Zimbabwe	14753.11	38.1364	17.328
OWID_KOS	Kosovo (under UNSC res. 1244)	1727.666	158.4288	28.3954
VAT	Holy See	0.5464	1241.3636	0
TKL	Tokelau	1.548	128.9998	26.898
NIU	Niue	1.877	7.2182	35.4312
FLK	Falkland Islands (Malvinas)	3.576	0.2938	38.3974
MSR	Montserrat	4.7414	46.0284	40.4514
SHN	Saint Helena	5.4842	14.0618	47.0874
SPM	Saint Pierre and Miquelon	5.9538	25.8866	43.474
BLM	Saint Barthélemy	10.0534	456.9862	37.4196
TUV	Tuvalu	10.8756	362.5168	24.3366
NRU	Nauru	11.672	583.6	20.1434
WLF	Wallis and Futuna Islands	11.9416	85.2976	33.8434

AIA	Anguilla	14.9828	170.2602	34.6116
COK	Cook Islands	17.3998	72.4994	31.4816
PLW	Palau	17.8454	38.7946	35.2146
BES	Bonaire, Sint Eustatius and Saba	24.368	74.2924	38.3672
VGB	British Virgin Islands	30.022	194.9474	36.2248
GIB	Gibraltar	32.604	3260.4	40.334
SMR	San Marino	33.9588	556.7016	44.3324
MAF	Saint Martin (French part)	34.26	646.417	34.3406
MCO	Monaco	36.9876	24823.8928	53.7114
LIE	Liechtenstein	37.9032	236.8948	42.7042
TCA	Turks and Caicos Islands	39.839	41.9358	35.9782
SXM	Sint Maarten (Dutch part)	41.732	1227.4088	43.577
MHL	Marshall Islands	47.1286	261.8248	22.2454
KNA	Saint Kitts and Nevis	47.7672	183.7196	32.243
ASM	American Samoa	49.4048	247.0234	24.7968
FRO	Faroe Islands	50.2364	36.2722	38.211
MNP	Northern Mariana Islands	50.7076	110.9572	36.7818
GRL	Greenland	55.9202	0.136	33.3082
GGY	Guernsey	61.8132	965.8312	42.0706
BMU	Bermuda	63.374	1173.5906	43.225
CYM	Cayman Islands	63.553	263.705	35.8978
DMA	Dominica	70.5472	94.0626	30.8582
AND	Andorra	73.8958	157.225	40.772
IMN	Isle of Man	83.6662	146.2698	44.1528
ATG	Antigua and Barbuda	91.0734	206.9846	32.9278
VIR	United States Virgin Islands	101.8322	290.9492	41.7898
JEY	Jersey	103.7458	894.3594	39.9252
ABW	Aruba	105.3948	585.527	39.818
VCT	Saint Vincent and the Grenadines	105.6398	270.8704	31.6354
FSM	Micronesia (Fed. States of)	110.425	157.75	22.1464
KIR	Kiribati	120.4168	165.8636	21.2342
GRD	Grenada	120.8858	355.5456	29.2754
GUM	Guam	168.4464	311.3612	29.244
CUW	Curaçao	177.9328	419.6532	36.8518
WSM	Samoa	207.6702	73.3814	20.1166
GUF	French Guiana	269.9822	3.2846	23.6142
MYT	Mayotte	271.7672	724.7126	16.6598
BRB	Barbados	279.1574	649.2032	37.7708
NCL	New Caledonia	284.2766	15.551	31.6022
VUT	Vanuatu	290.3194	23.8164	19.4476
PYF	French Polynesia	295.6202	80.2444	31.0108
BLZ	Belize	374.6076	16.423	23.567
MTQ	Martinique	377.6796	356.3012	44.0936
GLP	Guadeloupe	397.1424	243.9448	41.1942
BHS	Bahamas	398.8312	74.4368	31.005
BRN	Brunei Darussalam	430.0058	74.589	29.8494
ESH	Western Sahara	518.6036	1.9496	29.4272
	Micronesia	526.642	170.7658	25.005
SUR	Suriname	587.7006	3.7672	27.1996
MAC	China, Macao SAR	639.036	19969.8752	36.4542

SLB	Solomon Islands	643.7276	22.355	18.7676
	Polynesia	701.8062	87.2244	25.7212
GUY	Guyana	772.3274	3.9234	24.4136
FJI	Fiji	918.4102	50.269	25.7778
REU	Réunion	934.4936	373.7976	33.0356
BHR	Bahrain	1442.033	1841.677	30.4554
GNQ	Equatorial Guinea	1450.343	51.7056	20.7468
TTO	Trinidad and Tobago	1486.556	289.777	33.5742
QAT	Qatar	2659.092	229.509	30.5982
JAM	Jamaica	2806.225	259.1158	28.8116
PRI	Puerto Rico	3381.728	389.0622	41.6418
ERI	Eritrea	3409.284	28.1422	17.5222
BIH	Bosnia and Herzegovina	3441.235	67.2156	40.3416
KWT	Kuwait	4168.003	233.9208	34.5316
OMN	Oman	4467.125	14.4334	28.3776
NZL	New Zealand	4760.497	17.9706	36.195
CAF	Central African Republic	5004.871	8.0338	14.5266
COG	Congo	5315.069	15.564	18.0618
SGP	Singapore	5761.476	8435.5432	39.6934
TKM	Turkmenistan	5965.372	12.6942	24.855
LBN	Lebanon	6099.911	596.2768	28.6178
LBY	Libya	6379.915	3.8062	25.4544
HKG	China, Hong Kong SAR	7454.992	6783.4324	42.7916
PNG	Papua New Guinea	9113.57	20.1246	20.9698
AZE	Azerbaijan	10059.31	121.698	29.6456
JOR	Jordan	10166.57	114.496	22.0478
HTI	Haiti	10862.8	394.022	22.096
BDI	Burundi	11230.88	432.7892	15.2842
	Melanesia	11250.3	21.2108	21.3794
CUB	Cuba	11332.65	106.1526	40.2606
	Oceania (excluding Australia and New Z	12478.75	23.0438	21.7288
KHM	Cambodia	15821.16	87.3926	24.9708
SYR	Syrian Arab Republic	19316.9	105.1488	18.725
TWN	China, Taiwan Province of China	23655.11	668.0348	39.1214
PRK	Dem. People's Republic of Korea	25511.51	211.8722	34.643
MDG	Madagascar	26180.41	44.9992	18.2502
NPL	Nepal	28198.83	191.5928	22.1612
	Australia/New Zealand	29349.03	3.693	36.2832
	Australia/New Zealand	29349.03	3.693	36.2832
VEN	Venezuela (Bolivarian Republic of)	30126.39	32.873	26.8022
	No income group available	30731.46	25.6912	26.8806
UZB	Uzbekistan	31955.04	75.1178	25.6616
SAU	Saudi Arabia	34240.95	15.9284	28.714
MAR	Morocco	35509.55	79.5644	27.2954
AFG	Afghanistan	35697.88	54.9792	15.9812
IRQ	Iraq	39646.23	91.3236	18.9354
DZA	Algeria	41130.28	17.2692	26.9742
	OCEANIA	41827.78	4.9274	31.4076
	Caribbean	43230.14	195.1796	29.8274
	Southern Africa	64962.95	24.4356	25.437

	Small Island Developing States (SIDS)	71152.75	59.6786	28.3158
	Central Asia	71273.08	18.136	25.5886
COD	Democratic Republic of the Congo	84273.08	37.173	15.6808
	Northern Europe	104203.7	63.611	39.3628
JPN	Japan	126591	335.942	46.734
	Southern Europe	152847.6	117.3056	43.2368
	Middle Africa	168118.2	25.9036	16.0104
	Central America	171117.6	69.4306	26.2408
	Western Europe	193214	177.3986	42.6586
	Northern Africa	237769	30.9348	23.9684
	Western Asia	274011.5	57.1768	25.6326
	Eastern Europe	294019.5	16.2874	39.0102
	NORTHERN AMERICA	366330.6	19.6406	37.1806
	Western Africa	377904.1	62.3232	16.858
	Eastern Africa	415149.7	62.405	16.9896
	South America	420855.5	23.9398	29.8298
	Land-locked Developing Countries (LLD	501355.6	30.3746	18.67
	Northern Africa and Western Asia	511780.5	41.0128	24.869
	Latin America and the Caribbean	635203.2	31.3436	28.861
	LATIN AMERICA AND THE CARIBBEAN	635203.2	31.3436	28.861
	Low-income countries	644237.1	43.862	17.078
	South-Eastern Asia	650476.2	146.167	28.671
	EUROPE	744284.8	33.7046	40.8474
	Least developed countries	999634.1	49.721	18.6754
	Sub-Saharan Africa	1026135	46.9306	17.263
	Europe and Northern America	1110615	27.2646	39.7112
	High-income countries	1228624	34.9858	39.7064
	AFRICA	1263904	42.77	18.3594
	More developed regions	1266555	25.8172	40.4126
	Eastern Asia	1647371	139.7242	37.301
	Southern Asia	1903045	297.3104	25.2584
	Central and Southern Asia	1974318	191.1102	25.2712
	Eastern and South-Eastern Asia	2297847	141.4896	34.6382
	Upper-middle-income countries	2469608	45.937	33.6204
	Lower-middle-income countries	3224527	125.7586	24.654
	ASIA	4546177	144.951	29.7718
	Less developed regions, excluding Chin	4890460	68.1994	24.484
	Less developed regions, excluding least	5331538	87.0594	28.7274
	Middle-income countries	5694134	71.7134	28.4524
	Less developed regions	6331172	77.8312	27.0648
	WORLD	7597727	58.2632	28.955

INITIAL DATASET FOR EACH VARIABLE

iso_code	country_name	democracy_average
ALB	Albania	5.89
AGO	Angola	3.47
ARG	Argentina	6.96
ARM	Armenia	4.18
AUS	Australia	9.04
AUT	Austria	8.44
BGD	Bangladesh	5.65
BLR	Belarus	3.42
BEL	Belgium	7.84
BEN	Benin	5.68
BTN	Bhutan	5.02
BOL	Bolivia	5.67
BWA	Botswana	7.85
BRA	Brazil	7.01
BGR	Bulgaria	6.99
BFA	Burkina Faso	4.60
CMR	Cameroon	3.48
CAN	Canada	9.12
CPV	Cabo Verde	7.86
TCD	Chad	1.52
CHL	Chile	7.85
CHN	China	3.14
COL	Colombia	6.69
COM	Comoros	3.67
CRI	Costa Rica	7.96
CIV	Cote d'Ivoire	3.75
HRV	Croatia	6.76
CYP	Cyprus	7.55
CZE	Czechia	7.80
DNK	Denmark	9.17
DJI	Djibouti	2.87
DOM	Dominican Repul	6.64
ECU	Ecuador	5.97
EGY	Egypt	3.27
SLV	El Salvador	6.44
EST	Estonia	7.84
SWZ	Eswatini	3.05
ETH	Ethiopia	3.58
FIN	Finland	9.05
FRA	France	7.90
GAB	Gabon	3.70
GMB	Gambia	3.46
GEO	Georgia	5.81
DEU	Germany	8.64
GHA	Ghana	6.65
GRC	Greece	7.34

GTM	Guatemala	5.82
GIN	Guinea	3.11
GNB	Guinea-Bissau	1.96
HND	Honduras	5.79
HUN	Hungary	6.75
ISL	Iceland	9.56
IND	India	7.59
IDN	Indonesia	6.75
IRN	Iran	2.28
IRL	Ireland	9.00
ISR	Israel	7.77
ITA	Italy	7.90
KAZ	Kazakhstan	3.06
KEN	Kenya	5.20
KGZ	Kyrgyzstan	5.14
LAO	Laos	2.31
LVA	Latvia	7.36
LSO	Lesotho	6.62
LBR	Liberia	5.16
LTU	Lithuania	7.49
LUX	Luxembourg	8.84
MWI	Malawi	5.55
MYS	Malaysia	6.58
MLI	Mali	5.65
MLT	Malta	8.31
MRT	Mauritania	3.95
MUS	Mauritius	8.23
MEX	Mexico	6.46
MDA	Moldova	6.09
MNG	Mongolia	6.57
MNE	Montenegro	5.82
MOZ	Mozambique	4.23
MMR	Myanmar	3.81
NAM	Namibia	6.28
NLD	Netherlands	8.88
NIC	Nicaragua	4.74
NER	Niger	3.87
NGA	Nigeria	4.35
MKD	North Macedoni	5.79
NOR	Norway	9.91
PAK	Pakistan	4.36
PSE	Palestine	4.53
PAN	Panama	7.11
PRY	Paraguay	6.28
PER	Peru	6.57
PHL	Philippines	6.79
POL	Poland	6.95
PRT	Portugal	7.82
ROU	Romania	6.56

RUS	Russia	3.21
RWA	Rwanda	3.19
SEN	Senegal	6.15
SRB	Serbia	6.56
SLE	Sierra Leone	4.60
SVK	Slovakia	7.24
SVN	Slovenia	7.53
ZAF	South Africa	7.45
KOR	South Korea	7.99
ESP	Spain	8.16
LKA	Sri Lanka	6.25
SDN	Sudan	2.32
SWE	Sweden	9.47
CHE	Switzerland	9.07
TJK	Tajikistan	2.01
TZA	Tanzania	5.60
THA	Thailand	4.93
TLS	Timor-Leste	7.22
TGO	Togo	3.27
TUN	Tunisia	6.43
TUR	Turkey	4.91
UGA	Uganda	5.20
UKR	Ukraine	5.64
ARE	United Arab Emi	2.72
GBR	United Kingdom	8.41
USA	United States	8.02
URY	Uruguay	8.20
VNM	Vietnam	3.30
YEM	Yemen	2.22
ZMB	Zambia	5.99
ZWE	Zimbabwe	3.04
AFG	Afghanistan	2.72
DZA	Algeria	3.68
AZE	Azerbaijan	2.70
BHR	Bahrain	2.77
BIH	Bosnia and Herze	4.87
BDI	Burundi	2.58
KHM	Cambodia	4.11
CAF	Central African R	1.54
COG	Congo	3.05
CUB	Cuba	3.36
COD	Democratic Repu	1.78
GNQ	Equatorial Guine	1.77
ERI	Eritrea	2.38

FJI	Fiji	5.73
GUY	Guyana	6.27
HTI	Haiti	4.14
HKG	Hong Kong	6.37
IRQ	Iraq	4.11
JAM	Jamaica	7.30
JPN	Japan	7.98
JOR	Jordan	3.88
KWT	Kuwait	3.84
LBN	Lebanon	4.84
LBY	Libya	2.56
MDG	Madagascar	4.93
MAR	Morocco	4.66
NPL	Nepal	4.95
NZL	New Zealand	9.26
PRK	North Korea	1.08
OMN	Oman	3.06
PNG	Papua New Guin	6.03
QAT	Qatar	3.18
SAU	Saudi Arabia	1.91
SGP	Singapore	6.25
SUR	Suriname	6.81
SYR	Syria	1.49
TTO	Trinidad and Tob	7.08
UZB	Uzbekistan	2.06
VEN	Venezuela	4.36
TWN	Taiwan	7.75
	Africa	4.30
	Asia	4.46
	Europe	7.45
	North America	6.43
	Oceania	7.52
	South America	6.55
TKM	Turkmenistan	1.79
	World	5.52

INITIAL DATASET FOR EACH VARIABLE

Country / Territory	ISO3	Region	CPI_average
Albania	ALB	ECA	36.40
Angola	AGO	SSA	18.00
Argentina	ARG	AME	36.20
Armenia	ARM	ECA	35.00
Australia	AUS	AP	78.40
Austria	AUT	WE/EU	74.80
Bangladesh	BGD	AP	26.00
Belarus	BLR	ECA	38.20
Belgium	BEL	WE/EU	76.00
Benin	BEN	SSA	38.20
Bhutan	BTN	AP	66.00
Bolivia	BOL	AME	32.80
Botswana	BWA	SSA	61.60
Brazil	BRA	AME	38.60
Bulgaria	BGR	WE/EU	42.00
Burkina Fasc	BFA	SSA	40.20
Cameroon	CMR	SSA	26.00
Canada	CAN	AME	81.80
Cabo Verde	CPV	SSA	56.60
Chad	TCD	SSA	20.60
Chile	CHL	AME	68.60
China	CHN	AP	38.60
Colombia	COL	AME	36.80
Comoros	COM	SSA	26.00
Costa Rica	CRI	AME	56.40
Cote d'Ivoire	CIV	SSA	33.80
Croatia	HRV	WE/EU	49.00
Cyprus	CYP	WE/EU	59.00
Czechia	CZE	WE/EU	55.60
Denmark	DNK	WE/EU	89.80
Djibouti	DJI	SSA	32.00
Dominican R	DOM	AME	31.00
Ecuador	ECU	AME	32.40
Egypt	EGY	MENA	34.80
El Salvador	SLV	AME	36.40
Estonia	EST	WE/EU	70.60
Eswatini	SWZ	SSA	40.00
Ethiopia	ETH	SSA	33.80
Finland	FIN	WE/EU	87.60
France	FRA	WE/EU	70.00
Gabon	GAB	SSA	33.80
Gambia	GMB	SSA	30.00
Georgia	GEO	ECA	55.00
Germany	DEU	WE/EU	80.40
Ghana	GHA	SSA	43.80

Greece	GRC	WE/EU	45.20
Guatemala	GTM	AME	28.60
Guinea	GIN	SSA	26.40
Guinea Bissa	GNB	SSA	17.00
Honduras	HND	AME	29.60
Hungary	HUN	WE/EU	48.80
Iceland	ISL	WE/EU	77.80
India	IND	AP	39.40
Indonesia	IDN	AP	36.40
Iran	IRN	MENA	28.20
Ireland	IRL	WE/EU	73.80
Israel	ISR	MENA	61.60
Italy	ITA	WE/EU	47.20
Kazakhstan	KAZ	ECA	29.60
Kenya	KEN	SSA	26.20
Kyrgyzstan	KGZ	ECA	28.20
Laos	LAO	AP	27.60
Latvia	LVA	WE/EU	56.80
Lesotho	LSO	SSA	43.00
Liberia	LBR	SSA	34.80
Lithuania	LTU	WE/EU	58.80
Luxembourg	LUX	WE/EU	82.20
Malawi	MWI	SSA	31.60
Malaysia	MYS	AP	49.00
Maldives	MDV	AP	33.33
Mali	MLI	SSA	32.40
Malta	MLT	WE/EU	56.00
Mauritania	MRT	SSA	28.60
Mauritius	MUS	SSA	52.40
Mexico	MEX	AME	30.60
Moldova	MDA	ECA	32.40
Mongolia	MNG	AP	37.80
Montenegro	MNE	ECA	44.40
Mozambique	MOZ	SSA	27.40
Myanmar	MMR	AP	26.00
Namibia	NAM	SSA	51.60
Netherlands	NLD	WE/EU	82.80
Nicaragua	NIC	AME	26.40
Niger	NER	SSA	34.20
Nigeria	NGA	SSA	27.00
North Maced	MKD	ECA	39.20
Norway	NOR	WE/EU	85.60
Pakistan	PAK	AP	31.20
Panama	PAN	AME	37.60
Paraguay	PRY	AME	27.80
Peru	PER	AME	36.20
Philippines	PHL	AP	35.60
Poland	POL	WE/EU	61.20
Portugal	PRT	WE/EU	63.20

Romania	ROU	WE/EU	46.40
Russia	RUS	ECA	28.40
Rwanda	RWA	SSA	53.60
Saint Lucia	LCA	AME	60.25
Sao Tome ar	STP	SSA	44.40
Senegal	SEN	SSA	44.40
Serbia	SRB	ECA	40.60
Seychelles	SYC	SSA	59.00
Sierra Leone	SLE	SSA	30.00
Slovakia	SVK	WE/EU	50.40
Slovenia	SVN	WE/EU	60.00
Somalia	SOM	SSA	9.00
South Africa	ZAF	SSA	43.80
Korea, South	KOR	AP	54.60
South Sudan	SSD	SSA	13.20
Spain	ESP	WE/EU	58.20
Sri Lanka	LKA	AP	37.40
Sudan	SDN	SSA	13.80
Sweden	SWE	WE/EU	86.60
Switzerland	CHE	WE/EU	85.60
Tajikistan	TJK	ECA	24.00
Tanzania	TZA	SSA	33.00
Thailand	THA	AP	36.80
Timor-Leste	TLS	AP	32.80
Togo	TGO	SSA	31.00
Tunisia	TUN	MENA	40.80
Turkey	TUR	ECA	41.80
Uganda	UGA	SSA	25.60
Ukraine	UKR	ECA	28.80
United Arab I	ARE	MENA	69.40
United Kingd	GBR	WE/EU	80.40
United States	USA	AME	74.00
Uruguay	URY	AME	71.60
Vietnam	VNM	AP	32.60
Yemen	YEM	MENA	16.20
Zambia	ZMB	SSA	37.20
Zimbabwe	ZWE	SSA	21.60
Kosovo	)WID_KO	ECA	35.60
Afghanistan	AFG	AP	13.80
Algeria	DZA	MENA	34.80
Azerbaijan	AZE	ECA	28.80
Bahamas	BHS	AME	66.75
Bahrain	BHR	MENA	43.00
Barbados	BRB	AME	67.75
Bosnia and H	BIH	ECA	38.40
Brunei Darus	BRN	AP	61.00
Burundi	BDI	SSA	20.00
Cambodia	KHM	AP	20.80
Central Africa	CAF	SSA	23.40

Congo	COG	SSA	21.20
Cuba	CUB	AME	46.80
Democratic F	COD	SSA	21.20
Dominica	DMA	AME	57.75
Equatorial Gu	GNQ	SSA	16.50
Eritrea	ERI	SSA	19.60
Fiji	FJI	AP	#DIV/0!
Grenada	GRD	AME	53.33
Guyana	GUY	AME	33.60
Haiti	HTI	AME	19.60
Hong Kong	HKG	AP	75.80
Iraq	IRQ	MENA	17.00
Jamaica	JAM	AME	41.20
Japan	JPN	AP	73.80
Jordan	JOR	MENA	49.40
Kuwait	KWT	MENA	42.80
Lebanon	LBN	MENA	27.80
Libya	LBY	MENA	16.40
Madagascar	MDG	SSA	26.20
Morocco	MAR	MENA	39.00
Nepal	NPL	AP	29.40
New Zealanc	NZL	AP	89.60
Korea, North	PRK	AP	11.80
Oman	OMN	MENA	46.20
Papua New (	PNG	AP	27.00
Qatar	QAT	MENA	65.20
Saint Vincent	VCT	AME	59.50
Saudi Arabia	SAU	MENA	49.00
Singapore	SGP	AP	84.40
Solomon Isla	SLB	AP	41.67
Suriname	SUR	AME	40.20
Syria	SYR	MENA	15.60
Trinidad and	TTO	AME	38.80
Uzbekistan	UZB	ECA	20.60
Vanuatu	VUT	AP	44.50
Venezuela	VEN	AME	17.80
Taiwan	TWN	AP	62.00
Turkmenistar	TKM	ECA	19.20

INITIAL DATASET FOR EACH VARIABLE

Country Name	Country Code	Gini_average
Albania	ALB	32.86
Angola	AGO	51.30
Argentina	ARG	41.50
Armenia	ARM	32.88
Australia	AUS	34.13
Austria	AUT	30.46
Bangladesh	BGD	32.40
Belarus	BLR	25.74
Belgium	BEL	27.60
Benin	BEN	42.80
Bhutan	BTN	37.40
Bolivia	BOL	45.40
Botswana	BWA	53.30
Brazil	BRA	52.88
Bulgaria	BGR	39.66
Burkina Faso	BFA	41.30
Cameroon	CMR	46.60
Canada	CAN	33.23
Cabo Verde	CPV	42.40
Chad	TCD	37.50
Chile	CHL	44.40
China	CHN	38.78
Colombia	COL	50.86
Comoros	COM	45.30
Costa Rica	CRI	48.40
Cote d'Ivoire	CIV	39.35
Croatia	HRV	30.84
Cyprus	CYP	33.32
Czechia	CZE	25.42
Denmark	DNK	28.34
Djibouti	DJI	41.60
Dominican Republ	DOM	44.22
Ecuador	ECU	45.22
Egypt	EGY	31.65
El Salvador	SLV	39.76
Estonia	EST	31.84
Eswatini	SWZ	54.60
Ethiopia	ETH	35.00
Finland	FIN	27.14
France	FRA	32.18
Gabon	GAB	38.00
Gambia	GMB	35.90
Georgia	GEO	37.00
Germany	DEU	31.40
Ghana	GHA	43.50
Greece	GRC	34.82

Guatemala	GTM	48.30
Guinea	GIN	29.60
Guinea-Bissau	GNB	34.80
Honduras	HND	49.44
Hungary	HUN	30.36
Iceland	ISL	26.98
India	IND	35.00
Indonesia	IDN	39.42
Iran	IRN	40.22
Ireland	IRL	31.70
Israel	ISR	39.06
Italy	ITA	35.28
Kazakhstan	KAZ	27.26
Kenya	KEN	40.80
Kyrgyzstan	KGZ	27.52
Laos	LAO	38.80
Latvia	LVA	34.86
Lesotho	LSO	44.90
Liberia	LBR	34.25
Lithuania	LTU	37.30
Luxembourg	LUX	33.14
Malawi	MWI	44.70
Malaysia	MYS	41.10
Maldives	MDV	31.30
Mali	MLI	36.10
Malta	MLT	29.08
Mauritania	MRT	32.60
Mauritius	MUS	36.80
Mexico	MEX	47.70
Moldova	MDA	26.34
Mongolia	MNG	32.33
Montenegro	MNE	38.00
Mozambique	MOZ	54.00
Myanmar	MMR	34.40
Namibia	NAM	59.10
Netherlands	NLD	28.32
Nicaragua	NIC	46.20
Niger	NER	35.80
Nigeria	NGA	35.50
North Macedonia	MKD	34.50
Norway	NOR	27.48
Pakistan	PAK	30.45
Palestine	PSE	33.70
Panama	PAN	50.16
Paraguay	PRY	48.14
Peru	PER	43.16
Philippines	PHL	43.45
Poland	POL	31.14
Portugal	PRT	34.72
Romania	ROU	35.62

Russia	RUS	37.82
Rwanda	RWA	43.70
Saint Lucia	LCA	51.20
Sao Tome and Prir	STP	40.70
Senegal	SEN	38.10
Serbia	SRB	38.20
Seychelles	SYC	32.10
Sierra Leone	SLE	35.70
Slovakia	SVK	25.20
Slovenia	SVN	24.94
Somalia	SOM	36.80
South Africa	ZAF	63.00
South Korea	KOR	31.30
South Sudan	SSD	44.10
Spain	ESP	35.50
Sri Lanka	LKA	39.30
Sudan	SDN	34.20
Sweden	SWE	29.20
Switzerland	CHE	32.72
Tajikistan	TJK	34.00
Tanzania	TZA	40.50
Thailand	THA	36.56
Timor-Leste	TLS	28.70
Togo	TGO	42.75
Tonga	TON	37.60
Tunisia	TUN	32.80
Turkey	TUR	41.86
Uganda	UGA	42.80
Ukraine	UKR	25.32
United Arab Emira	ARE	26.00
United Kingdom	GBR	34.28
United States	USA	41.28
Uruguay	URY	39.82
Vietnam	VNM	35.27
Yemen	YEM	36.70
Zambia	ZMB	57.10
Zimbabwe	ZWE	44.30
Kosovo	OWID_KOS	27.38

INITIAL DATASET FOR EACH VARIABLE

iso_code	Countries	CHE_average
ALB	Albania	295
AGO	Angola	106
ARG	Argentina	1 321
ARM	Armenia	401
AUS	Australia	5 720
AUT	Austria	4 998
BGD	Bangladesh	38
BLR	Belarus	350
BEL	Belgium	4 786
BEN	Benin	29
BTN	Bhutan	97
BOL	Bolivia	204
BWA	Botswana	399
BRA	Brazil	879
BGR	Bulgaria	601
BFA	Burkina Faso	39
CMR	Cameroon	54
CAN	Canada	4 907
CPV	Cabo Verde	162
TCD	Chad	35
CHL	Chile	1 258
CHN	China	420
COL	Colombia	503
COM	Comoros	71
CRI	Costa Rica	865
CIV	Cote d'Ivoire	70
HRV	Croatia	893
CYP	Cyprus	1 783
CZE	Czechia	1 479
DNK	Denmark	5 938
DJI	Djibouti	68
DOM	Dominican Republic	326
ECU	Ecuador	458
EGY	Egypt	141
SLV	El Salvador	332
EST	Estonia	1 315
SWZ	Eswatini	265
ETH	Ethiopia	24
FIN	Finland	4 383
FRA	France	4 504
GAB	Gabon	207
GMB	Gambia	20
GEO	Georgia	324
DEU	Germany	5 049
GHA	Ghana	72
GRC	Greece	1 562

GTM	Guatemala	245
GIN	Guinea	38
GNB	Guinea-Bissau	58
HND	Honduras	173
HUN	Hungary	971
ISL	Iceland	5 190
IND	India	58
IDN	Indonesia	106
IRN	Iran	422
IRL	Ireland	5 019
ISR	Israel	2 918
ITA	Italy	2 868
KAZ	Kazakhstan	300
KEN	Kenya	72
KGZ	Kyrgyzstan	78
LAO	Laos	54
LVA	Latvia	908
LSO	Lesotho	105
LBR	Liberia	67
LTU	Lithuania	1 052
LUX	Luxembourg	5 877
MWI	Malawi	36
MYS	Malaysia	385
MDV	Maldives	851
MLI	Mali	31
MLT	Malta	2 465
MRT	Mauritania	56
MUS	Mauritius	567
MEX	Mexico	542
MDA	Moldova	222
MNG	Mongolia	161
MNE	Montenegro	618
MOZ	Mozambique	38
MMR	Myanmar	59
NAM	Namibia	468
NLD	Netherlands	5 059
NIC	Nicaragua	165
NER	Niger	26
NGA	Nigeria	84
MKD	North Macedonia	339
NOR	Norway	8 054
PAK	Pakistan	38
PAN	Panama	1 063
PRY	Paraguay	409
PER	Peru	330
PHL	Philippines	119
POL	Poland	883
PRT	Portugal	1 988

ROU	Romania	533
RUS	Russia	579
RWA	Rwanda	50
LCA	Saint Lucia	501
STP	Sao Tome and Principe	109
SEN	Senegal	59
SRB	Serbia	544
SYC	Seychelles	710
SLE	Sierra Leone	86
SVK	Slovakia	1 213
SVN	Slovenia	1 954
ZAF	South Africa	523
KOR	South Korea	2 119
SSD	South Sudan	28
ESP	Spain	2 534
LKA	Sri Lanka	147
SDN	Sudan	82
SWE	Sweden	5 946
CHE	Switzerland	9 576
TJK	Tajikistan	62
TZA	Tanzania	38
THA	Thailand	238
TLS	Timor-Leste	91
TGO	Togo	48
TON	Tonga	199
TUN	Tunisia	240
TUR	Turkey	450
UGA	Uganda	39
UKR	Ukraine	187
ARE	United Arab Emirates	1 623
GBR	United Kingdom	4 271
USA	United States	9 570
URY	Uruguay	1 540
VNM	Vietnam	133
YEM	Yemen	69
ZMB	Zambia	64
ZWE	Zimbabwe	107
AFG	Afghanistan	64
DZA	Algeria	287
AND	Andorra	2 948
ATG	Antigua and Barbuda	811
AZE	Azerbaijan	190
BHS	Bahamas	1 766
BHR	Bahrain	1 097
BRB	Barbados	1 173
BLZ	Belize	289

BIH	Bosnia and Herzegovina	474
BRN	Brunei	719
BDI	Burundi	19
KHM	Cambodia	80
CAF	Central African Republic	27
COG	Congo	57
COD	Democratic Republic of Congo	19
CUB	Cuba	957
DMA	Dominica	421
GNQ	Equatorial Guinea	285
ERI	Eritrea	25
FJI	Fiji	185
GRD	Grenada	405
GUY	Guyana	250
HTI	Haiti	63
IRQ	Iraq	180
JAM	Jamaica	298
JPN	Japan	4 103
JOR	Jordan	308
KIR	Kiribati	151
KWT	Kuwait	1 360
LBN	Lebanon	645
LBY	Libya	#DIV/0!
MDG	Madagascar	23
MHL	Marshall Islands	617
FSM	Micronesia (country)	385
MCO	Monaco	3 265
MAR	Morocco	171
NRU	Nauru	986
NPL	Nepal	47
NZL	New Zealand	3 879
OMN	Oman	710
PLW	Palau	1 842
PNG	Papua New Guinea	61
QAT	Qatar	2 215
KNA	Saint Kitts and Nevis	1 078
VCT	Saint Vincent and the Grenadines	322
WSM	Samoa	215
SMR	San Marino	3 912
SAU	Saudi Arabia	1 244
SGP	Singapore	2 432
SLB	Solomon Islands	98

SUR	Suriname	416
SYR	Syria	#DIV/0!
TTO	Trinidad and Tobago	1 037
TUV	Tuvalu	592
UZB	Uzbekistan	111
VUT	Vanuatu	97
VEN	Venezuela	417
COK	Cook Islands	563
TKM	Turkmenistan	428
NIU	Niue	1 261

INITIAL DATASET FOR EACH VARIABLE

iso_code	country	%Overweight_average
ALB	Albania	57.00
AGO	Angola	26.83
ARG	Argentina	62.27
ARM	Armenia	53.90
AUS	Australia	64.03
AUT	Austria	53.87
BGD	Bangladesh	19.40
BLR	Belarus	59.00
BEL	Belgium	59.20
BEN	Benin	28.93
BTN	Bhutan	26.37
BOL	Bolivia (Plurinational State of)	55.50
BWA	Botswana	42.90
BRA	Brazil	55.90
BGR	Bulgaria	61.23
BFA	Burkina Faso	22.57
CMR	Cameroon	32.97
CAN	Canada	63.67
CPV	Cabo Verde	34.17
TCD	Chad	22.60
CHL	Chile	62.57
CHN	China	31.57
COL	Colombia	58.47
COM	Comoros	26.60
CRI	Costa Rica	60.80
CIV	Côte d'Ivoire	30.93
HRV	Croatia	59.10
CYP	Cyprus	58.77
CZE	Czechia	61.97
DNK	Denmark	55.07
DJI	Djibouti	38.13
DOM	Dominican Republic	60.30
ECU	Ecuador	55.40
EGY	Egypt	62.83
SLV	El Salvador	59.30
EST	Estonia	55.43
SWZ	Eswatini	37.87
ETH	Ethiopia	20.40
FIN	Finland	57.57
FRA	France	59.03
GAB	Gabon	39.63
GMB	Gambia	31.20
GEO	Georgia	53.50
DEU	Germany	56.40
GHA	Ghana	31.40
GRC	Greece	61.90

GTM	Guatemala	55.27
GIN	Guinea	26.07
GNB	Guinea-Bissau	29.27
HND	Honduras	55.03
HUN	Hungary	61.10
ISL	Iceland	58.77
IND	India	19.13
IDN	Indonesia	27.37
IRN	Iran (Islamic Republic of)	60.90
IRL	Ireland	60.03
ISR	Israel	63.97
ITA	Italy	58.03
KAZ	Kazakhstan	53.00
KEN	Kenya	24.90
KGZ	Kyrgyzstan	47.60
LAO	Lao People's Democratic Republic	24.57
LVA	Latvia	57.50
LSO	Lesotho	38.10
LBR	Liberia	30.37
LTU	Lithuania	59.23
LUX	Luxembourg	58.30
MWI	Malawi	22.90
MYS	Malaysia	41.57
MDV	Maldives	29.60
MLI	Mali	27.40
MLT	Malta	66.07
MRT	Mauritania	33.73
MUS	Mauritius	31.87
MEX	Mexico	64.40
MDA	Republic of Moldova	51.33
MNG	Mongolia	54.80
MNE	Montenegro	58.93
MOZ	Mozambique	25.90
MMR	Myanmar	24.03
NAM	Namibia	39.80
NLD	Netherlands	57.37
NIC	Nicaragua	57.57
NER	Niger	21.50
NGA	Nigeria	28.27
MKD	The former Yugoslav Republic of Macedonia	57.63
NOR	Norway	57.87
PAK	Pakistan	27.70
PAN	Panama	58.20
PRY	Paraguay	52.83
PER	Peru	56.93
PHL	Philippines	27.00
POL	Poland	57.83
PRT	Portugal	57.00
ROU	Romania	57.13

RUS	Russian Federation	56.70
RWA	Rwanda	24.47
LCA	Saint Lucia	47.33
STP	Sao Tome and Principe	34.73
SEN	Senegal	27.83
SRB	Serbia	56.67
SYC	Seychelles	36.23
SLE	Sierra Leone	27.17
SVK	Slovakia	55.77
SVN	Slovenia	55.67
SOM	Somalia	27.80
ZAF	South Africa	53.17
KOR	Republic of Korea	29.93
SSD	South Sudan	
ESP	Spain	61.27
LKA	Sri Lanka	22.63
SDN	Sudan	
SWE	Sweden	56.00
CHE	Switzerland	53.90
TJK	Tajikistan	44.60
TZA	United Republic of Tanzania	27.03
THA	Thailand	31.60
TLS	Timor-Leste	20.93
TGO	Togo	27.50
TON	Tonga	78.07
TUN	Tunisia	61.00
TUR	Türkiye	66.20
UGA	Uganda	21.90
UKR	Ukraine	58.00
ARE	United Arab Emirates	67.23
GBR	United Kingdom of Great Britain and Northern Ireland	63.20
USA	United States of America	67.40
URY	Uruguay	62.40
VNM	Viet Nam	17.70
YEM	Yemen	47.97
ZMB	Zambia	27.27
ZWE	Zimbabwe	37.73
AFG	Afghanistan	22.33
DZA	Algeria	61.27
AND	Andorra	63.50
ATG	Antigua and Barbuda	47.43
AZE	Azerbaijan	52.90
BHS	Bahamas	63.87
BHR	Bahrain	65.23
BRB	Barbados	51.77
BLZ	Belize	54.20
BIH	Bosnia and Herzegovina	52.77
BRN	Brunei Darussalam	40.37
BDI	Burundi	21.63
KHM	Cambodia	21.10

CAF	Central African Republic	25.63
COG	Congo	30.30
CUB	Cuba	57.90
COD	Democratic Republic of the Congo	24.70
DMA	Dominica	59.67
GNQ	Equatorial Guinea	26.13
ERI	Eritrea	21.50
FJI	Fiji	63.20
GRD	Grenada	50.70
GUY	Guyana	48.70
HTI	Haiti	53.87
IRQ	Iraq	64.07
JAM	Jamaica	54.80
JPN	Japan	26.80
JOR	Jordan	69.03
KIR	Kiribati	78.30
KWT	Kuwait	73.00
LBN	Lebanon	67.40
LBY	Libya	66.23
MDG	Madagascar	23.30
MHL	Marshall Islands	83.13
FSM	Micronesia (Federated States of)	75.40
MCO	Monaco	
MAR	Morocco	59.67
NRU	Nauru	88.30
NPL	Nepal	20.40
NZL	New Zealand	65.10
PRK	Democratic People's Republic of Korea	31.90
OMN	Oman	61.87
PLW	Palau	84.77
PNG	Papua New Guinea	52.20
QAT	Qatar	71.13
KNA	Saint Kitts and Nevis	51.60
VCT	Saint Vincent and the Grenadines	54.23
WSM	Samoa	77.20
SMR	San Marino	
SAU	Saudi Arabia	69.13
SGP	Singapore	31.50
SLB	Solomon Islands	54.23
SUR	Suriname	58.37
SYR	Syrian Arab Republic	60.70
TTO	Trinidad and Tobago	45.30
TUV	Tuvalu	81.40
UZB	Uzbekistan	47.50
VUT	Vanuatu	56.40
VEN	Venezuela (Bolivarian Republic of)	63.00
COK	Cook Islands	84.40
NIU	Niue	79.47
SDN736	Sudan (until 2011)	27.13
TKM	Turkmenistan	51.10

INITIAL DATASET FOR EACH VARIABLE

ISO	MediaFreedom_average
ALB	70.396
AGO	61.4
ARG	74.482
ARM	70.668
AUS	83.348
AUT	87.69
BGD	54.31
BLR	48.972
BEL	87.026
BEN	70.496
BTN	68.886
BOL	67.912
BWA	76.21
BRA	67.328
BGR	66.196
BFA	76.384
CMR	59.84
CAN	86.19
CPV	81.352
TCD	60.182
CHL	77.75
CHN	23.326
COL	59.526
COM	75.4
CRI	87.694
CIV	69.45
HRV	72.124
CYP	82.226
CZE	84.57
DNK	90.218
DJI	29.282
DOM	72.814
ECU	67.556
EGY	46.198
SLV	74.51
EST	87.448
SWZ	50.172
ETH	54.39
FIN	91.662
FRA	77.804
GAB	67.58
GMB	55.498
GEO	71.892
DEU	86.828
GHA	82.78
GRC	69.446

GTM	62.388
GIN	67.528
GNB	70.408
HND	57.998
HUN	71.908
ISL	87.04
IND	57.964
IDN	59.954
IRN	32.608
IRL	87.372
ISR	68.574
ITA	73.8
KAZ	45.726
KEN	68.81
KGZ	69.198
LAO	30.626
LVA	81.03
LSO	71.388
LBR	69.282
LTU	79.696
LUX	87.164
MWI	72.156
MYS	54.622
MDV	64.23
MLI	62.626
MLT	75.192
MRT	73.718
MUS	72.762
MEX	52.812
MDA	71.51
MNG	71.768
MNE	66.588
MOZ	69.668
MMR	57.208
NAM	84.506
NLD	90.854
NIC	70.824
NER	74.666
NGA	63.734
MKD	64.61
NOR	92.342
PAK	52.554
PSE	58.018
PAN	69.51
PRY	66.572
PER	69.17
PHL	57.37
POL	79.862
PRT	83.59
ROU	75.844

RUS	52.762
RWA	45.048
SEN	73.046
SRB	72.412
SYC	69.028
SLE	70.53
SVK	85.584
SVN	78.684
SOM	32.032
ZAF	78.464
KOR	73.618
SSD	57.2
ESP	80.06
LKA	49.984
SDN	27.712
SWE	90.528
CHE	88.104
TJK	55.656
TZA	70.932
THA	57.692
TLS	68.536
TGO	70.242
TON	75.608
TUN	65.58
TUR	50.546
UGA	65.954
UKR	65.338
ARE	62.052
GBR	78.572
USA	76.4
URY	83.822
VNM	26.346
YEM	34.256
ZMB	65.568
ZWE	59.848
OWID_KOS	69.904
AFG	62.2
DZA	59.892
AND	82.04
AZE	42.94
BHR	41.692
BLZ	79.164
BIH	72.396
BRN	53.748
BDI	50.286
KHM	57.874
CAF	65.612
COG	65.914

CUB	29.598
COD	51.162
GNQ	33.282
ERI	15.582
FJI	70.318
GUY	73.118
HTI	74.71
HKG	71.738
IRQ	48.372
JAM	88.282
JPN	72.056
JOR	57.614
KWT	68.068
LBN	68.038
LBY	48.536
LIE	83.23
MDG	72.648
MAR	58.58
NPL	66.688
NZL	88.756
PRK	15.436
OMN	60.156
PNG	74.72
QAT	62.874
WSM	80.752
SAU	38.684
SGP	50.966
SUR	82.878
SYR	20.722
TTO	77.526
UZB	37.95
VEN	58.056
TWN	75.85
CTU	70.624
TKM	17.306
XCD	79.01

INITIAL DATASET FOR EACH VARIABLE

iso_code	Location	concentration_fpm_average
ALB	Albania	19.006
AGO	Angola	25.304
ARG	Argentina	13.502
ARM	Armenia	39.208
AUS	Australia	6.836
AUT	Austria	12.778
BGD	Banglades	49.244
BLR	Belarus	16.1
BEL	Belgium	12.654
BEN	Benin	32.396
BTN	Bhutan	28.322
BOL	Bolivia (Plu	25.836
BWA	Botswana	12.884
BRA	Brazil	12.67
BGR	Bulgaria	20.382
BFA	Burkina Fa	42.242
CMR	Cameroon	57.842
CAN	Canada	6.948
CPV	Cabo Verd	31.822
TCD	Chad	43.4
CHL	Chile	23.04
CHN	China	48.442
COL	Colombia	16.412
COM	Comoros	14.328
CRI	Costa Rica	17.372
CIV	Côte d'Ivoi	41.988
HRV	Croatia	18.536
CYP	Cyprus	14.732
CZE	Czechia	17.382
DNK	Denmark	10.178
DJI	Djibouti	20.43
DOM	Dominican	7.982
ECU	Ecuador	17.136
EGY	Egypt	61.96
SLV	El Salvador	25.792
EST	Estonia	6.68
SWZ	Eswatini	14.838
ETH	Ethiopia	22.138
FIN	Finland	5.586
FRA	France	11.57
GAB	Gabon	25.94
GMB	Gambia	39.424
GEO	Georgia	21.858
DEU	Germany	12.05
GHA	Ghana	48.082
GRC	Greece	15.624

GTM	Guatemala	24.234
GIN	Guinea	38.506
GNB	Guinea-Bis	35.612
HND	Honduras	21.98
HUN	Hungary	16.978
ISL	Iceland	5.958
IND	India	54.23
IDN	Indonesia	19.174
IRN	Iran (Islam	30.192
IRL	Ireland	8.484
ISR	Israel	20.348
ITA	Italy	16.298
KAZ	Kazakhstar	29.98
KEN	Kenya	12.518
KGZ	Kyrgyzstan	43.168
LAO	Lao People	20.63
LVA	Latvia	13.048
LSO	Lesotho	17.714
LBR	Liberia	35.944
LTU	Lithuania	11.138
LUX	Luxembou	10.004
MWI	Malawi	18.636
MYS	Malaysia	21.204
MDV	Maldives	12.592
MLI	Mali	39.878
MLT	Malta	13.482
MRT	Mauritania	42.584
MUS	Mauritius	10.588
MEX	Mexico	20.752
MDA	Republic o	13.408
MNG	Mongolia	46.394
MNE	Montenegı	22.65
MOZ	Mozambiq	16.546
MMR	Myanmar	26.766
NAM	Namibia	11.914
NLD	Netherlanc	11.96
NIC	Nicaragua	19.22
NER	Niger	51.466
NGA	Nigeria	56.476
MKD	The forme	29.488
NOR	Norway	6.492
PAK	Pakistan	54.858
PSE	Occupied F	30.228
PAN	Panama	13.836
PRY	Paraguay	13.764
PER	Peru	29.564
PHL	Philippines	22.126
POL	Poland	22.37
PRT	Portugal	8.388
ROU	Romania	15.428

RUS	Russian Fe	9.32
RWA	Rwanda	34.844
LCA	Saint Lucia	9.564
STP	Sao Tome	33.606
SEN	Senegal	39.046
SRB	Serbia	25.332
SYC	Seychelles	16.748
SLE	Sierra Leor	40.678
SVK	Slovakia	18.824
SVN	Slovenia	17.41
SOM	Somalia	14.364
ZAF	South Afric	19.218
KOR	Republic o	26.666
SSD	South Suda	21.85
ESP	Spain	10.35
LKA	Sri Lanka	23.462
SDN	Sudan	22.196
SWE	Sweden	6.114
CHE	Switzerlan	10.244
TJK	Tajikistan	61.488
TZA	United Rep	15.43
THA	Thailand	24.28
TLS	Timor-Lest	19.81
TGO	Togo	36.954
TON	Tonga	7.342
TUN	Tunisia	26.814
TUR	Türkiye	22.906
UGA	Uganda	31.634
UKR	Ukraine	14.35
ARE	United Ara	42.918
GBR	United Kin	10.476
USA	United Sta	8.112
URY	Uruguay	9.452
VNM	Viet Nam	20.622
YEM	Yemen	40.436
ZMB	Zambia	17.204
ZWE	Zimbabwe	13.15
AFG	Afghanista	66.258
DZA	Algeria	22.85
AND	Andorra	9.374
ATG	Antigua an	8.896
AZE	Azerbaijan	28.576
BHS	Bahamas	5.522
BHR	Bahrain	53.722
BRB	Barbados	10.418
BLZ	Belize	11.052
BIH	Bosnia and	31.188
BRN	Brunei Dar	7.494
BDI	Burundi	28.126
KHM	Cambodia	17.522

CAF	Central Afr	28.402
COG	Congo	29.142
CUB	Cuba	14.276
COD	Democrati	31.89
DMA	Dominica	8.806
GNQ	Equatorial	26.27
ERI	Eritrea	22.496
FJI	Fiji	7.382
GRD	Grenada	10.648
GUY	Guyana	11.622
HTI	Haiti	10.252
IRQ	Iraq	38.606
JAM	Jamaica	15.824
JPN	Japan	12.292
JOR	Jordan	25.164
KIR	Kiribati	7.516
KWT	Kuwait	64.836
LBN	Lebanon	24.006
LBY	Libya	29.59
MDG	Madagasca	16.236
MHL	Marshall Is	7.126
FSM	Micronesia	7.6
MCO	Monaco	9.884
MAR	Morocco	13.556
NRU	Nauru	7.366
NPL	Nepal	39.074
NZL	New Zealar	7.126
PRK	Democrati	52.284
OMN	Oman	35.748
PLW	Palau	7.728
PNG	Papua New	8.77
QAT	Qatar	62.254
KNA	Saint Kitts	8.606
VCT	Saint Vince	10.026
WSM	Samoa	7.674
SMR	San Marinc	10.822
SAU	Saudi Arab	56.794
SGP	Singapore	15.124
SLB	Solomon Is	7.798
SUR	Suriname	12.828
SYR	Syrian Arab	24.654
TTO	Trinidad ar	10.844
TUV	Tuvalu	6.844
UZB	Uzbekistan	47.07
VUT	Vanuatu	8.614
VEN	Venezuela	19.076
COK	Cook Islanc	7.558
NIU	Niue	6.634
TKM	Turkmenis	30.652

INITIAL DATASET FOR EACH VARIABLE

iso_code	CountryName	strigency_period
ALB	Albania	44.53
AGO	Angola	54.20
ARG	Argentina	55.85
ARM		
AUS	Australia	50.38
AUT	Austria	50.95
BGD	Bangladesh	53.21
BLR	Belarus	25.15
BEL	Belgium	42.42
BEN	Benin	33.76
BTN	Bhutan	54.48
BOL	Bolivia	44.28
BWA	Botswana	39.37
BRA	Brazil	51.16
BGR	Bulgaria	38.45
BFA	Burkina Faso	21.66
CMR	Cameroon	33.51
CAN	Canada	54.09
CPV	Cabo Verde	49.69
TCD	Chad	38.44
CHL	Chile	54.74
CHN	China	71.98
COL	Colombia	53.62
COM	Comoros	
CRI	Costa Rica	46.18
CIV	Cote d'Ivoire	26.06
HRV	Croatia	35.64
CYP	Cyprus	48.69
CZE	Czechia	42.04
DNK	Denmark	37.51
DJI	Djibouti	42.93
DOM	Dominican Republic	48.39
ECU	Ecuador	52.52
EGY	Egypt	45.94
SLV	El Salvador	43.16
EST	Estonia	33.99
SWZ	Eswatini	52.05
ETH	Ethiopia	47.49
FIN	Finland	36.27
FRA	France	45.06
GAB	Gabon	50.44
GMB	Gambia	34.78
GEO	Georgia	47.72
DEU	Germany	48.93
GHA	Ghana	44.02
GRC	Greece	56.55

GTM	Guatemala	55.60
GIN	Guinea	55.52
GNB		
HND	Honduras	66.58
HUN	Hungary	37.92
ISL	Iceland	32.56
IND	India	60.79
IDN	Indonesia	56.88
IRN	Iran	60.90
IRL	Ireland	45.49
ISR	Israel	45.92
ITA	Italy	55.41
KAZ	Kazakhstan	55.10
KEN	Kenya	54.31
KGZ	Kyrgyzstan	49.26
LAO	Laos	47.87
LVA	Latvia	38.25
LSO	Lesotho	46.81
LBR	Liberia	47.00
LTU	Lithuania	38.29
LUX	Luxembourg	40.09
MWI	Malawi	43.34
MYS	Malaysia	52.48
MDV		
MLI	Mali	39.11
MLT	Malta	42.49
MRT	Mauritania	38.69
MUS	Mauritius	36.78
MEX	Mexico	46.80
MDA	Moldova	44.09
MNG	Mongolia	45.88
MNE		
MOZ	Mozambique	46.43
MMR	Myanmar	66.51
NAM	Namibia	37.76
NLD	Netherlands	45.73
NIC	Nicaragua	11.41
NER	Niger	22.36
NGA	Nigeria	43.24
MKD		
NOR	Norway	37.87
PAK	Pakistan	54.06
PSE	Palestine	55.48
PAN	Panama	52.96
PRY	Paraguay	46.58
PER	Peru	57.33
PHL	Philippines	61.71
POL	Poland	42.49
PRT	Portugal	46.60
ROU	Romania	45.36

RUS	Russia	43.66
RWA	Rwanda	56.54
LCA		
STP		
SEN	Senegal	32.22
SRB	Serbia	39.88
SYC	Seychelles	48.97
SLE	Sierra Leone	43.90
SVK	Slovakia	41.49
SVN	Slovenia	43.23
SOM	Somalia	31.94
ZAF	South Africa	46.77
KOR	South Korea	43.44
SSD	South Sudan	42.36
ESP	Spain	48.47
LKA	Sri Lanka	53.89
SDN	Sudan	31.20
SWE	Sweden	39.01
CHE	Switzerland	37.36
TJK	Tajikistan	29.65
TZA	Tanzania	15.92
THA	Thailand	46.77
TLS	Timor-Leste	39.50
TGO	Togo	45.26
TON	Tonga	48.35
TUN	Tunisia	51.17
TUR	Turkey	45.44
UGA	Uganda	56.16
UKR	Ukraine	45.64
ARE	United Arab Emirates	47.05
GBR	United Kingdom	46.25
USA	United States	50.64
URY	Uruguay	39.69
VNM	Vietnam	57.75
YEM	Yemen	28.15
ZMB	Zambia	31.87
ZWE	Zimbabwe	59.75
OWID_KOS	Kosovo	50.83
AFG	Afghanistan	29.52
DZA	Algeria	56.00
AZE	Azerbaijan	62.27
BHR	Bahrain	41.09
BIH	Bosnia and Herzegovina	40.27
BDI	Burundi	16.11
KHM	Cambodia	48.18
CAF	Central African Republic	25.18
COG	Congo	46.25
CUB	Cuba	51.62
COD	Democratic Republic of Congo	38.97
GNQ		

ERI	Eritrea	
FJI	Fiji	56.72
GUY	Guyana	55.33
HTI	Haiti	45.76
HKG	Hong Kong	60.05
IRQ	Iraq	61.26
JAM	Jamaica	57.80
JPN	Japan	41.68
JOR	Jordan	44.93
KWT	Kuwait	53.01
LBN	Lebanon	55.15
LBY	Libya	60.58
MDG	Madagascar	41.43
MAR	Morocco	56.70
NPL	Nepal	53.35
NZL	New Zealand	36.99
PRK		
OMN	Oman	49.49
PNG	Papua New Guinea	48.44
QAT	Qatar	56.09
SAU	Saudi Arabia	48.63
SGP	Singapore	45.81
SUR	Suriname	57.39
SYR	Syria	39.90
TTO	Trinidad and Tobago	55.73
UZB	Uzbekistan	41.49
VEN	Venezuela	58.87
TWN	Taiwan	30.92
AND	Andorra	35.64
AIA		
ATG		
ABW	Aruba	39.80
BHS	Bahamas	58.46
BRB	Barbados	51.08
BLZ	Belize	51.27
BMU	Bermuda	41.86
BES		
VGB		
BRN	Brunei	41.88
CYM		
COK		
CUW		
DMA	Dominica	41.59
FRO	Faeroe Islands	29.13
FLK		
PYF		
GIB		
GRL	Greenland	32.62
GRD	Grenada	29.44
IMN		

KIR	Kiribati	27.26
LIE	Liechtenstein	35.03
MAC	Macao	33.42
MHL		
FSM		
MCO	Monaco	38.93
MSR		
NRU		
NCL		
PLW		
SHN		
KNA		
SPM		
VCT		
WSM		
SMR	San Marino	40.46
SLB	Solomon Islands	37.77
TCA		
TUV		
VUT	Vanuatu	30.96
VAT		
WLF		

INITIAL DATASET FOR EACH VARIABLE

iso_code	location	date	vacc_rate_p1	months_p1
ALB	Albania	30/12/2021	3.35	12
AGO	Angola	30/12/2021	2.16	10
ARG	Argentina	30/12/2021	6.56	13
ARM	Armenia	30/12/2021	3.73	9
AUS	Australia	30/12/2021	7.10	11
AUT	Austria	30/12/2021	6.23	12
BGD	Bangladesh	30/12/2021	3.21	12
BLR	Belarus	30/12/2021	3.51	13
BEL	Belgium	30/12/2021	5.90	13
BEN	Benin	30/12/2021	1.59	8
BTN	Bhutan	30/12/2021	7.54	10
BOL	Bolivia	30/12/2021	4.17	11
BWA	Botswana	30/12/2021	2.93	10
BRA	Brazil	30/12/2021	6.43	12
BGR	Bulgaria	30/12/2021	2.16	13
BFA	Burkina Faso	30/12/2021	0.61	7
CMR	Cameroon	30/12/2021	0.33	9
CAN	Canada	30/12/2021	6.35	13
CPV	Cabo Verde	30/12/2021	5.11	10
TCD	Chad	30/12/2021	0.17	7
CHL	Chile	30/12/2021	6.79	13
CHN	China	30/12/2021	6.80	13
COL	Colombia	30/12/2021	6.72	11
COM	Comoros	30/12/2021	3.75	9
CRI	Costa Rica	30/12/2021	5.86	13
CIV	Cote d'Ivoire	30/12/2021	1.17	10
HRV	Croatia	30/12/2021	4.31	13
CYP	Cyprus	30/12/2021	5.96	12
CZE	Czechia	30/12/2021	5.00	13
DNK	Denmark	30/12/2021	6.18	13
DJI	Djibouti	30/12/2021	0.38	9
DOM	Dominican Republic	30/12/2021	5.62	11
ECU	Ecuador	30/12/2021	6.58	12
EGY	Egypt	30/12/2021	2.49	12
SLV	El Salvador	30/12/2021	6.43	11
EST	Estonia	30/12/2021	4.88	13
SWZ	Eswatini	30/12/2021	2.78	10
ETH	Ethiopia	30/12/2021	0.84	9
FIN	Finland	30/12/2021	6.43	12
FRA	France	30/12/2021	6.04	13
GAB	Gabon	30/12/2021	0.92	10
GMB	Gambia	30/12/2021	0.97	10
GEO	Georgia	30/12/2021	3.64	10
DEU	Germany	30/12/2021	5.79	13
GHA	Ghana	30/12/2021	1.73	10
GRC	Greece	30/12/2021	5.53	13

GTM	Guatemala	30/12/2021	3.33	11
GIN	Guinea	30/12/2021	1.45	10
GNB	Guinea-Bissau	30/12/2021	2.32	8
HND	Honduras	30/12/2021	4.28	11
HUN	Hungary	30/12/2021	4.84	13
ISL	Iceland	30/12/2021	5.95	13
IND	India	30/12/2021	4.96	12
IDN	Indonesia	30/12/2021	4.84	12
IRN	Iran	30/12/2021	6.11	11
IRL	Ireland	30/12/2021	6.02	13
ISR	Israel	30/12/2021	5.35	13
ITA	Italy	30/12/2021	6.31	13
KAZ	Kazakhstan	30/12/2021	4.21	11
KEN	Kenya	30/12/2021	1.10	10
KGZ	Kyrgyzstan	30/12/2021	1.86	10
LAO	Laos	30/12/2021	4.97	10
LVA	Latvia	30/12/2021	5.46	13
LSO	Lesotho	30/12/2021	2.81	10
LBR	Liberia	30/12/2021	1.85	8
LTU	Lithuania	30/12/2021	5.36	13
LUX	Luxembourg	30/12/2021	5.51	13
MWI	Malawi	30/12/2021	0.73	10
MYS	Malaysia	30/12/2021	6.97	11
MDV	Maldives	30/12/2021	6.89	11
MLI	Mali	30/12/2021	0.39	10
MLT	Malta	30/12/2021	6.94	12
MRT	Mauritania	30/12/2021	2.46	12
MUS	Mauritius	30/12/2021	6.01	13
MEX	Mexico	30/12/2021	4.94	10
MDA	Moldova	30/12/2021	3.02	12
MNG	Mongolia	30/12/2021	6.06	11
MNE	Montenegro	30/12/2021	4.11	11
MOZ	Mozambique	30/12/2021	2.62	12
MMR	Myanmar	30/12/2021	2.90	10
NAM	Namibia	30/12/2021	1.35	9
NLD	Netherlands	30/12/2021	5.98	11
NIC	Nicaragua	30/12/2021	7.02	10
NER	Niger	30/12/2021	0.19	10
NGA	Nigeria	30/12/2021	0.45	11
MKD	North Macedonia	30/12/2021	3.66	13
NOR	Norway	30/12/2021	5.64	11
PAK	Pakistan	30/12/2021	3.74	12
PSE	Palestine	30/12/2021	3.64	11
PAN	Panama	30/12/2021	5.90	11
PRY	Paraguay	30/12/2021	4.65	13
PER	Peru	30/12/2021	6.63	12
PHL	Philippines	30/12/2021	4.41	13
POL	Poland	30/12/2021	4.18	13
PRT	Portugal	30/12/2021	7.61	13
ROU	Romania	30/12/2021	2.14	3

RUS	Russia	30/12/2021	3.92	11
RWA	Rwanda	30/12/2021	5.03	11
LCA	Saint Lucia	30/12/2021	2.81	11
STP	Sao Tome and Principe	30/12/2021	3.80	12
SEN	Senegal	30/12/2021	0.69	13
SRB	Serbia	30/12/2021	4.01	12
SYC	Seychelles	30/12/2021	6.41	13
SLE	Sierra Leone	30/12/2021	0.82	10
SVK	Slovakia	30/12/2021	3.73	11
SVN	Slovenia	30/12/2021	4.54	11
SOM	Somalia	30/12/2021	0.76	12
ZAF	South Africa	30/12/2021	2.87	12
KOR	South Korea	30/12/2021	7.71	10
SSD	South Sudan	30/12/2021	0.23	11
ESP	Spain	30/12/2021	6.95	12
LKA	Sri Lanka	30/12/2021	6.10	13
SDN	Sudan	30/12/2021	0.59	10
SWE	Sweden	30/12/2021	6.00	8
CHE	Switzerland	30/12/2021	5.25	5
TJK	Tajikistan	30/12/2021	4.66	10
TZA	Tanzania	30/12/2021	0.64	9
THA	Thailand	30/12/2021	6.52	11
TLS	Timor-Leste	30/12/2021	5.49	10
TGO	Togo	30/12/2021	1.56	12
TON	Tonga	30/12/2021	7.65	12
TUN	Tunisia	30/12/2021	5.56	10
TUR	Turkey	30/12/2021	5.56	11
UGA	Uganda	30/12/2021	1.77	13
UKR	Ukraine	30/12/2021	3.37	11
ARE	United Arab Emirates	30/12/2021	8.72	9
GBR	United Kingdom	30/12/2021	6.39	7
USA	United States	30/12/2021	5.65	11
URY	Uruguay	30/12/2021	7.33	10
VNM	Vietnam	30/12/2021	7.90	11
YEM	Yemen	30/12/2021	0.12	13
ZMB	Zambia	30/12/2021	0.45	12
ZWE	Zimbabwe	30/12/2021	2.29	14
OWID_KOS	Kosovo	30/12/2021	4.96	10
AFG	Afghanistan	30/12/2021	0.92	11
DZA	Algeria	30/12/2021	1.31	12
AND	Andorra	30/12/2021	5.96	12
AIA	Anguilla	30/12/2021	5.77	11
ATG	Antigua and Barbuda	30/12/2021	6.04	11
ABW	Aruba	30/12/2021	7.96	10
AZE	Azerbaijan	30/12/2021	4.16	12
BHS	Bahamas	30/12/2021	3.83	10
BHR	Bahrain	30/12/2021	6.28	13
BRB	Barbados	30/12/2021	5.03	11
BLZ	Belize	30/12/2021	5.16	11
BMU	Bermuda	30/12/2021	6.00	12

BES	Bonaire Sint Eustatius and Saba	30/08/2021	4.23	5
BIH	Bosnia and Herzegovina	30/12/2021	2.48	11
VGB	British Virgin Islands	30/12/2021	7.35	8
BRN	Brunei	30/12/2021	10.02	9
BDI	Burundi	30/12/2021	0.01	3
KHM	Cambodia	30/12/2021	7.73	11
CYM	Cayman Islands	30/12/2021	6.56	13
CAF	Central African Republic	30/12/2021	0.84	8
COG	Congo	30/12/2021	1.16	9
COK	Cook Islands	30/12/2021	9.42	8
CUB	Cuba	30/12/2021	11.65	8
CUW	Curacao	30/12/2021	5.46	10
COD	Democratic Republic of Congo	30/12/2021	0.03	9
DMA	Dominica	30/12/2021	3.68	11
GNQ	Equatorial Guinea	30/12/2021	1.49	10
ERI				
FRO	Faeroe Islands	30/12/2021	6.50	12
FLK	Falkland Islands	30/03/2021	28.77	2
FJI	Fiji	30/12/2021	7.11	10
PYF	French Polynesia	30/12/2021	5.05	11
GIB	Gibraltar	30/12/2021	10.50	12
GRL	Greenland	30/12/2021	5.97	12
GRD	Grenada	30/12/2021	2.99	11
GUY	Guyana	30/12/2021	4.61	11
HTI	Haiti	30/12/2021	0.18	6
HKG	Hong Kong	30/12/2021	5.91	11
IRQ	Iraq	30/12/2021	1.91	10
IMN	Isle of Man	30/12/2021	6.78	12
JAM	Jamaica	30/12/2021	2.52	10
JPN	Japan	30/12/2021	7.42	11
JOR	Jordan	30/12/2021	3.20	12
KIR	Kiribati	30/12/2021	6.48	7
KWT	Kuwait	30/12/2021	6.01	13
LBN	Lebanon	30/12/2021	3.73	11
LBY	Libya	30/12/2021	3.02	9
LIE	Liechtenstein	30/12/2021	5.11	13
MAC	Macao	30/12/2021	6.45	11
MDG	Madagascar	30/12/2021	0.25	8
MHL				10
FSM				
MCO	Monaco	30/11/2021	6.09	11
MSR	Montserrat	30/12/2021	3.19	12
MAR	Morocco	30/12/2021	5.48	10
NRU	Nauru	30/12/2021	6.66	12
NPL	Nepal	30/12/2021	3.34	12
NCL	New Caledonia	30/12/2021	5.72	11
NZL	New Zealand	30/12/2021	6.96	10
PRK				14
OMN	Oman	30/12/2021	5.25	10
PLW				10

PNG	Papua New Guinea	30/12/2021	0.28	11
QAT	Qatar	30/12/2021	6.74	11
SHN	Saint Helena	30/04/2021	26.91	10
KNA	Saint Kitts and Nevis	30/12/2021	5.27	8
SPM				10
VCT	Saint Vincent and the Grenadines	30/12/2021	3.22	12
WSM	Samoa	30/12/2021	7.95	11
SMR	San Marino	30/12/2021	6.56	12
SAU	Saudi Arabia	30/12/2021	5.73	10
SGP	Singapore	30/12/2021	6.63	9
SLB	Solomon Islands	30/12/2021	2.49	9
SUR	Suriname	30/12/2021	3.85	10
SYR	Syria	30/12/2021	0.54	11
TWN	Taiwan	30/12/2021	7.83	9
TTO	Trinidad and Tobago	30/12/2021	4.22	9
TCA	Turks and Caicos Islands	30/12/2021	5.32	12
TUV	Tuvalu	30/12/2021	6.11	12
UZB	Uzbekistan	30/12/2021	5.79	10
VUT	Vanuatu	30/12/2021	4.47	8
VAT				
VEN	Venezuela	30/12/2021	5.91	9
WLF	Wallis and Futuna	30/12/2021	5.19	12
	Africa	30/12/2021	1.12	13
	Asia	30/12/2021	5.07	12
	England	30/12/2021	6.41	14
	Europe	30/12/2021	4.67	10
	European Union	30/12/2021	5.53	11
	Guernsey	30/12/2021	4.34	12
	High income	30/12/2021	5.35	7
	Jersey	30/12/2021	7.35	13
	Low income	30/12/2021	0.68	12
	Lower middle income	30/12/2021	3.91	12
	Niue	30/12/2021	8.80	11
	North America	30/12/2021	5.20	7
	Northern Cyprus	30/12/2021	6.19	12
	Northern Ireland	30/12/2021	6.15	8
	Oceania	30/12/2021	5.31	13
	Pitcairn	30/12/2021	14.29	7
	Scotland	30/12/2021	6.68	11
	Sint Maarten (Dutch part)	30/12/2021	7.68	13
	South America	30/12/2021	5.82	12
	Tokelau	30/12/2021	7.31	14
	Turkmenistan	30/12/2021	0.05	
	Upper middle income	30/12/2021	5.94	
	Wales	30/12/2021	6.55	
	World	30/12/2021	4.08	

INITIAL DATASET FOR EACH VARIABLE

iso_code	location	hcq_cq	iver	remd	Favipiravir	Acetaminophen
ALB	Albania	0	0	0	0	0
AGO	Angola	0	0	0	0	0
ARG	Argentina	0	0	0	0	0
ARM	Armenia	0	0	0	0	0
AUS	Australia	0	0	1	0	1
AUT	Austria	0	0	1	0	1
BGD	Bangladesh	0	1	0	0	0
BLR	Belarus	0	0	0	0	0
BEL	Belgium	0	0	1	0	1
BEN	Benin	1	0	0	0	0
BTN	Bhutan	0	0	0	0	0
BOL	Bolivia	0	1	0	0	0
BWA	Botswana	0	0	0	0	0
BRA	Brazil	0	0	0	0	0
BGR	Bulgaria	0	1	1	0	1
BFA	Burkina Faso	1	0	0	0	0
CMR	Cameroon	1	0	0	0	0
CAN	Canada	0	0	0	0	1
CPV	Cabo Verde	0	0	0	0	0
TCD	Chad	1	0	0	0	0
CHL	Chile	0	0	0	0	0
CHN	China	1	0	0	0	1
COL	Colombia	0	0	0	0	0
COM	Comoros	0	0	0	0	0
CRI	Costa Rica	1	0	0	0	0
CIV	Cote d'Ivoire	0	0	0	0	0
HRV	Croatia	0	0	1	0	1
CYP	Cyprus	0	0	1	0	1
CZE	Czechia	1	0	1	0	1
DNK	Denmark	0	0	1	0	1
DJI	Djibouti	1	0	0	0	0
DOM	Dominican Republic	0	1	0	0	0
ECU	Ecuador	0	0	0	0	0
EGY	Egypt	1	1	1	1	0
SLV	El Salvador	0	1	0	0	0
EST	Estonia	0	0	1	0	1
SWZ	Eswatini	0	0	0	0	0
ETH	Ethiopia	1	0	0	0	0
FIN	Finland	0	0	1	0	1
FRA	France	0	0	1	0	1
GAB	Gabon	1	0	0	0	0
GMB	Gambia	0	0	0	0	0
GEO	Georgia	0	0	0	0	0
DEU	Germany	0	0	1	0	1
GHA	Ghana	1	0	1	0	0
GRC	Greece	1	0	1	0	1

GTM	Guatemala	0	1	0	0	0
GIN	Guinea	1	0	0	0	0
GNB	Guinea-Bissau	1	0	0	0	0
HND	Honduras	1	1	0	0	0
HUN	Hungary	0	0	1	1	1
ISL	Iceland	0	0	0	0	0
IND	India	0	0	0	0	1
IDN	Indonesia	0	0	0	0	0
IRN	Iran	1	0	0	0	0
IRL	Ireland	0	0	1	0	1
ISR	Israel	0	0	0	0	0
ITA	Italy	0	0	1	0	1
KAZ	Kazakhstan	0	0	0	0	0
KEN	Kenya	0	0	0	0	0
KGZ	Kyrgyzstan	0	0	0	0	0
LAO	Laos	0	0	0	0	0
LVA	Latvia	0	0	1	0	1
LSO	Lesotho	0	0	0	0	0
LBR	Liberia	0	0	0	0	0
LTU	Lithuania	0	0	1	0	1
LUX	Luxembourg	0	0	1	0	1
MWI	Malawi	0	0	0	0	0
MYS	Malaysia	0	0	0	1	1
MDV	Maldives	0	0	0	0	0
MLI	Mali	1	0	0	0	0
MLT	Malta	0	0	1	0	1
MRT	Mauritania	1	0	0	0	0
MUS	Mauritius	0	0	0	0	0
MEX	Mexico	0	0	0	0	0
MDA	Moldova	0	0	0	0	0
MNG	Mongolia	0	0	0	0	0
MNE	Montenegro	0	0	0	0	0
MOZ	Mozambique	0	0	0	0	0
MMR	Myanmar	0	0	0	0	0
NAM	Namibia	0	0	1	0	0
NLD	Netherlands	0	0	1	0	1
NIC	Nicaragua	0	1	0	0	0
NER	Niger	1	0	0	0	0
NGA	Nigeria	1	0	0	0	0
MKD	North Macedonia	0	0	0	0	0
NOR	Norway	0	0	0	0	0
PAK	Pakistan	0	0	0	0	0
PSE	Palestine	0	0	0	0	0
PAN	Panama	0	1	0	0	0
PRY	Paraguay	0	0	0	0	0
PER	Peru	0	0	0	0	0
PHL	Philippines	0	0	0	0	1
POL	Poland	0	0	1	0	1
PRT	Portugal	0	0	1	0	1
ROU	Romania	0	0	1	1	1

RUS	Russia	0	0	0	1	0
RWA	Rwanda	1	0	0	0	0
LCA	Saint Lucia	0	0	0	0	0
STP	Sao Tome and Principe	0	0	0	0	0
SEN	Senegal	1	0	0	0	0
SRB	Serbia	0	0	0	0	0
SYC	Seychelles	0	0	0	0	0
SLE	Sierra Leone	0	0	0	0	0
SVK	Slovakia	0	0	1	0	1
SVN	Slovenia	0	0	1	0	1
SOM	Somalia	0	0	0	0	0
ZAF	South Africa	0	0	0	0	1
KOR	South Korea	1	0	0	0	0
SSD	South Sudan	0	0	0	0	0
ESP	Spain	0	0	1	0	1
LKA	Sri Lanka	0	0	0	0	0
SDN	Sudan	0	0	0	0	0
SWE	Sweden	0	0	1	0	1
CHE	Switzerland	0	0	0	0	0
TJK	Tajikistan	0	0	0	0	0
TZA	Tanzania	0	0	0	0	0
THA	Thailand	0	0	0	1	0
TLS	Timor-Leste	0	0	0	0	0
TGO	Togo	1	0	0	0	0
TON	Tonga	0	0	0	0	0
TUN	Tunisia	1	0	0	0	0
TUR	Turkey	0	0	0	1	0
UGA	Uganda	1	0	0	0	0
UKR	Ukraine	0	1	0	0	0
ARE	United Arab Emirates	1	0	0	1	0
GBR	United Kingdom	0	0	0	0	1
USA	United States	0	0	1	0	1
URY	Uruguay	0	0	0	0	0
VNM	Vietnam	0	0	0	1	0
YEM	Yemen	0	0	0	0	0
ZMB	Zambia	0	0	0	0	0
ZWE	Zimbabwe	0	0	0	0	0
OWID_KOS	Kosovo	0	0	0	0	0
AFG	Afghanistan	0	0	0	0	0
DZA	Algeria	1	0	0	0	0
AND	Andorra	0	0	0	0	0
AIA	Anguilla	0	0	0	0	0
ATG	Antigua and Barbuda	0	0	0	0	0
ABW	Aruba	0	0	0	0	0
AZE	Azerbaijan	0	0	0	0	0
BHS	Bahamas	0	0	0	0	0
BHR	Bahrain	1	0	0	0	0
BRB	Barbados	0	0	0	0	0
BLZ	Belize	0	1	0	0	0
BMU	Bermuda	0	0	0	0	0

BES	Bonaire Sint Eustatius an	0	0	0	0	0
BIH	Bosnia and Herzegovina	0	0	0	0	0
VGB	British Virgin Islands	0	0	0	0	0
BRN	Brunei	0	0	0	0	0
BDI	Burundi	1	0	0	0	0
KHM	Cambodia	0	1	0	0	0
CYM	Cayman Islands	0	0	0	0	0
CAF	Central African Republic	1	0	0	0	0
COG	Congo	1	0	1	0	0
COK	Cook Islands	0	0	0	0	0
CUB	Cuba	1	0	0	0	0
CUW	Curacao	0	0	0	0	0
COD	Democratic Republic of C	1	0	0	0	0
DMA	Dominica	0	0	0	0	0
GNQ	Equatorial Guinea	0	0	0	0	0
ERI	Eritrea	1	0	0	0	0
FRO	Faeroe Islands	0	0	0	0	0
FLK	Falkland Islands	0	0	0	0	0
FJI	Fiji	0	0	0	0	0
PYF	French Polynesia	0	0	0	0	0
GIB	Gibraltar	0	0	0	0	0
GRL	Greenland	0	0	0	0	0
GRD	Grenada	0	0	0	0	0
GUY	Guyana	0	0	0	0	0
HTI	Haiti	0	0	0	0	0
HKG	Hong Kong	0	0	0	0	0
IRQ	Iraq	0	0	0	0	0
IMN	Isle of Man	0	0	0	0	0
JAM	Jamaica	0	0	0	0	0
JPN	Japan	0	0	0	0	0
JOR	Jordan	0	0	0	0	0
KIR	Kiribati	0	0	0	0	0
KWT	Kuwait	0	0	0	0	0
LBN	Lebanon	0	1	0	0	0
LBY	Libya	0	0	0	0	0
LIE	Liechtenstein	0	0	0	0	0
MAC	Macao	0	0	0	0	0
MDG	Madagascar	1	0	0	0	0
MHL	Marshall Islands	0	0	0	0	0
FSM	Micronesia (country)	0	0	0	0	0
MCO	Monaco	0	0	0	0	0
MSR	Montserrat	0	0	0	0	0
MAR	Morocco	1	0	0	0	0
NRU	Nauru	0	0	0	0	0
NPL	Nepal	0	0	0	0	0
NCL	New Caledonia	0	0	0	0	0
NZL	New Zealand	0	0	0	0	1
PRK	North Korea	0	0	0	0	0
OMN	Oman	0	0	0	0	0
PLW	Palau	0	0	0	0	0

PNG	Papua New Guinea	0	0	0	0	0
QAT	Qatar	1	0	0	0	0
SHN	Saint Helena	0	0	0	0	0
KNA	Saint Kitts and Nevis	0	0	0	0	0
SPM	Saint Pierre and Miquelo	0	0	0	0	0
VCT	Saint Vincent and the Gre	0	0	0	0	0
WSM	Samoa	0	0	0	0	0
SMR	San Marino	0	0	0	0	0
SAU	Saudi Arabia	0	0	0	0	1
SGP	Singapore	0	0	0	0	1
SLB	Solomon Islands	0	0	0	0	0
SUR	Suriname	0	0	0	0	0
SYR	Syria	0	0	0	0	0
TWN	Taiwan	0	0	0	0	0
TTO	Trinidad and Tobago	0	0	0	0	0
TCA	Turks and Caicos Islands	0	0	0	0	0
TUV	Tuvalu	0	0	0	0	0
UZB	Uzbekistan	0	0	0	0	0
VUT	Vanuatu	0	0	0	0	0
VAT	Vatican	0	0	0	0	0
VEN	Venezuela	1	1	1	1	0
WLF	Wallis and Futuna	0	0	0	0	0