

# Visualization

## Armed Conflict Data Visualization

```
library(flextable)
library(xtable)
library(table1)
library(texreg)
library(gtsummary)
library(modelsummary)
library(tidyverse)
```

```
v2 <- read.csv("Clean_Data/armed_conflict_final.csv", header =TRUE)

label(v2$Under_5_Mortality) <- "Under 5"      # Under 5 mortality rate
label(v2$Infant_Mortality) <- "Infant"        # Infant mortality rate
label(v2$Neonatal_Mortality) <- "Neonatal"    # Neonatal mortality rate
label(v2$Maternal_Mortality) <- "Maternal"    # Maternal mortality rate

v2$is.conflict <- factor(v2$is.conflict, levels = c(0, 1), labels = c("NO", "YES"))
v2$drought <- factor(v2$drought, levels = c(0, 1), labels = c("No", "Yes"))
v2$earthquake <- factor(v2$earthquake, levels = c(0, 1), labels = c("No", "Yes"))

table1(~ drought+ earthquake+ Under_5_Mortality+ Infant_Mortality + Neonatal_Mortality
      + Maternal_Mortality| is.conflict,
      data = v2, caption = "Table of baseline characteristics",
      render.continuous = c(."Median [Min, Max]"),
      overall=c(left="Total"),
      topclass="Rtable1-grid Rtable1-center")
```

Get nicer `table1` LaTeX output by simply installing the `kableExtra` package

	Total	NO	YES
	(N=3720)	(N=3016)	(N=704)
drought			
No	3395 (91.3%)	2783 (92.3%)	612 (86.9%)
Yes	325 (8.7%)	233 (7.7%)	92 (13.1%)
earthquake			
No	3410 (91.7%)	2821 (93.5%)	589 (83.7%)
Yes	310 (8.3%)	195 (6.5%)	115 (16.3%)
Under 5			
Median [Min, Max]	22.2 [2.00, 225]	18.6 [2.00, 225]	58.4 [4.10, 225]
Missing	20 (0.5%)	20 (0.7%)	0 (0%)
Infant			
Median [Min, Max]	18.9 [1.60, 138]	16.1 [1.60, 130]	42.5 [3.20, 138]
Missing	20 (0.5%)	20 (0.7%)	0 (0%)
Neonatal			
Median [Min, Max]	12.1 [0.800, 60.9]	10.4 [0.800, 56.0]	25.7 [2.30, 60.9]
Missing	20 (0.5%)	20 (0.7%)	0 (0%)
Maternal			
Median [Min, Max]	66.0 [2.00, 2480]	51.0 [2.00, 1960]	252 [5.00, 2480]
Missing	426 (11.5%)	348 (11.5%)	78 (11.1%)

```
finaldata <- read.csv("Clean_Data/armed_conflict_final.csv", header =TRUE)
finaldata1 <- dplyr::select(finaldata, country_name, ISO, year, Maternal_Mortality, is.conflict)
finaldata1 <- dplyr::filter(finaldata1, year < 2018)
finaldata1 <- arrange(finaldata1, ISO, year)
finaldata1 <- group_by(finaldata1, ISO)
finaldata1 <- mutate(finaldata1, diffmatmor = Maternal_Mortality - Maternal_Mortality[1L])
finaldata2 <- filter(finaldata1, diffmatmor > 0)
```

```
plot1 <-ggplot(finaldata2, aes(x = year, y = Maternal_Mortality, group = ISO)) +
  geom_line(aes(color = as.factor(ISO)), alpha = 0.5) +
  xlim(c(2000,2017)) +
  scale_y_continuous(trans='log10') +
  labs(y = "Maternal mortality", x = "Year", color = "Armed conflict") +
  theme_bw()

plot1
```

