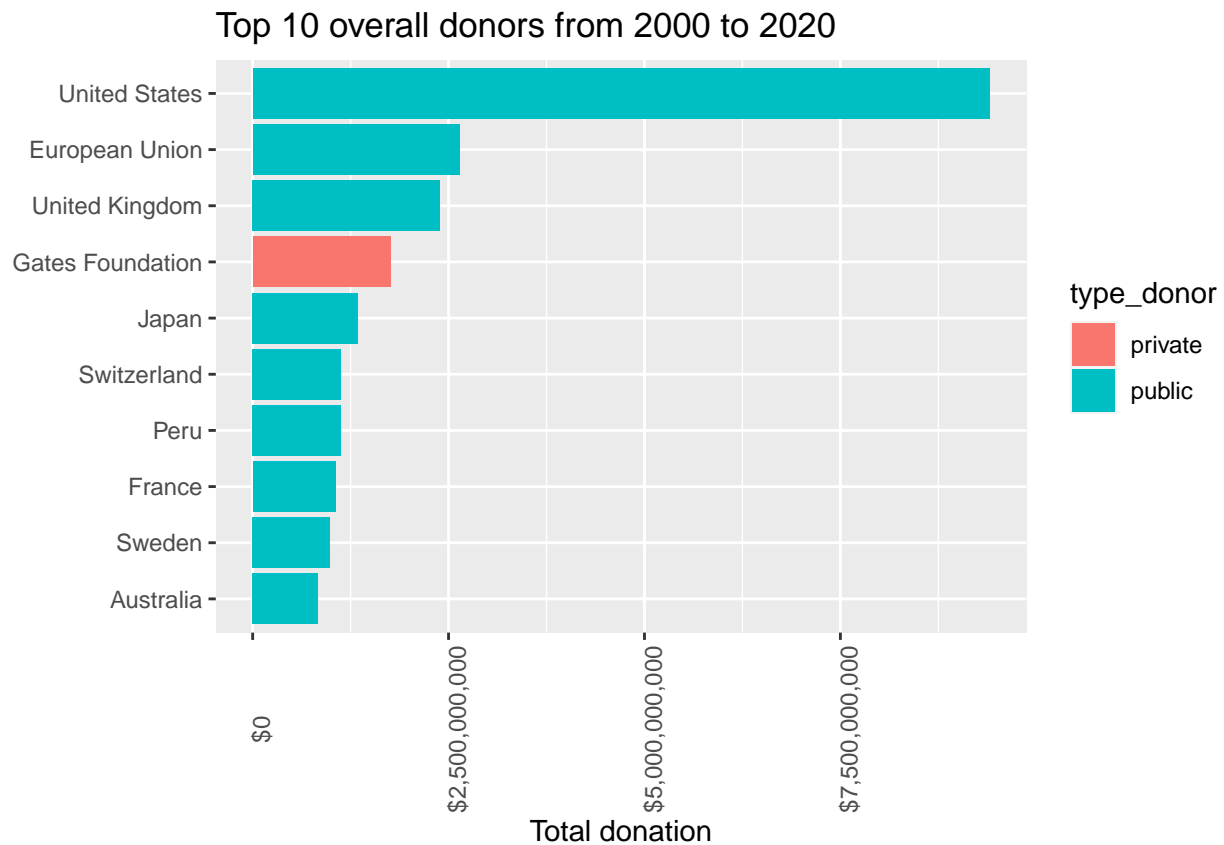


# Income of IOs

2022-10-20

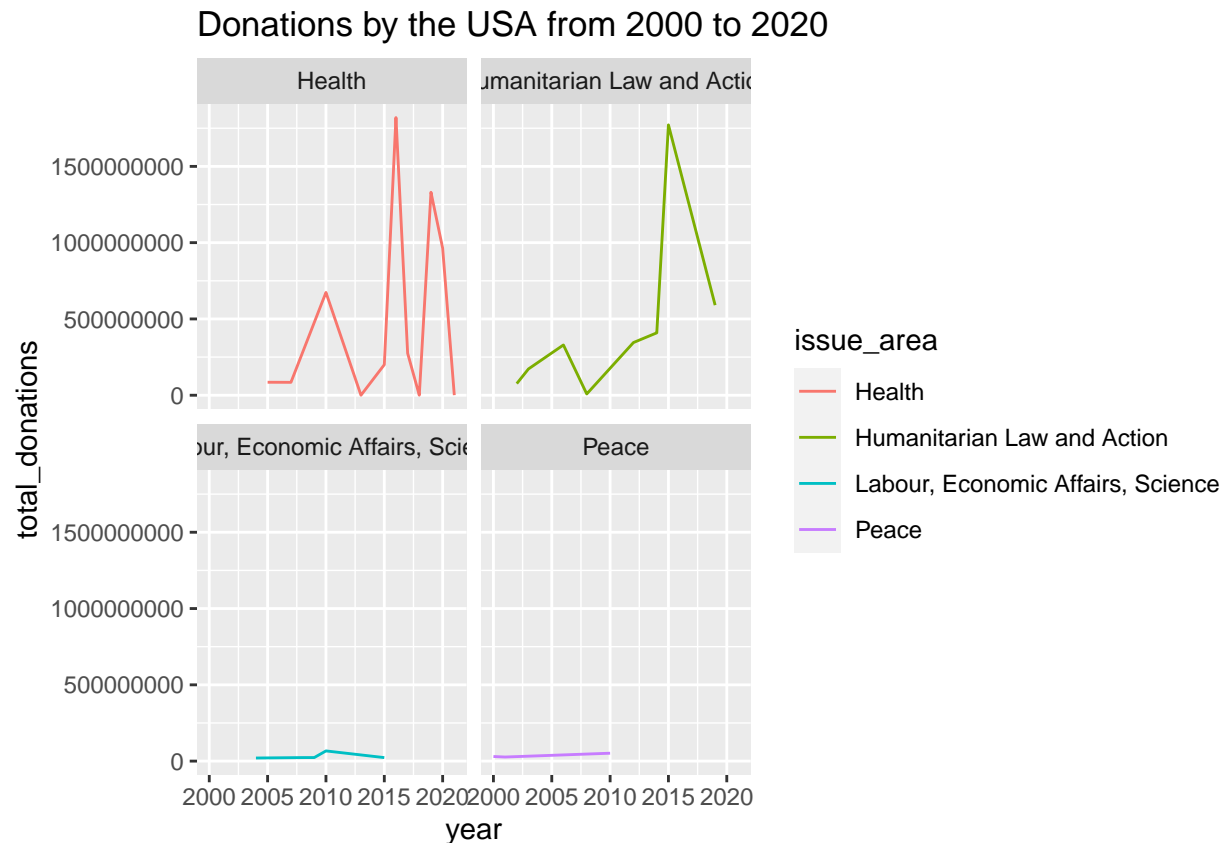
## Question 1

```
io_income_rs %>%
  drop_na(donor) %>%
  group_by(donor, type_donor) %>%
  summarise(total_donation = sum(amount_nominal, na.rm = TRUE)) %>%
  arrange(-total_donation) %>%
  ungroup() %>%
  slice(1:10) %>%
  ggplot(mapping=aes(x=reorder(donor, total_donation), y=total_donation, fill=type_donor))+
  geom_col()+
  scale_y_continuous(labels = scales::dollar)+
  labs(x=NULL, title="Top 10 overall donors from 2000 to 2020", y="Total donation")+
  theme(axis.text.x = element_text(angle = 90))+
  coord_flip()
```



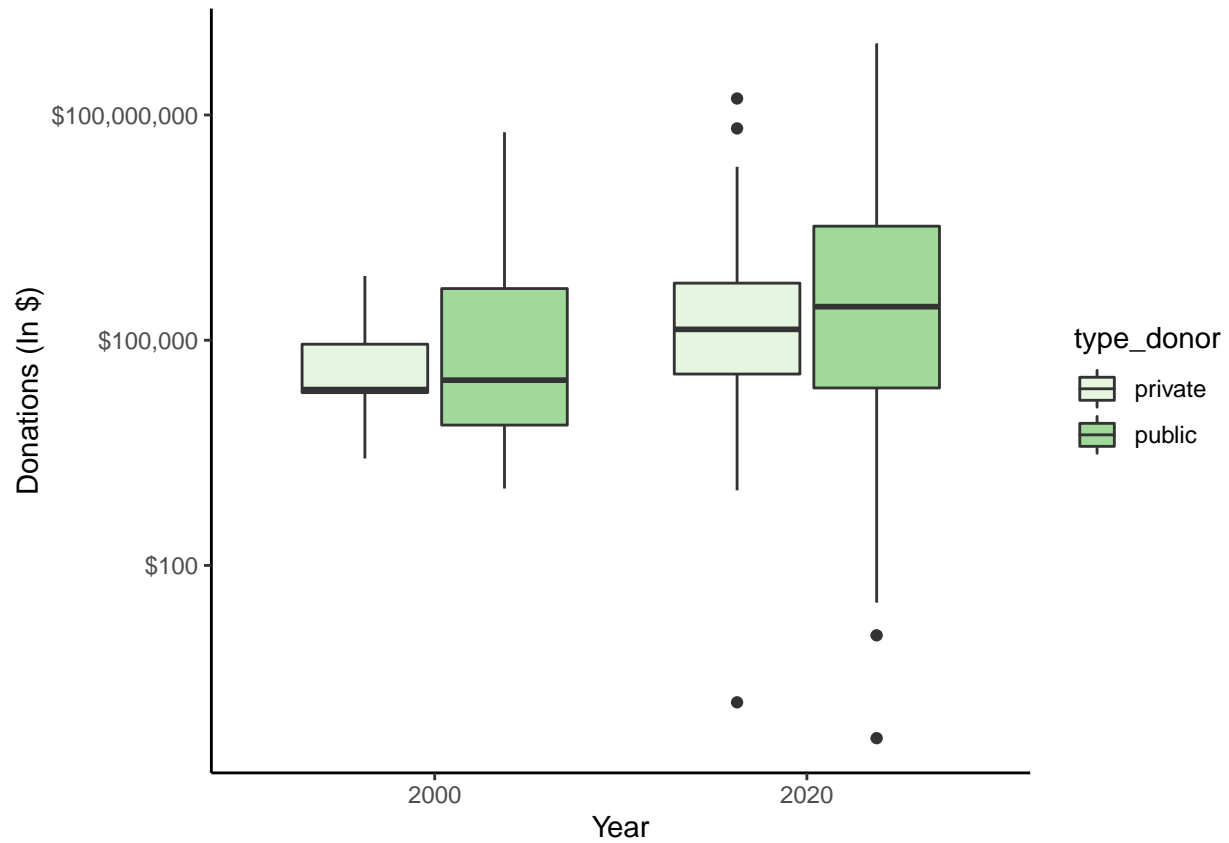
## #Question 2

```
io_income_rs %>%
  filter(donor=="United States") %>%
  group_by(year,issue_area) %>%
  summarise(total_donations = sum(amount_nominal, na.rm = TRUE)) %>%
  ggplot(mapping = aes(x=year, y=total_donations, color=issue_area))+
  geom_line()+
  labs(title = "Donations by the USA from 2000 to 2020")+
  facet_wrap(~issue_area)
```



## #Question 3

```
io_income_rs %>%
  filter(year==2000 | year==2020) %>%
  drop_na() %>%
  ggplot(mapping = aes(y=amount_nominal, x=as.factor(year), fill=type_donor))+
  geom_boxplot()+
  scale_y_log10(labels=scales::dollar)+
  scale_fill_brewer(palette = "Set 2")+
  labs(x="Year", y="Donations (In $)")+
  theme_classic()
```



#Question 4

```
io_income_rs %>%
  drop_na() %>%
  ggplot(mapping = aes(x=year, y=amount_nominal))+
  geom_point(aes(shape=type_donor), alpha=.5)+
  facet_wrap(~issue_area, scales = "free_y")+
  geom_smooth(method = "lm", color = "red")+
  scale_y_log10(labels=scales::dollar)+
  labs(title="Donations by issue by donor per year", x="Amount", y="")+
  theme_minimal()
```

## Donations by issue by donor per year

