

U.S. Dollar Performance After U.S. Elections

● USD Index Up 1 year after election ● USD Index Down 1 year after election

2016 Donald Trump



Source: Yahoo Finan

2012 Barack Obama



Source: Yahoo Fin

2008 Barack Obama



Source: Yahoo Finance

2004 George Bush



Source: Yahoo Fin

2000 George Bush



Source: Yahoo Finance

1996 Bill Clinton



Source: Yahoo Fir

1992 Bill Clinton



Source: Yahoo Fir

1988 George Bush



Source: Yahoo Fir

STAT3280 Homework 8

Yingyi Zhu

2022-12-13

data manipulation

```
library(dplyr)
```

```
##
```

```
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
```

```
##
```

```
## filter, lag
```

```
## The following objects are masked from 'package:base':
```

```
##
```

```
## intersect, setdiff, setequal, union
```

```
data <- read.csv("/Users/zach0422/Desktop/STAT3280/DX-Y.NYB (1).csv")
```

```
data$Close <- as.numeric(data$Close)
```

```
## Warning: NAs introduced by coercion
```

```
bush_1 <- data %>%
```

```
  filter(Date >= '1988-11-08' & Date <= '1989-11-08') %>%
```

```
  na.omit()
```

```
clinton_1 <- data %>%
```

```
  filter(Date >= '1992-11-03' & Date <= '1993-12-03') %>%
```

```
  na.omit()
```

```
clinton_2 <- data %>%
```

```
  filter(Date >= '1996-11-05' & Date <= '1997-11-05') %>%
```

```
  na.omit()
```

```
bush_2 <- data %>%
```

```
  filter(Date >= '2000-11-07' & Date <= '2001-11-07') %>%
```

```
  na.omit()
```

```
bush_3 <- data %>%
```

```

  filter(Date >= '2004-11-02' & Date <= '2005-11-02') %>%
  na.omit()

obama_1 <- data %>%
  filter(Date >= '2008-11-04' & Date <= '2009-11-04') %>%
  na.omit()

obama_2 <- data %>%
  filter(Date >= '2012-11-06' & Date <= '2013-11-06') %>%
  na.omit()

trump_1 <- data %>%
  filter(Date >= '2016-11-08' & Date <= '2017-11-16') %>%
  na.omit()

```

plot 1988

```

bush_1 <- bush_1 %>%
  mutate(percentage = ((Close - Close[1]) / Close[1] * 100))

library(ggplot2)
library(ggdark)

plot1 <- ggplot(bush_1, aes(x = as.Date(Date), y = percentage)) +
  geom_area(fill = "blue") +
  geom_line() +
  scale_x_date(date_breaks = "70 days") +
  scale_y_continuous(limits = c(-10,10)) +
  dark_theme_gray() +
  labs(title="1988 George Bush",
       x = "Date",
       y="% Change Since Election Day",
       caption="Source: Yahoo Finance")

```

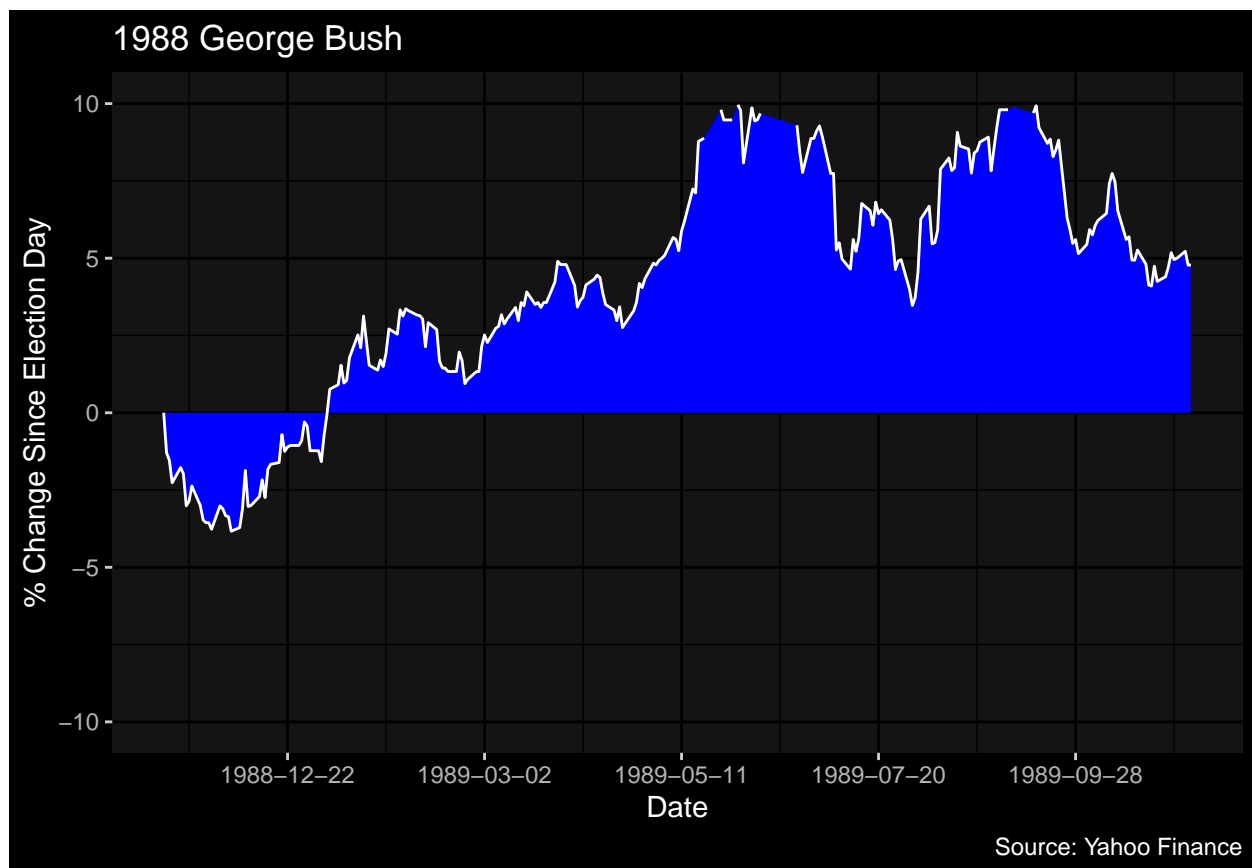
```

## Inverted geom defaults of fill and color/colour.
## To change them back, use invert_geom_defaults().

```

```
plot1
```

```
## Warning: Removed 17 rows containing non-finite values ('stat_align()').
```

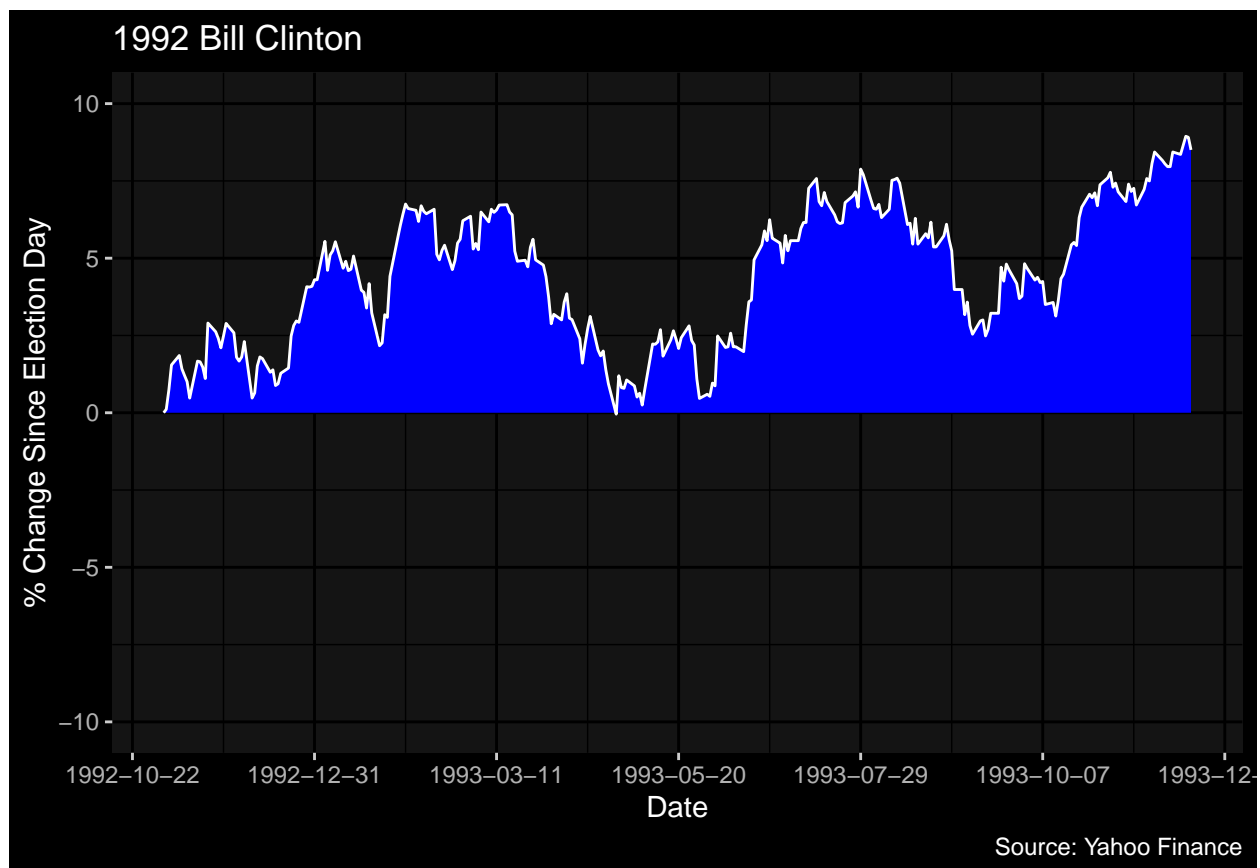


plot 1992

```
clinton_1 <- clinton_1 %>%
  mutate(percentage = ((Close - Close[1]) / Close[1] * 100))

plot2 <- ggplot(clinton_1, aes(x = as.Date(Date), y = percentage)) +
  geom_area(fill = "blue") +
  geom_line() +
  scale_x_date(date_breaks = "70 days") +
  scale_y_continuous(limits = c(-10,10)) +
  dark_theme_gray() +
  labs(title="1992 Bill Clinton",
       x = "Date",
       y="% Change Since Election Day",
       caption="Source: Yahoo Finance")

plot2
```



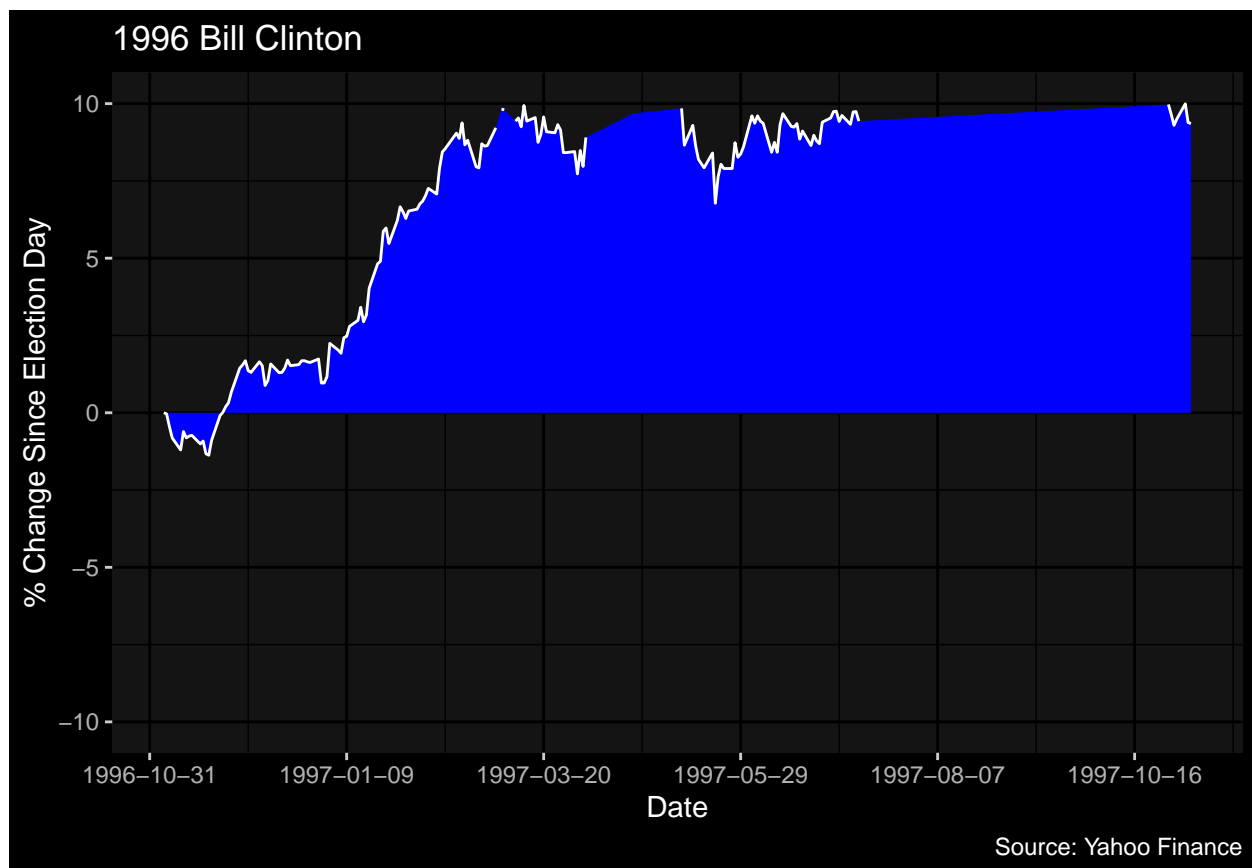
```
## plot 1996
```

```
clinton_2 <- clinton_2 %>%
  mutate(percentage = ((Close - Close[1]) / Close[1] * 100))

library(ggplot2)
library(ggdark)

plot3 <- ggplot(clinton_2, aes(x = as.Date(Date), y = percentage)) +
  geom_area(fill = "blue") +
  geom_line() +
  scale_x_date(date_breaks = "70 days") +
  scale_y_continuous(limits = c(-10,10)) +
  dark_theme_gray() +
  labs(title="1996 Bill Clinton",
       x = "Date",
       y="% Change Since Election Day",
       caption="Source: Yahoo Finance")
plot3
```

```
## Warning: Removed 101 rows containing non-finite values ('stat_align()').
```



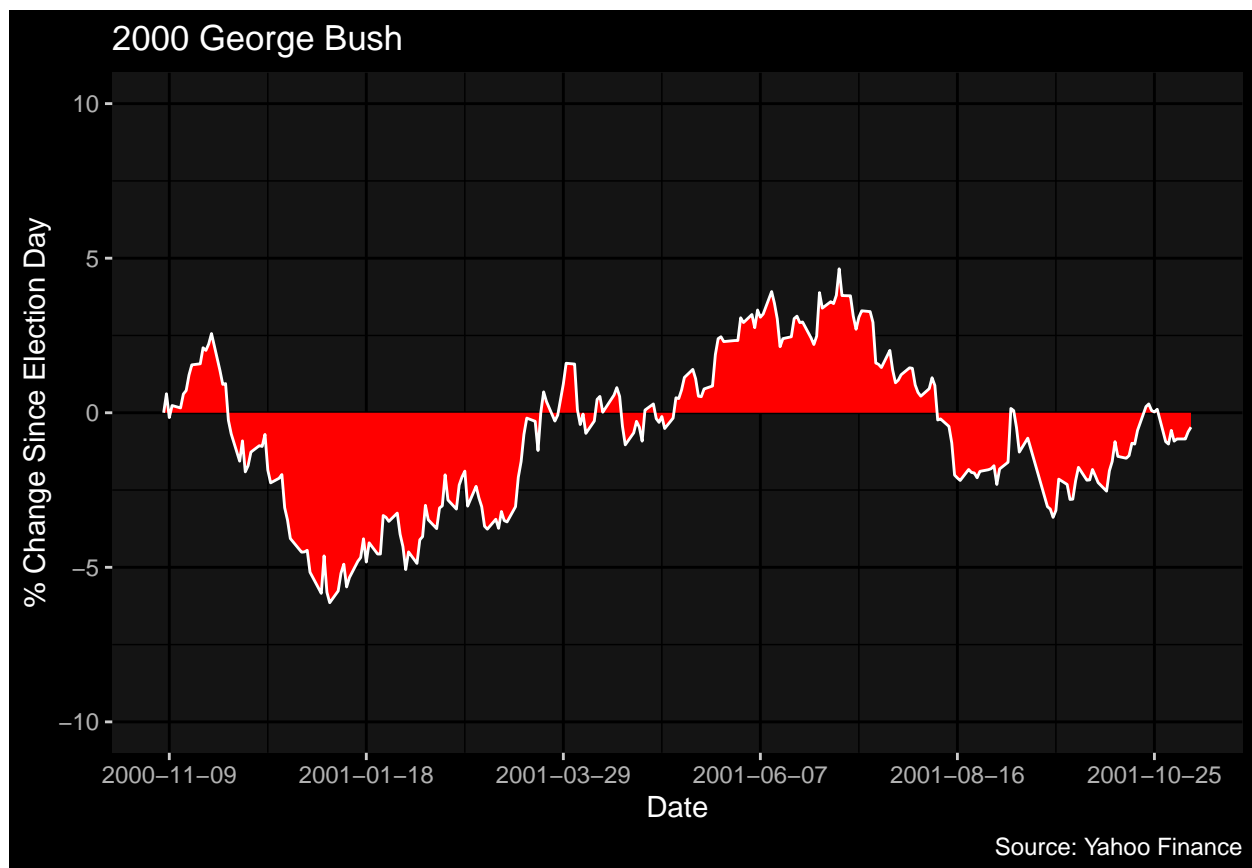
```
## plot 2000
```

```
bush_2 <- bush_2 %>%
  mutate(percentage = ((Close - Close[1]) / Close[1] * 100))

library(ggplot2)
library(ggdark)

plot4 <- ggplot(bush_2, aes(x = as.Date(Date), y = percentage)) +
  geom_area(fill = "red") +
  geom_line() +
  scale_x_date(date_breaks = "70 days") +
  scale_y_continuous(limits = c(-10,10)) +
  dark_theme_gray() +
  labs(title="2000 George Bush",
       x = "Date",
       y="% Change Since Election Day",
       caption="Source: Yahoo Finance")

plot4
```



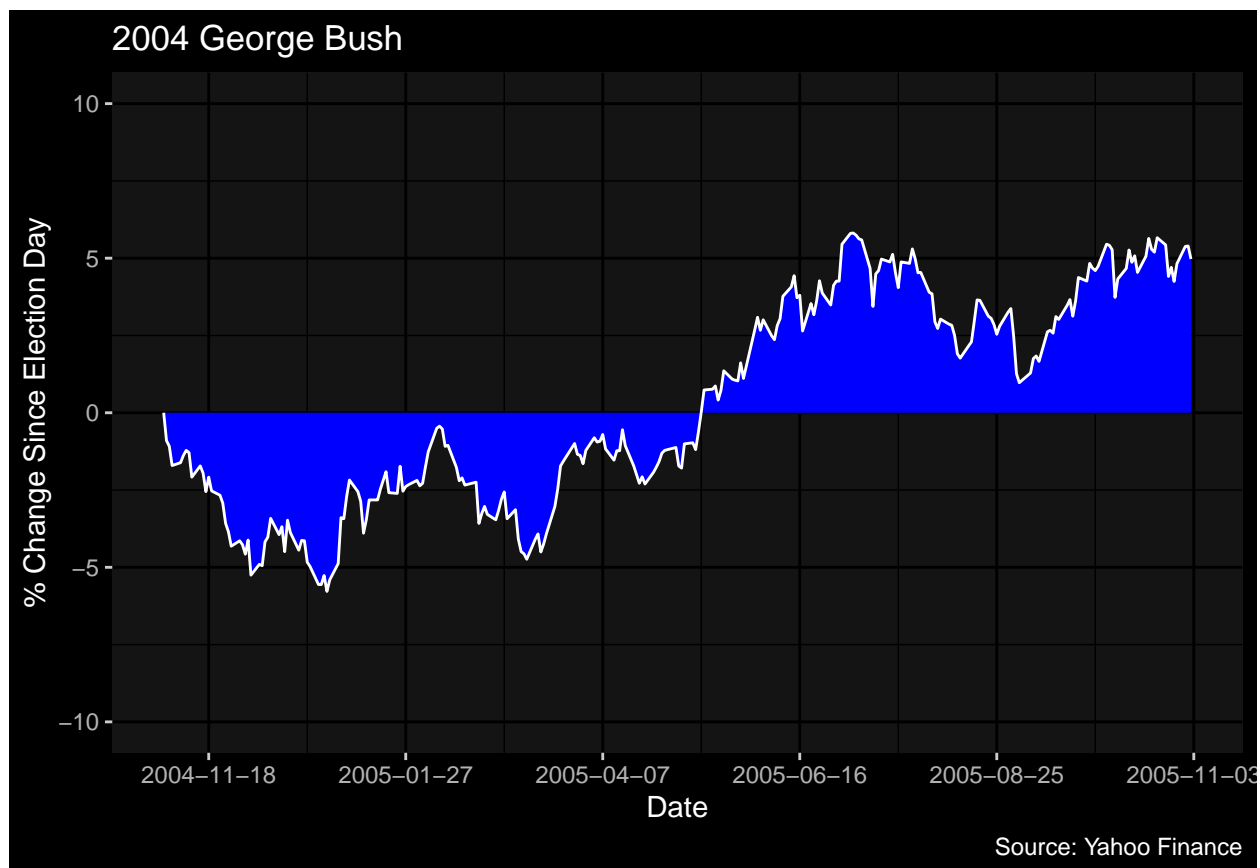
plot 2004

```
bush_3 <- bush_3 %>%
  mutate(percentage = ((Close - Close[1]) / Close[1] * 100))

library(ggplot2)
library(ggdark)

plot5 <- ggplot(bush_3, aes(x = as.Date(Date), y = percentage)) +
  geom_area(fill = "blue") +
  geom_line() +
  scale_x_date(date_breaks = "70 days") +
  scale_y_continuous(limits = c(-10,10)) +
  dark_theme_gray() +
  labs(title="2004 George Bush",
       x = "Date",
       y="% Change Since Election Day",
       caption="Source: Yahoo Finance")

plot5
```



plot 2008

```
obama_1 <- obama_1 %>%
  mutate(percentage = ((Close - Close[1]) / Close[1] * 100))

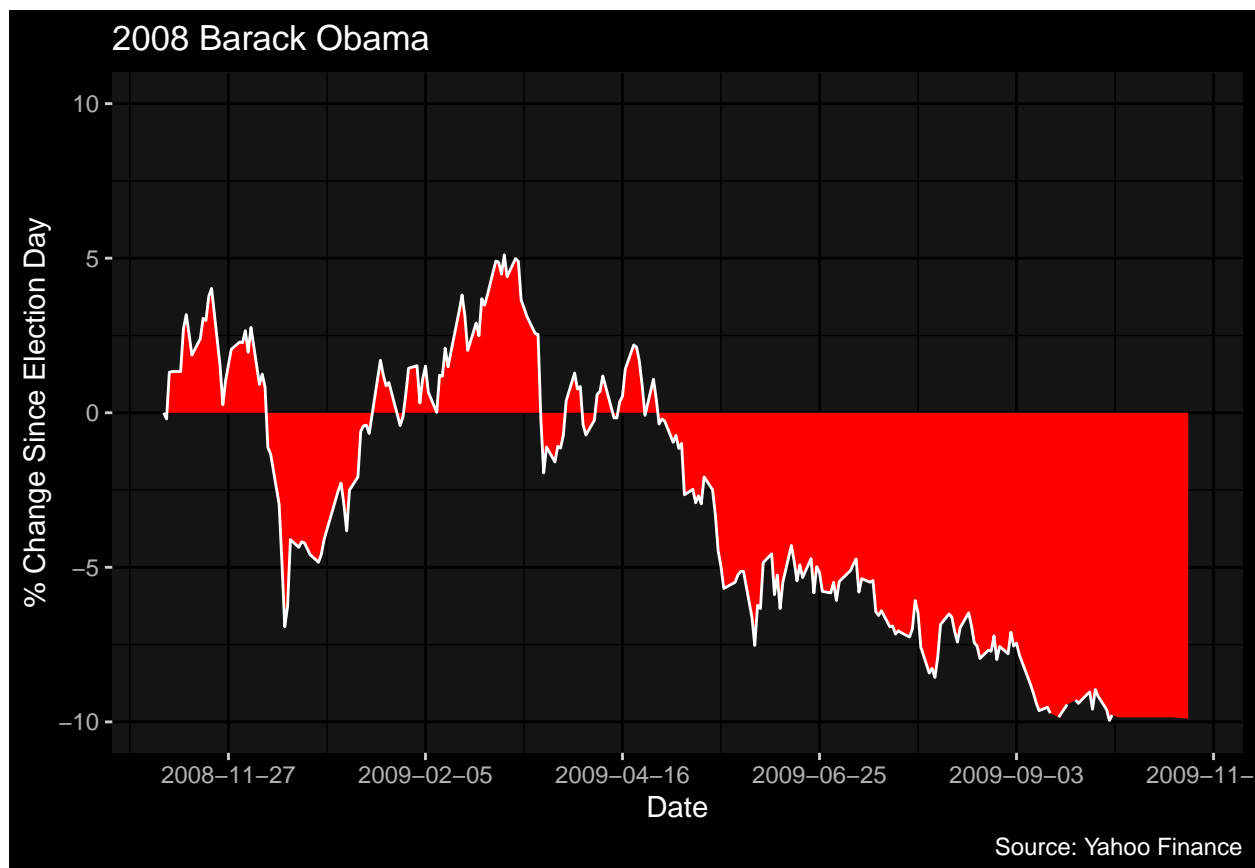
library(ggplot2)
library(ggdark)

plot6 <- ggplot(obama_1, aes(x = as.Date(Date), y = percentage)) +
  geom_area(fill = "red") +
  geom_line() +
  scale_x_date(date_breaks = "70 days") +
  scale_y_continuous(limits = c(-10,10)) +
  dark_theme_gray() +
  labs(title="2008 Barack Obama",
       x = "Date",
       y="% Change Since Election Day",
       caption="Source: Yahoo Finance")

plot6
```

```
## Warning: Removed 21 rows containing non-finite values ('stat_align()').
```

```
## Warning: Removed 1 row containing missing values ('geom_line()').
```

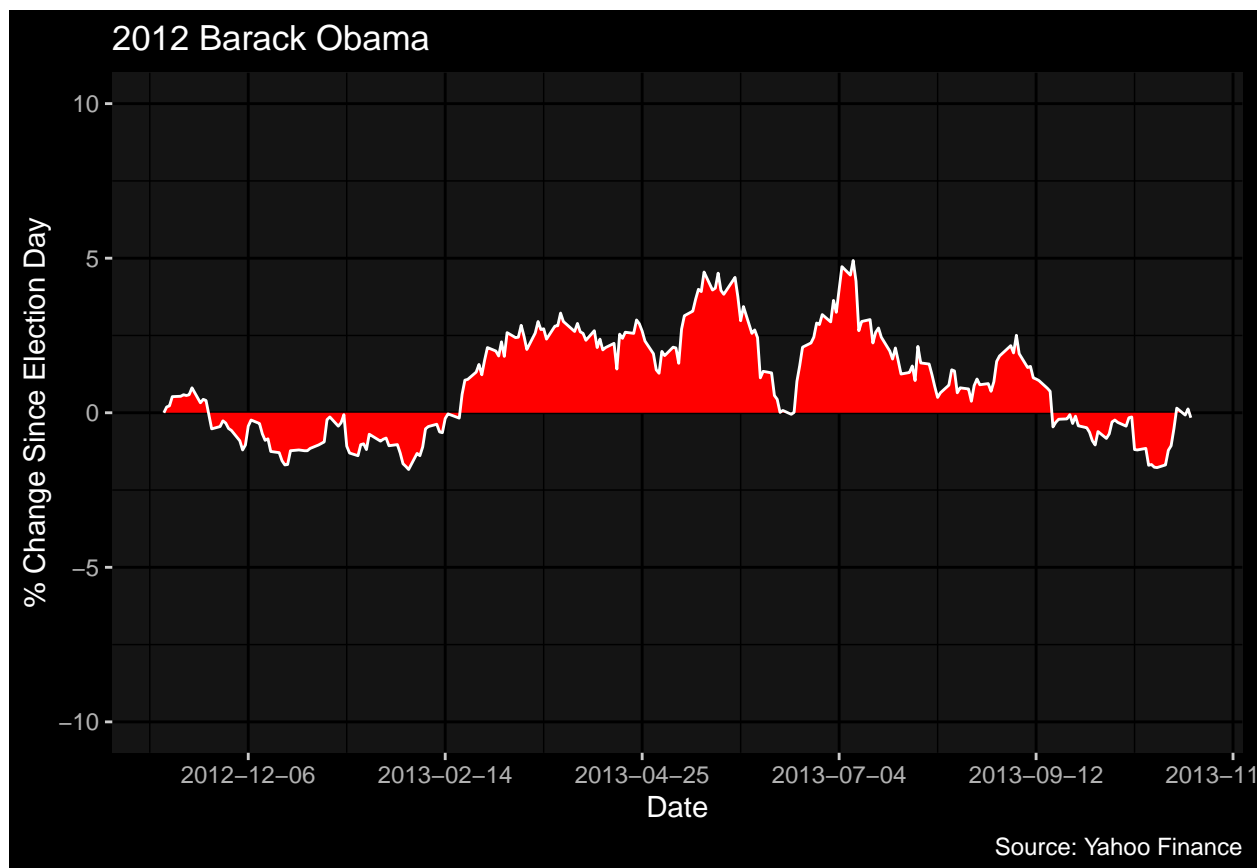
plot 2012

```
obama_2 <- obama_2 %>%
  mutate(percentage = ((Close - Close[1]) / Close[1] * 100))

library(ggplot2)
library(ggdark)

plot7 <- ggplot(obama_2, aes(x = as.Date(Date), y = percentage)) +
  geom_area(fill = "red") +
  geom_line() +
  scale_x_date(date_breaks = "70 days") +
  scale_y_continuous(limits = c(-10,10)) +
  dark_theme_gray() +
  labs(title="2012 Barack Obama",
       x = "Date",
       y="% Change Since Election Day",
       caption="Source: Yahoo Finance")

plot7
```



plot 2016

```
trump_1 <- trump_1 %>%
  mutate(percentage = ((Close - Close[1]) / Close[1] * 100))

library(ggplot2)
library(ggdark)

plot8 <- ggplot(trump_1, aes(x = as.Date(Date), y = percentage)) +
  geom_area(fill = "red") +
  geom_line() +
  scale_x_date(date_breaks = "70 days") +
  scale_y_continuous(limits = c(-10,10)) +
  dark_theme_gray() +
  labs(title="2016 Donald Trump",
       x = "Date",
       y="% Change Since Election Day",
       caption="Source: Yahoo Finance")

plot8
```

