

PSTAT 10 Worksheet 9

Setup

```
setwd('C:/Users/visha/OneDrive/Documents/School/Summer 2024/PSTAT 10/PSTAT10-Worksheets-and-HW')
library(tidyverse)

## -- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
## v dplyr      1.1.4      v readr      2.1.5
## v forcats    1.0.0      v stringr   1.5.1
## v ggplot2    3.5.1      v tibble    3.2.1
## v lubridate  1.9.3      v tidyr     1.3.1
## v purrr      1.0.2
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors

hibbs <- as_tibble(read.csv("hibbs.dat", sep=" "))
```

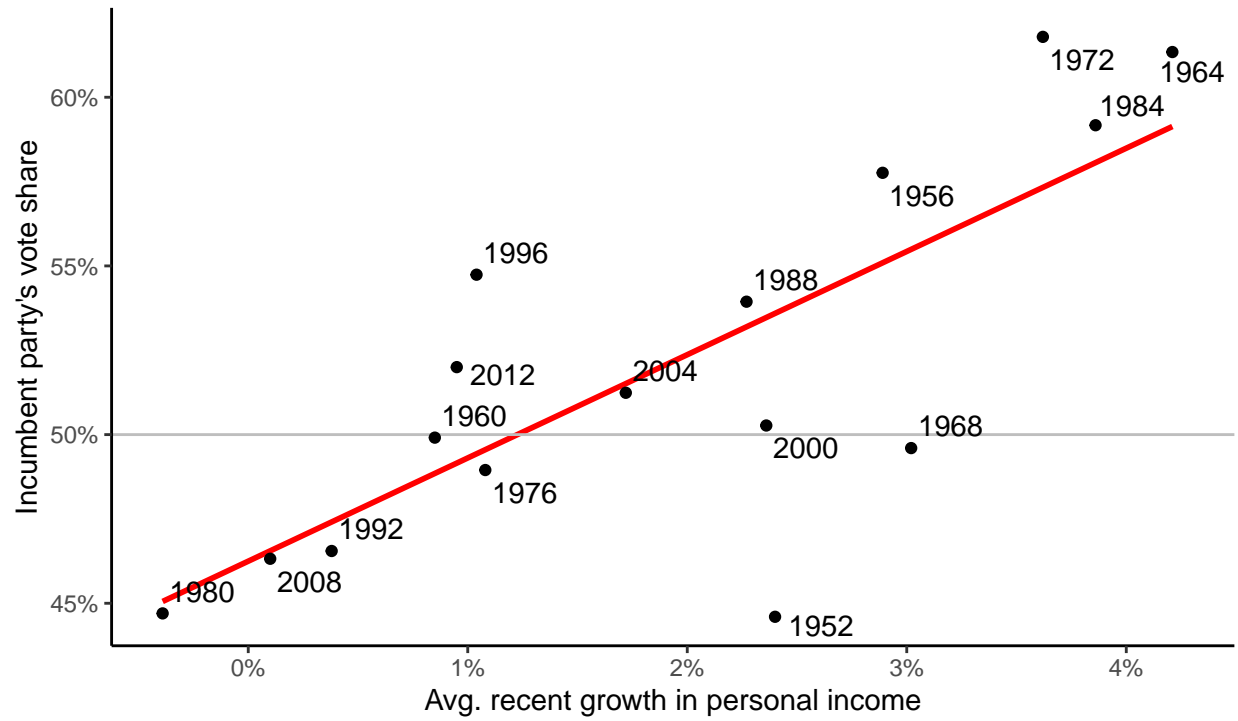
Problem 1

```
plot <- ggplot(hibbs, mapping = aes(x = growth, y = vote))
plot + geom_smooth(method='lm', se= FALSE, col="red") +
  geom_hline(yintercept=50, col="gray") +
  geom_point() +
  ggrepel::geom_text_repel(data=NULL, mapping = aes(x = growth, y = vote, label=year), nudge_x=0.05) +
  guides(fill = "none") +
  labs(x = "Avg. recent growth in personal income", y = "Incumbent party's vote share",
       title = "Bread and Peace", subtitle = "Forecasting the election from the economy",
       caption= "Source: Douglas Hibbs") +
  scale_x_continuous(breaks=c(0,1,2,3,4), labels=c('0%', '1%', '2%', '3%', '4%')) +
  scale_y_continuous(breaks=c(45,50,55,60), labels=c('45%', '50%', '55%', '60%')) +
  theme_classic()

## `geom_smooth()` using formula = 'y ~ x'
```

Bread and Peace

Forecasting the election from the economy



Source: Douglas Hibbs