Inflation Data

Aaron Peikert

8/11/2022

The dataset we use stems from the Bank of England Research datasets.

```
\label{eq:continuous_potential} \verb|'''`\{r\}| \ with(mtcars, \ plot(hp,mpg)) \\ \verb|,,, \\ |, \\ |, \\ |
```

I quote:

This dataset contains the individual responses to our Inflation Attitudes Survey, a quarterly survey of people's feelings about inflation and other economic variables like the interest rate.

```
# 2. use relative locations
# (relative paths instead absolute, names instead of indices)
inflation_raw <-
    readr::read_rds(here("data", "raw", "inflation.rds"))</pre>
```

```
# 3. document relevant information
# (variable names + comments)
inflation <- inflation_raw %>%
 mutate(
    # coded according to "Additional Variables in Dataset" in excel file
   age = fct_recode(
      as.ordered(age),
      `15-24` = "1",
      ^25-34^ = "2"
      `35-44` = "3"
      ^{45-54} = ^{4}
      55-64 = 5
             = "6",
      `65+`
      `NA`
              = "7"
      `NA`
              = "8"
   ),
    sex = fct_recode(
      as.factor(sex),
      male = "1",
      female = "2",
      other = "3",
      NA' = "4"
   ),
   education = fct_recode(as.ordered(educ), low = "1", medium = "2", high = "3"),
   perception = ifelse(P_all == 99.0, NA, P_all),
   expectation = ifelse(E1y_all == 99.0, NA, P_all),
    # first four characters are year, convert to date
   year = ymd(str_c(str_sub(yyyyqq, 1, 4), "-01-01")),
    # last two characters are quarters, convert to number
```

```
quarter = as.numeric(str_sub(yyyyqq, 5, 6)),
    # calculate date as first day of the quarter
    date = date(year + dyears() / quarter)
  ) %>%
  # only select important variables
  select(age, sex, education, perception, expectation, year, quarter, yyyyqq, date)
inflation %>%
  group_by(date) %>%
  summarise(across(c(perception, expectation),
                   ~ mean(., na.rm = TRUE)),
            .groups = "drop") %>%
  pivot_longer(c(expectation, perception)) %>%
  ungroup() %>%
  ggplot() +
  geom_line(aes(date, value, color = name)) +
  theme_minimal() +
  NULL
  16
  12
                                                                           name
value
                                                                               expectation
                                                                               perception
               2005
                             2010
                                            2015
                                                          2020
```

date