Inflation Data

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2024-11-15

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

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"))
```

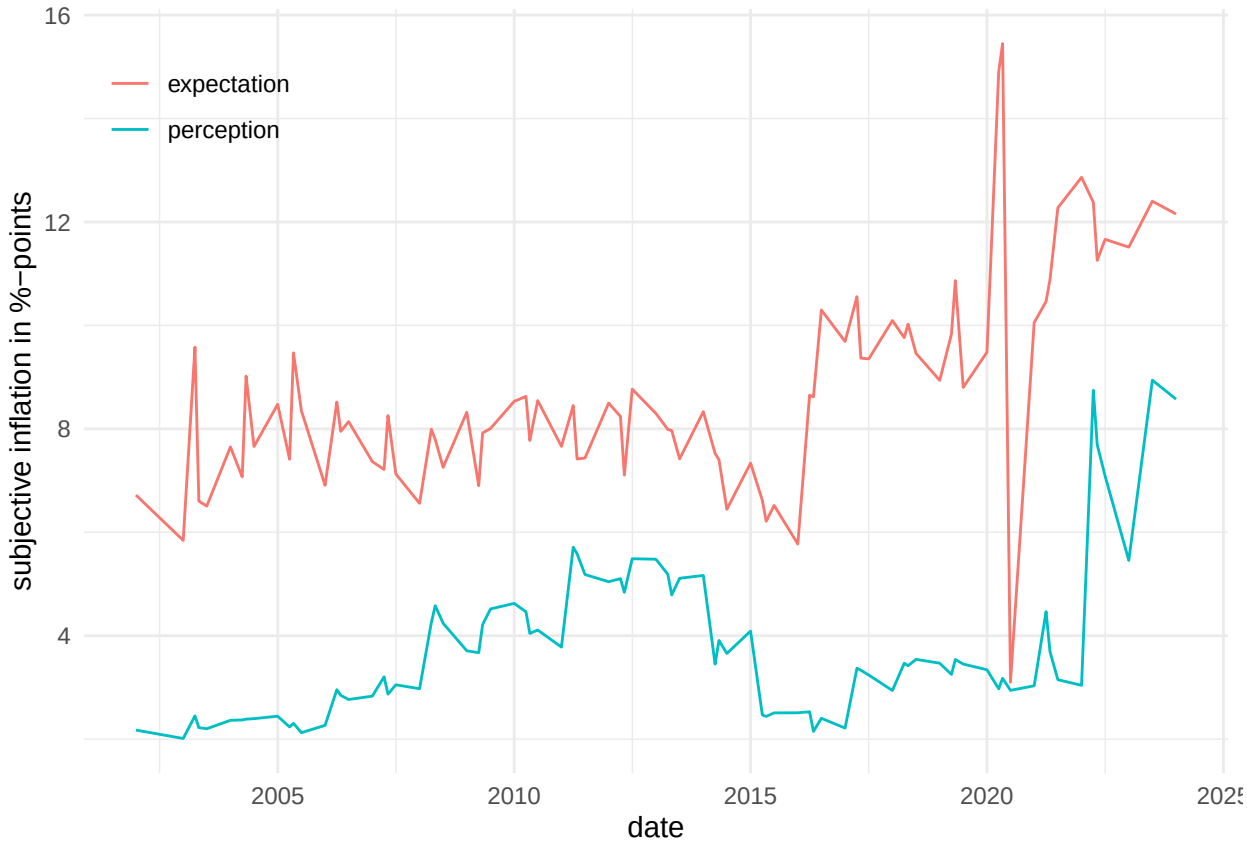
```
# 3. document relevant information
# (variable names + comments)
inflation <- inflation_raw %>%
  mutate(
    # coded according to "Additional Variables in Dataset" in excel file
    age = fct_recode(
      as.ordered(age),
      `15-24` = "1",
      `25-34` = "2",
      `35-44` = "3",
      `45-54` = "4",
      `55-64` = "5",
      `65+`   = "6",
      `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),
```

```
    # strip year of its date format
    year = year(year)
  ) %>%
  # only select important variables
  select(age, sex, education, perception, expectation, year, quarter, yyyyqq, date)
```

For this dataset the Bank of England asked 220.846 people for their opinion on the perceived and expected inflation. The survey has run quarterly since 2001.

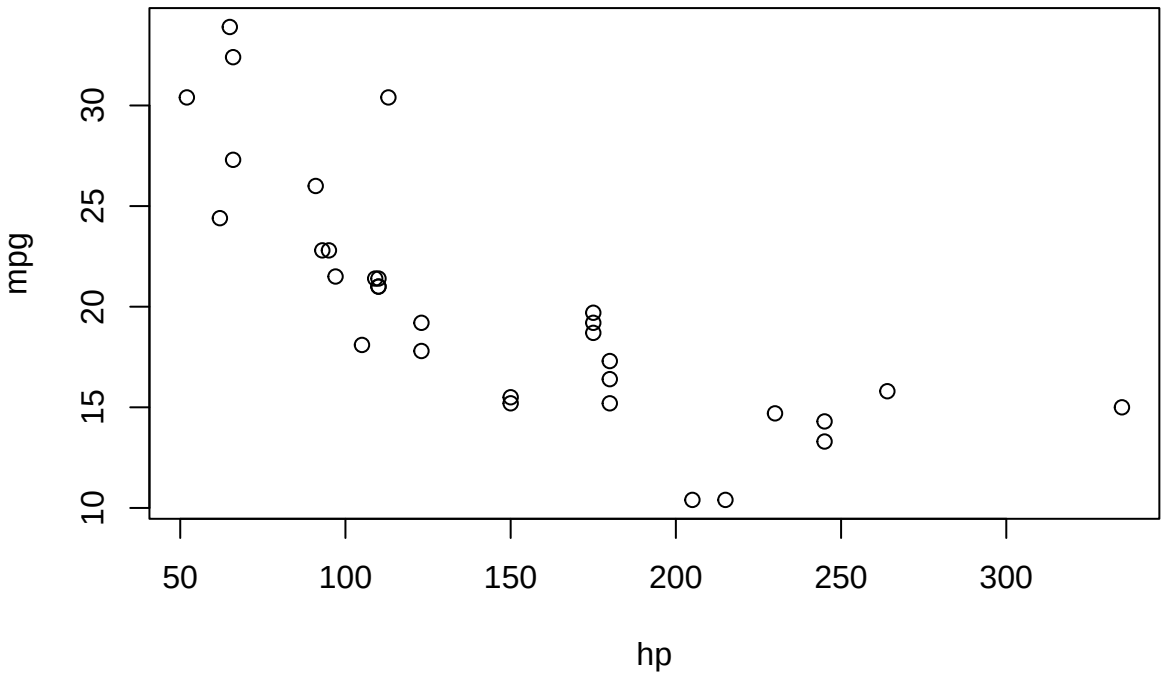
```
inflation %>%
  group_by(date) %>%
  summarise(across(c(perception, expectation),
                   ~ mean(., na.rm = TRUE)),
            .groups = "drop") %>%
  pivot_longer(c(expectation, perception)) %>%
  ungroup() %>%
  ggplot() +
  geom_line(aes(date, value, color = name)) +
  theme_minimal() +
  ylab("subjective inflation in %-points") +
  labs(color = "") +
  theme(legend.position = c(.1, .9)) +
  NULL
```

```
## Warning: A numeric ‘legend.position‘ argument in ‘theme()‘ was deprecated in ggplot2
## 3.5.0.
## i Please use the ‘legend.position.inside‘ argument of ‘theme()‘ instead.
## This warning is displayed once every 8 hours.
## Call ‘lifecycle::last_lifecycle_warnings()‘ to see where this warning was
## generated.
```



A code chunk is for longer code/output:

```
with(mtcars, plot(hp, mpg))
```



Inline code is for single numbers/short text:

We have 32 cars.