

# Making Decisions with Visual Data

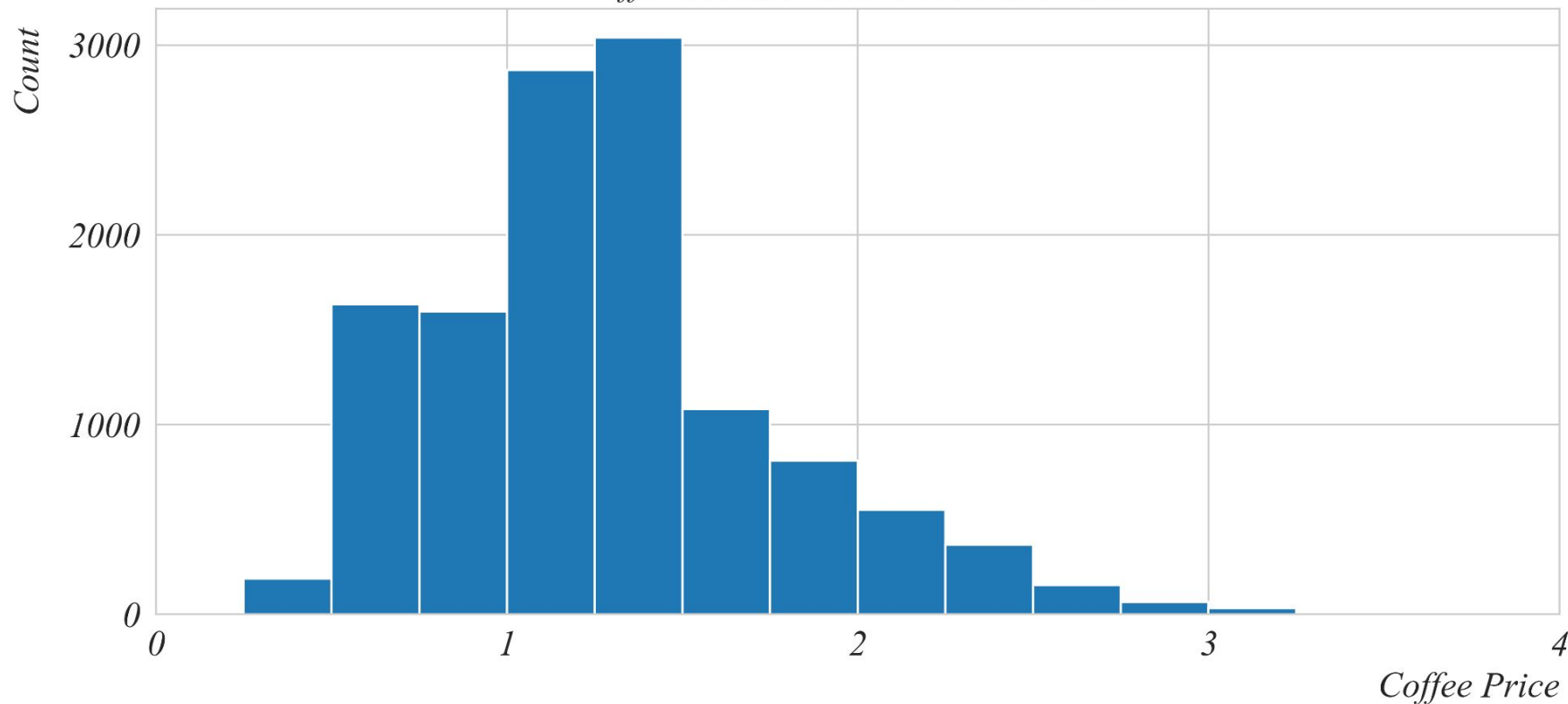
*Part 1.7 Data Connected Through Time*

*Taylor Weidman*

# Timeseries: Data Connected Through Time

Q. What information should we use to set prices in January 2025?

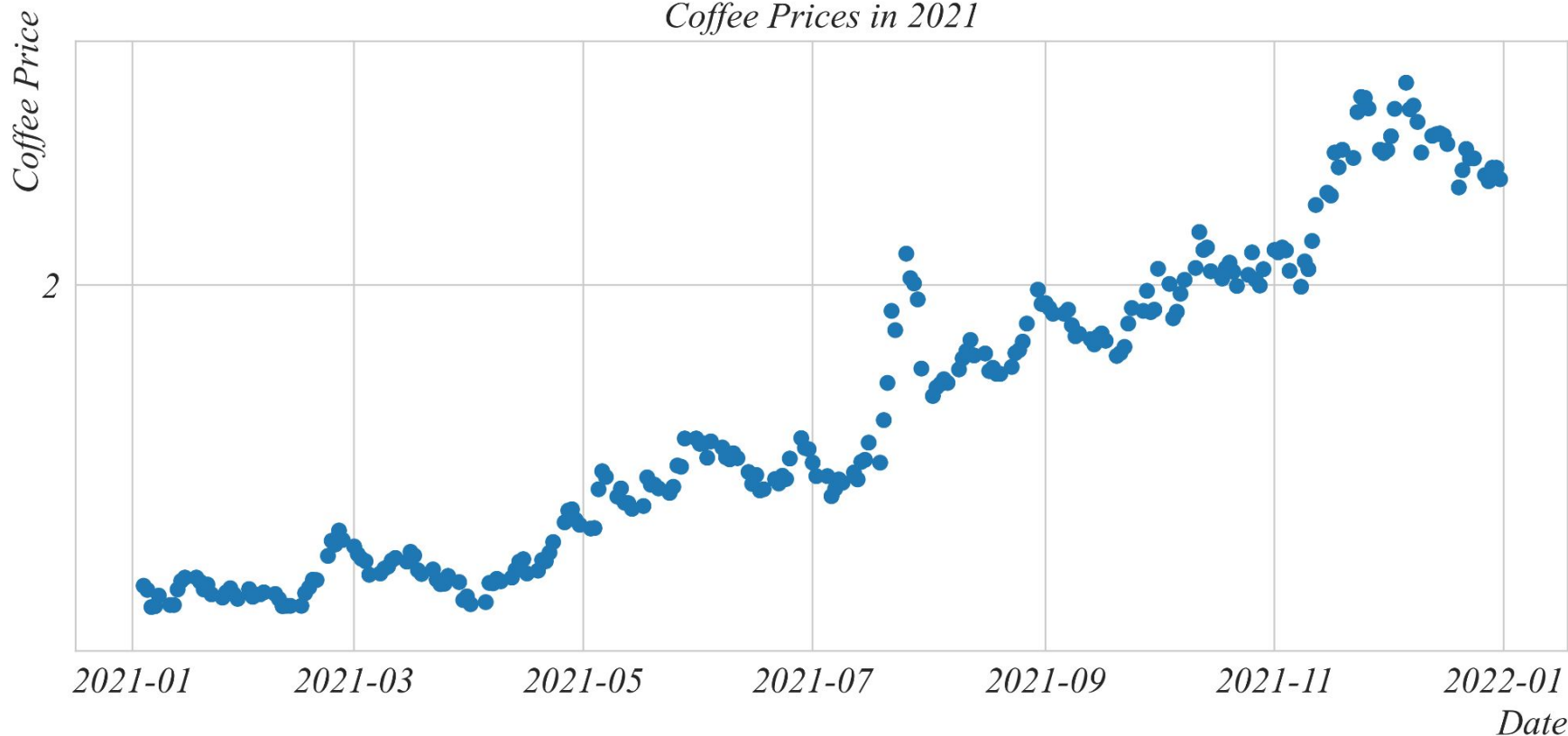
*Coffee Prices Between 1973 and 2022*



# Timeseries: Data Connected Through Time

Q. What information should we use to set prices in January 2025?

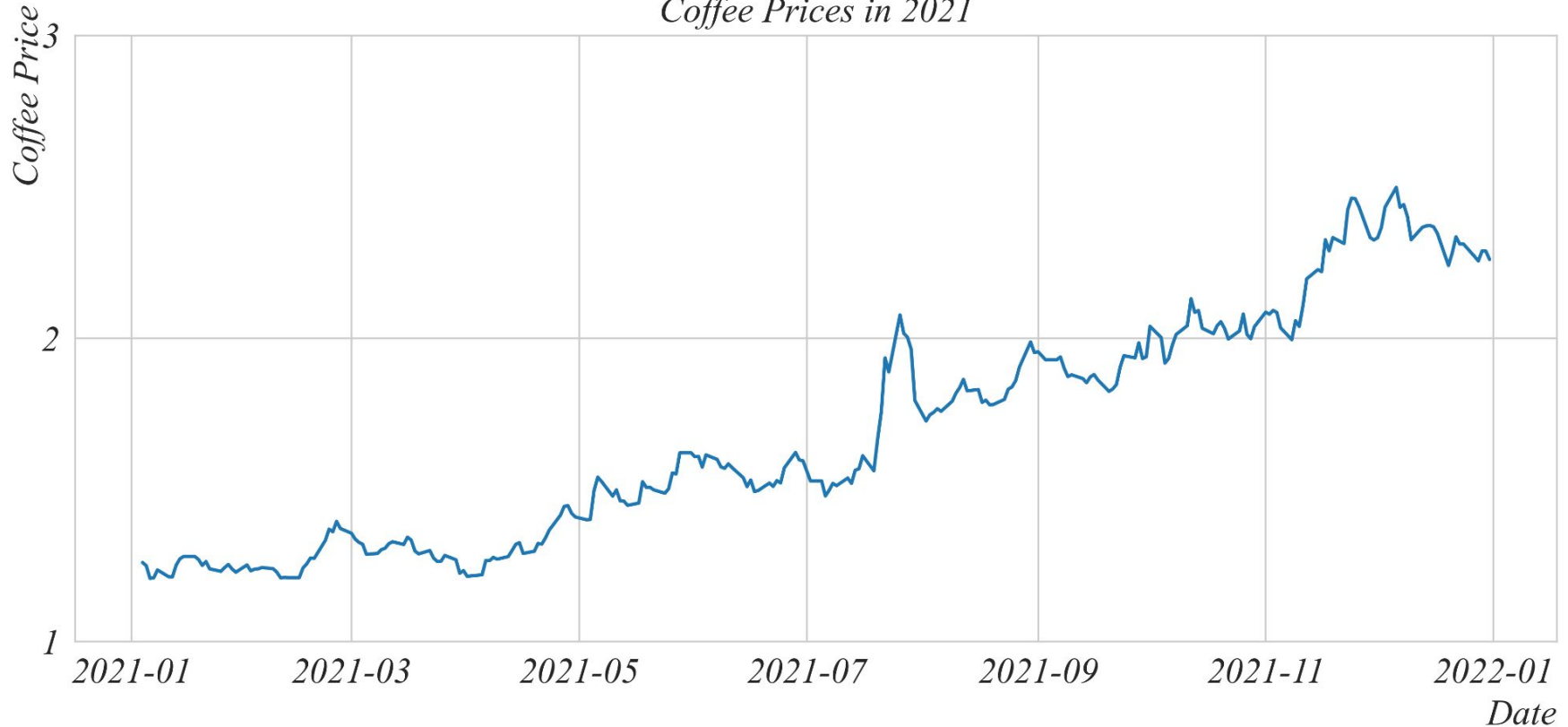
*Coffee Prices in 2021*



# Timeseries: Data Connected Through Time

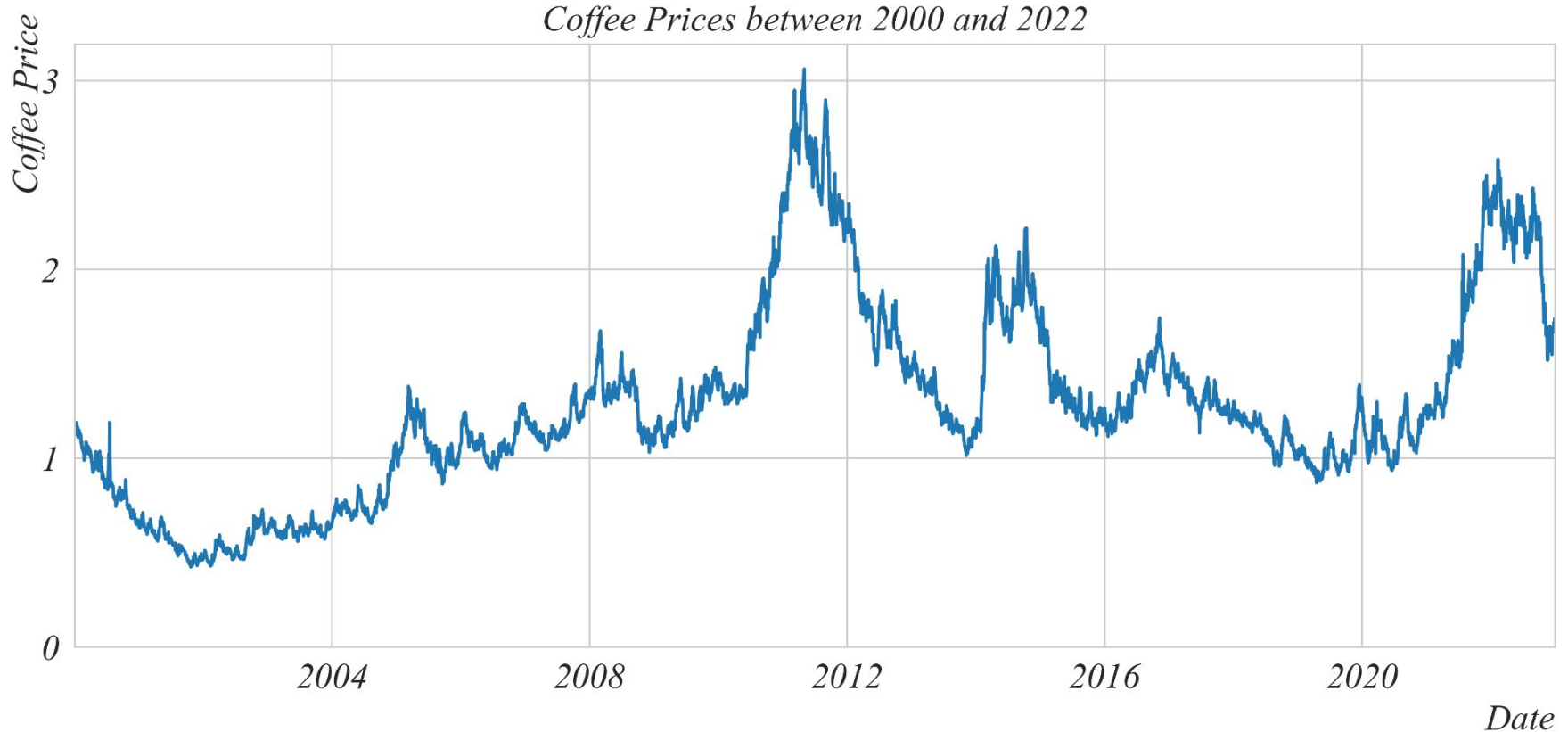
Q. What information should we use to set prices in January 2025?

*Coffee Prices in 2021*



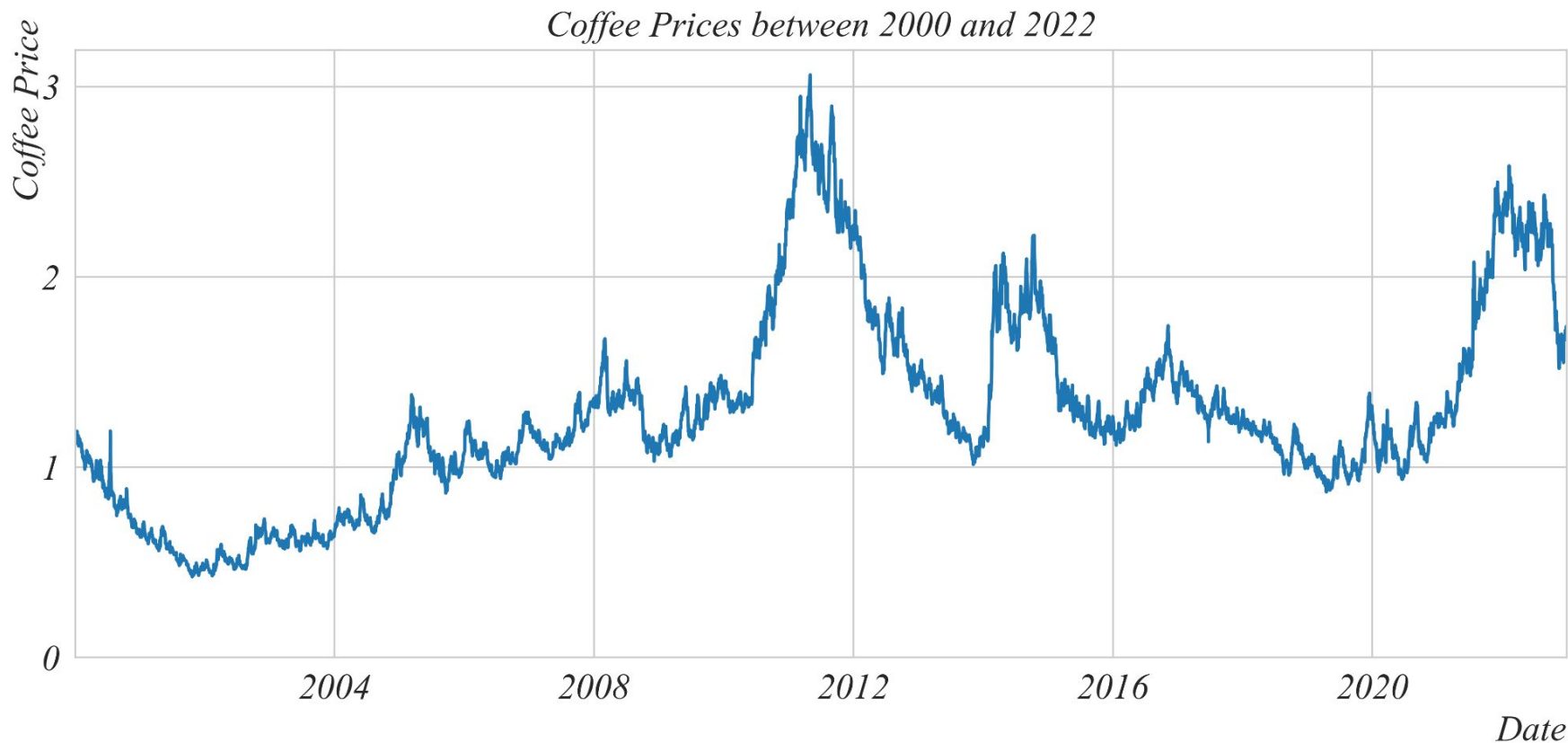
# Timeseries: Data Connected Through Time

Q. What information should we use to set prices in January 2025?



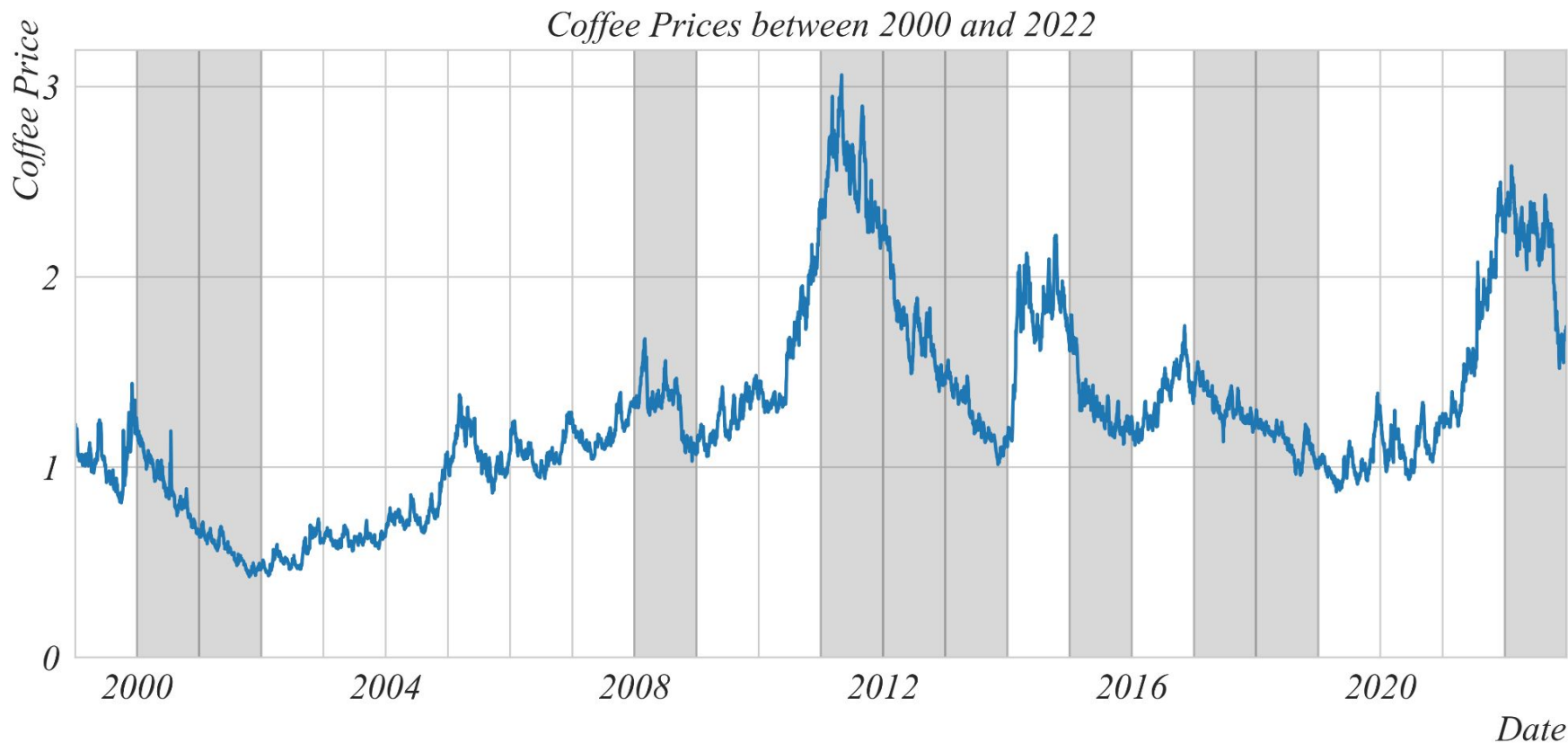
# Timeseries: Data Connected Through Time

Q. Which years does the price of coffee decrease?



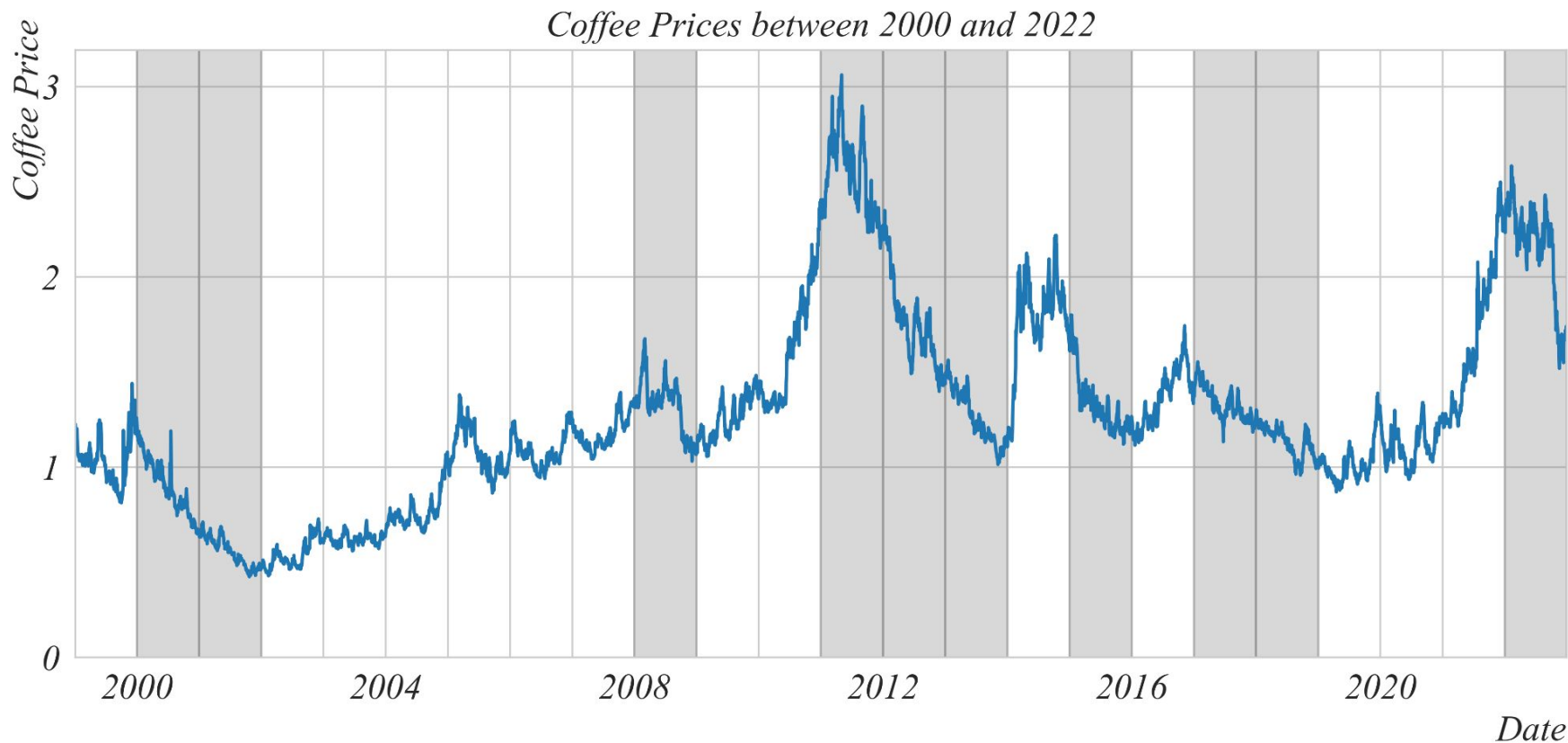
# Timeseries: Data Connected Through Time

Q. Which years does the price of coffee decrease?



# Timeseries: Data Connected Through Time

Q. What do you notice about the *trend* in price?

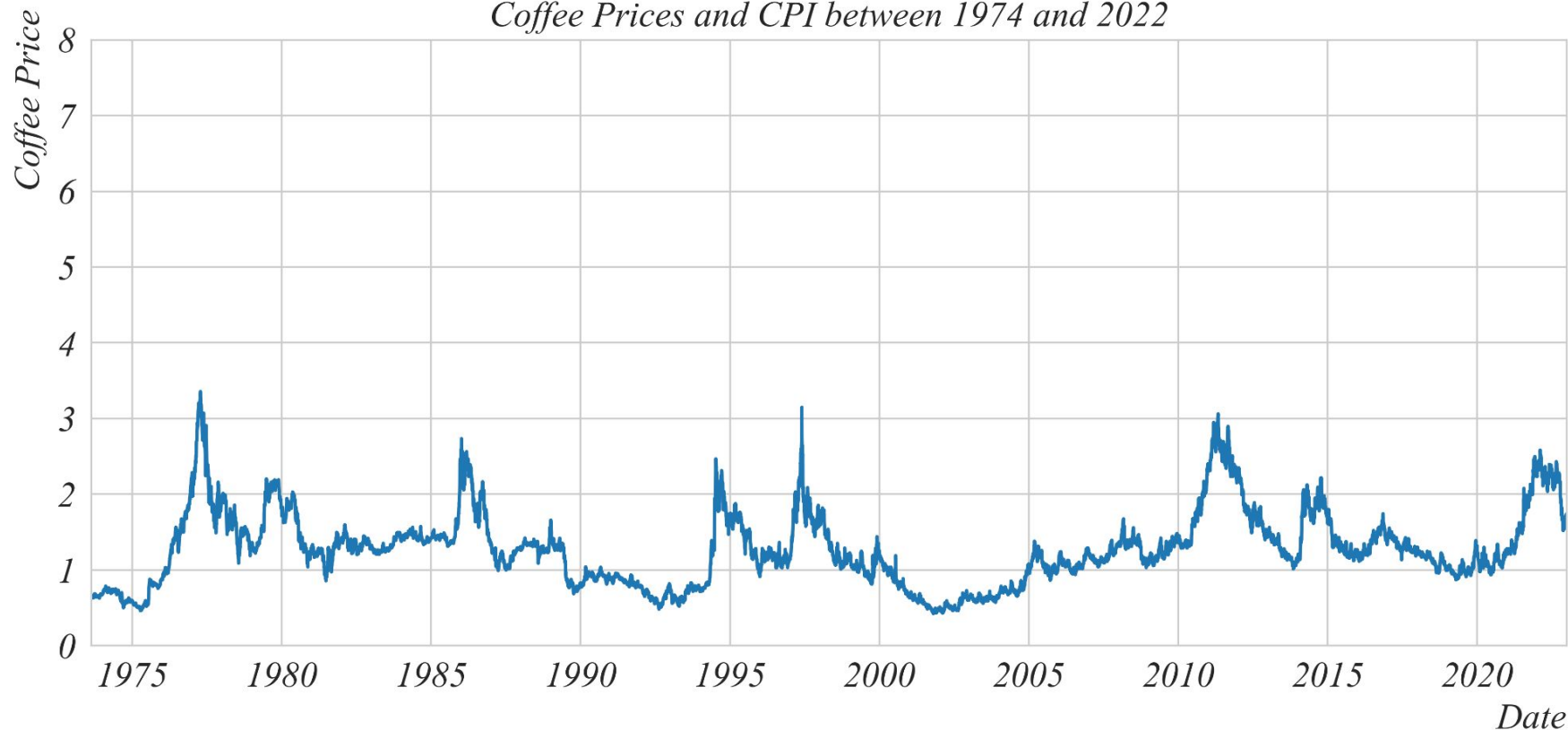




# Timeseries: Data Connected Through Time

Q. What do you notice about the *trend* in price?

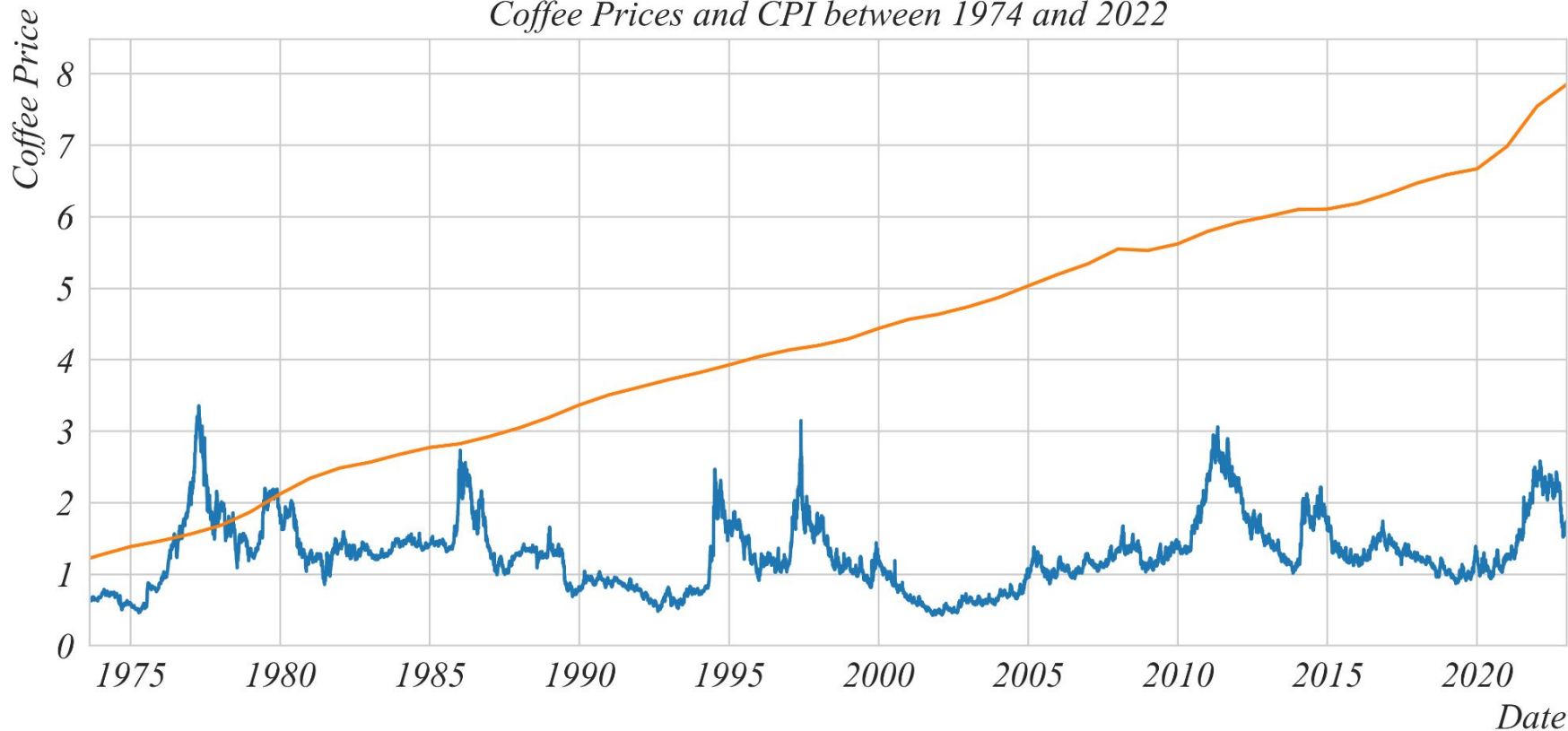
*Coffee Prices and CPI between 1974 and 2022*



# Timeseries: Data Connected Through Time

Q. What do you notice about the *trend* in price?

*Coffee Prices and CPI between 1974 and 2022*



# Timeseries: Data Connected Through Time

Q. What do you notice about the *trend* in price?

*Coffee Prices between 1974 and 2022*



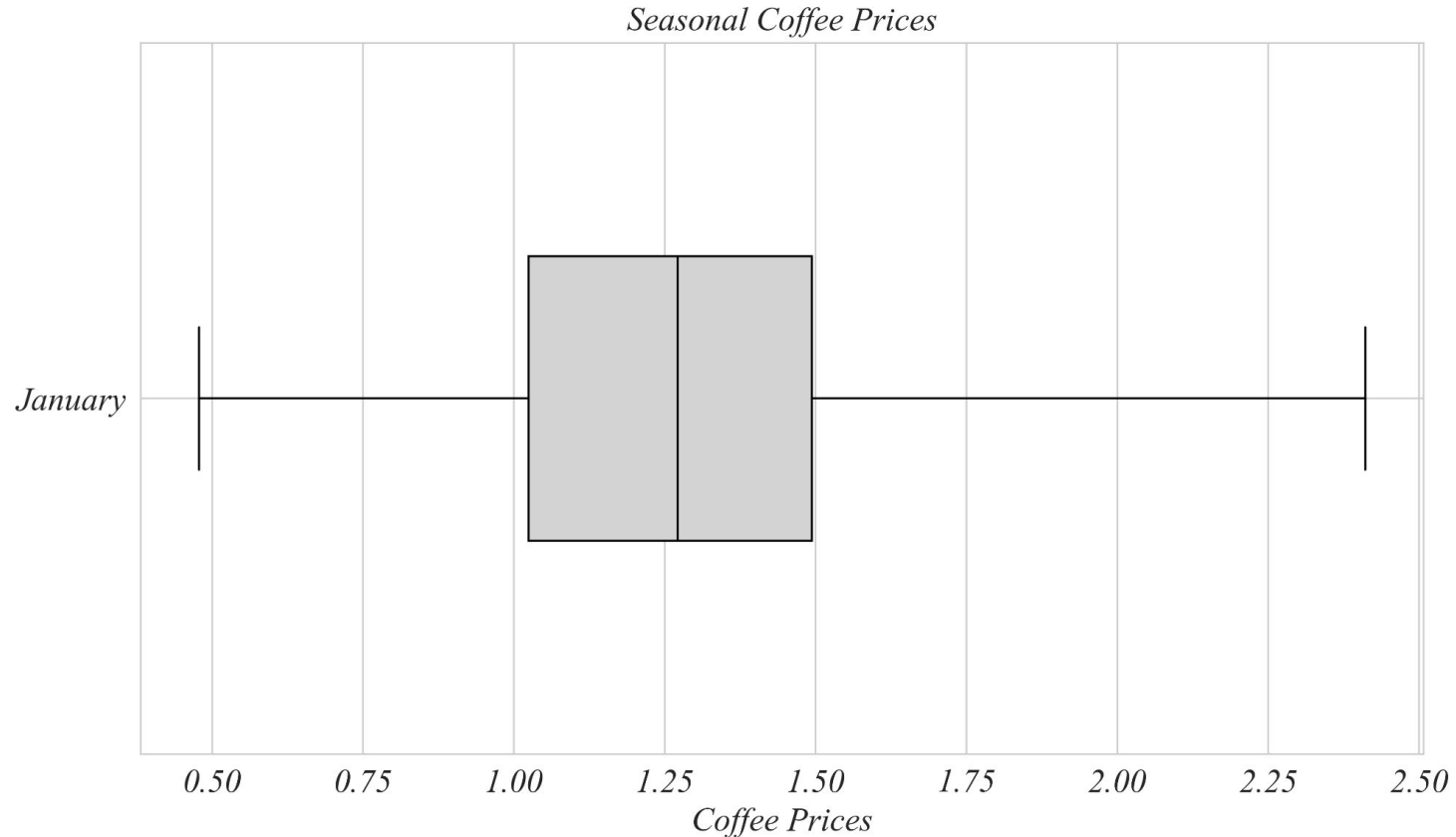
# Excel Exercise: Timeseries

We're going to use a timeseries to visually examine coffee price through time.

- Data: Part\_1\_7\_Coffee\_Prices\_CPI.csv

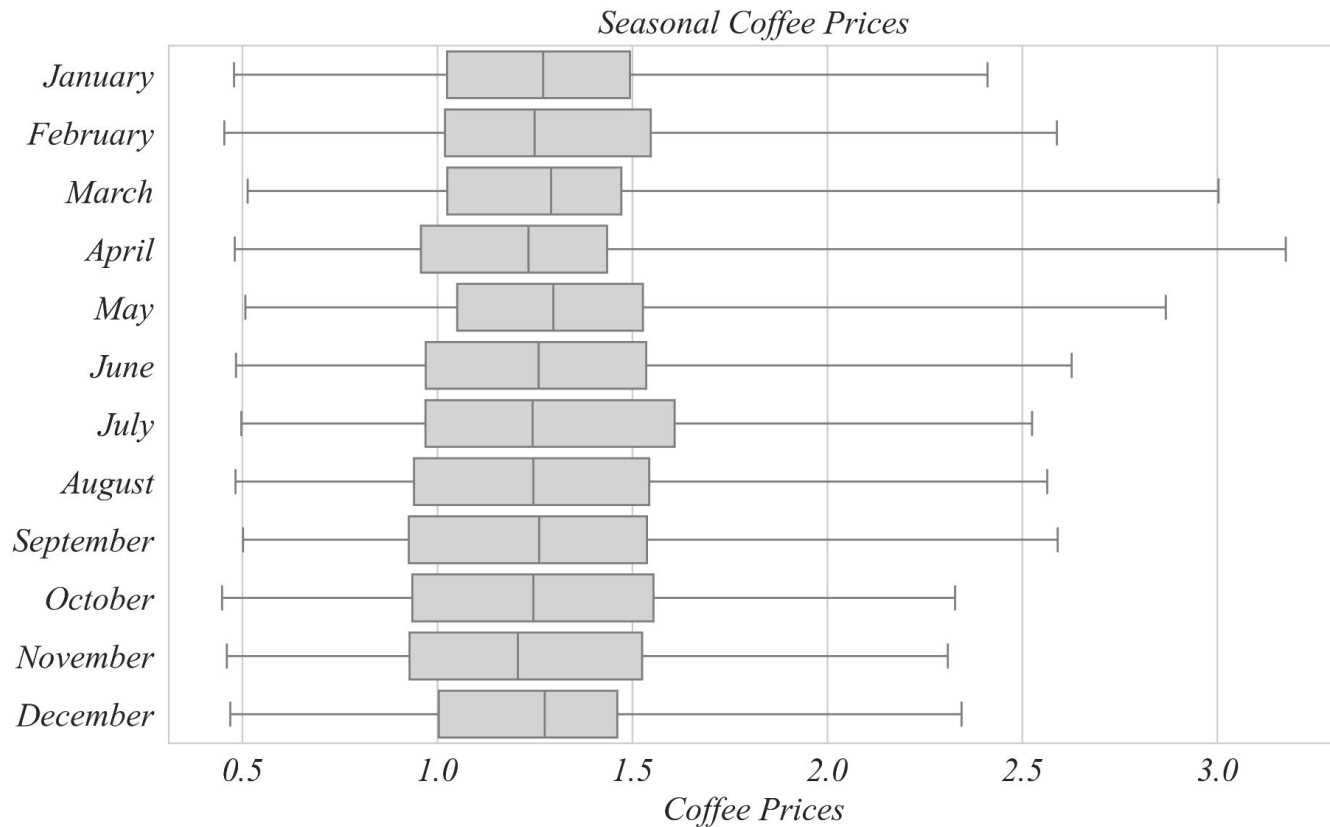
# Timeseries: Data Connected Through Time

Q. Year matters. But within the year, does month matter?



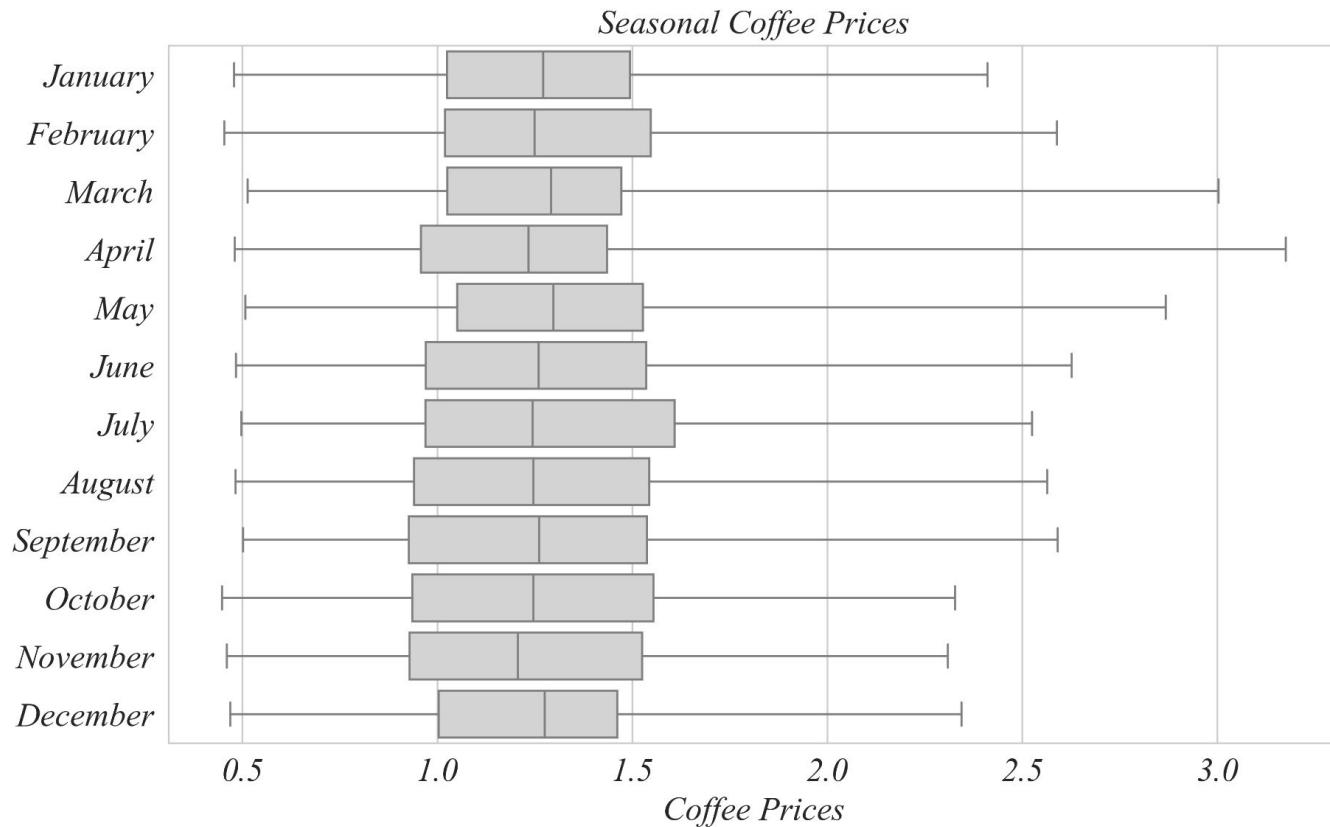
# Timeseries: Data Connected Through Time

Q. Year matters. But within the year, does month matter?



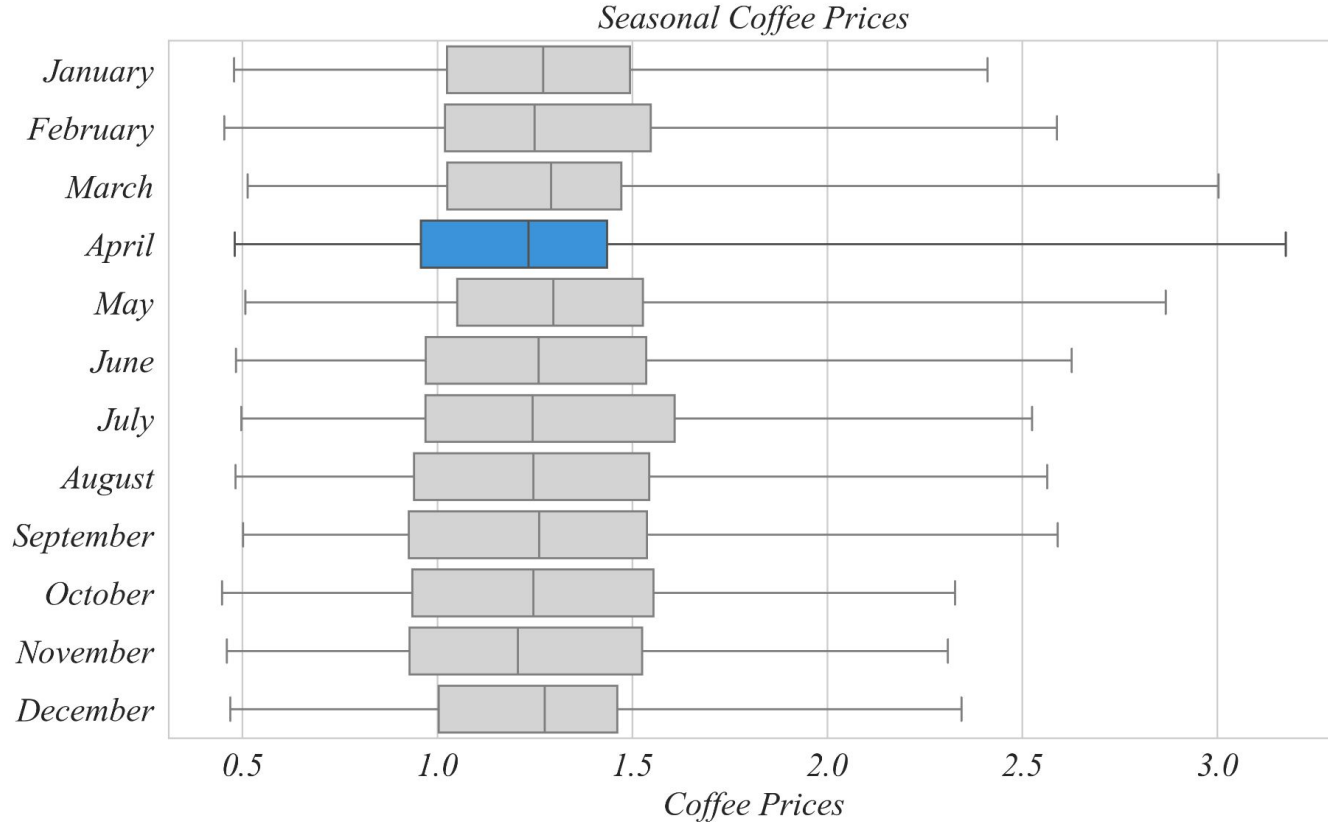
# Timeseries: Data Connected Through Time

Q. In which month was the record highest price set?



# Timeseries: Data Connected Through Time

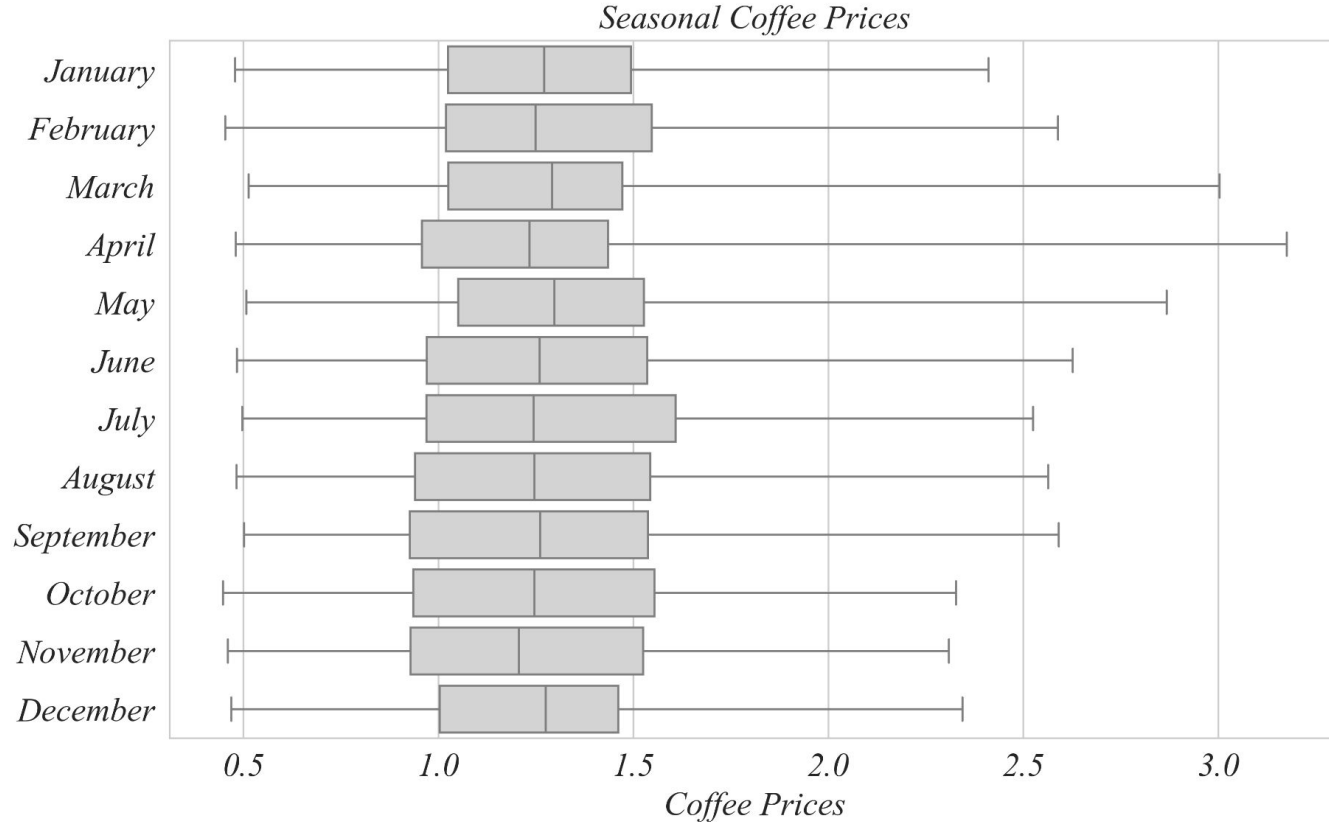
Q. In which month was the record highest price set?





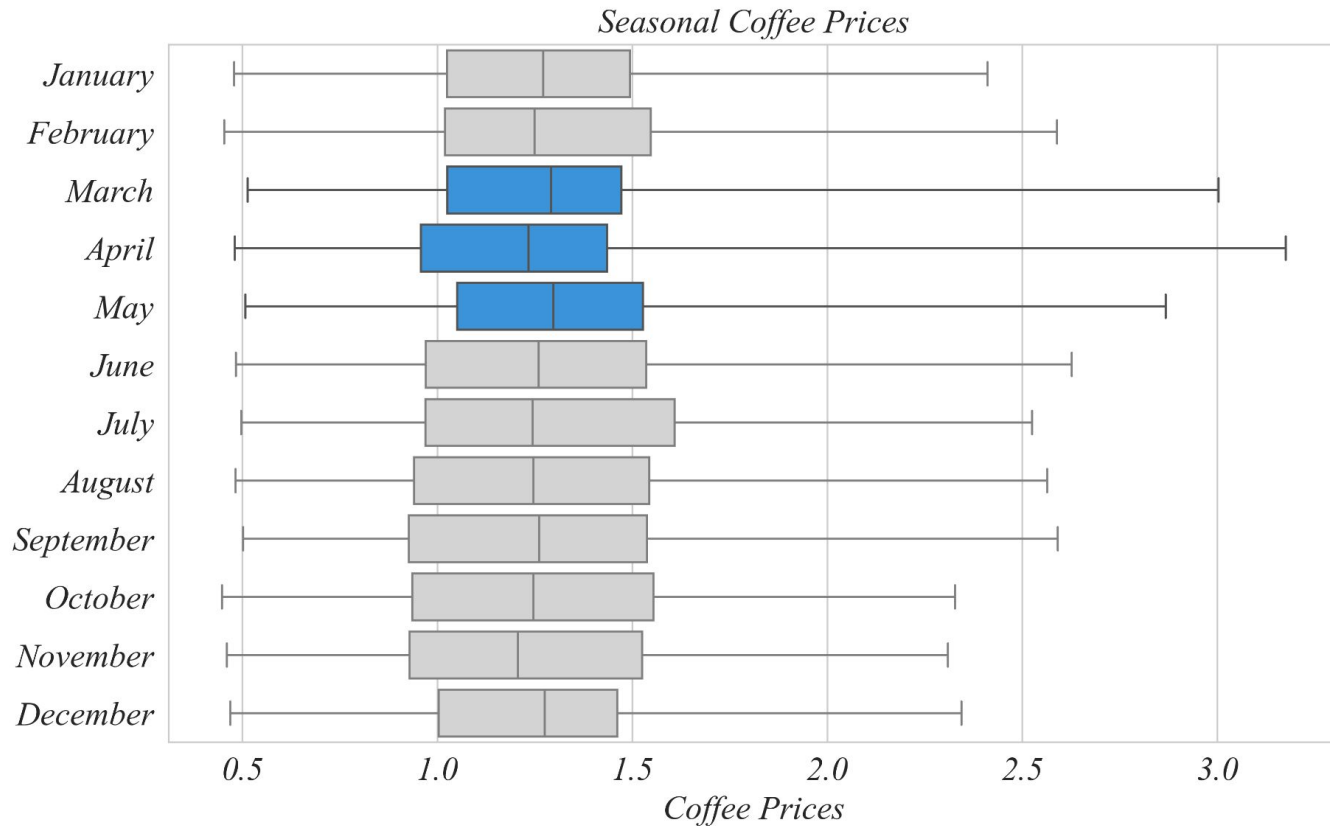
# Timeseries: Data Connected Through Time

Q. In which season are prices most spread out?



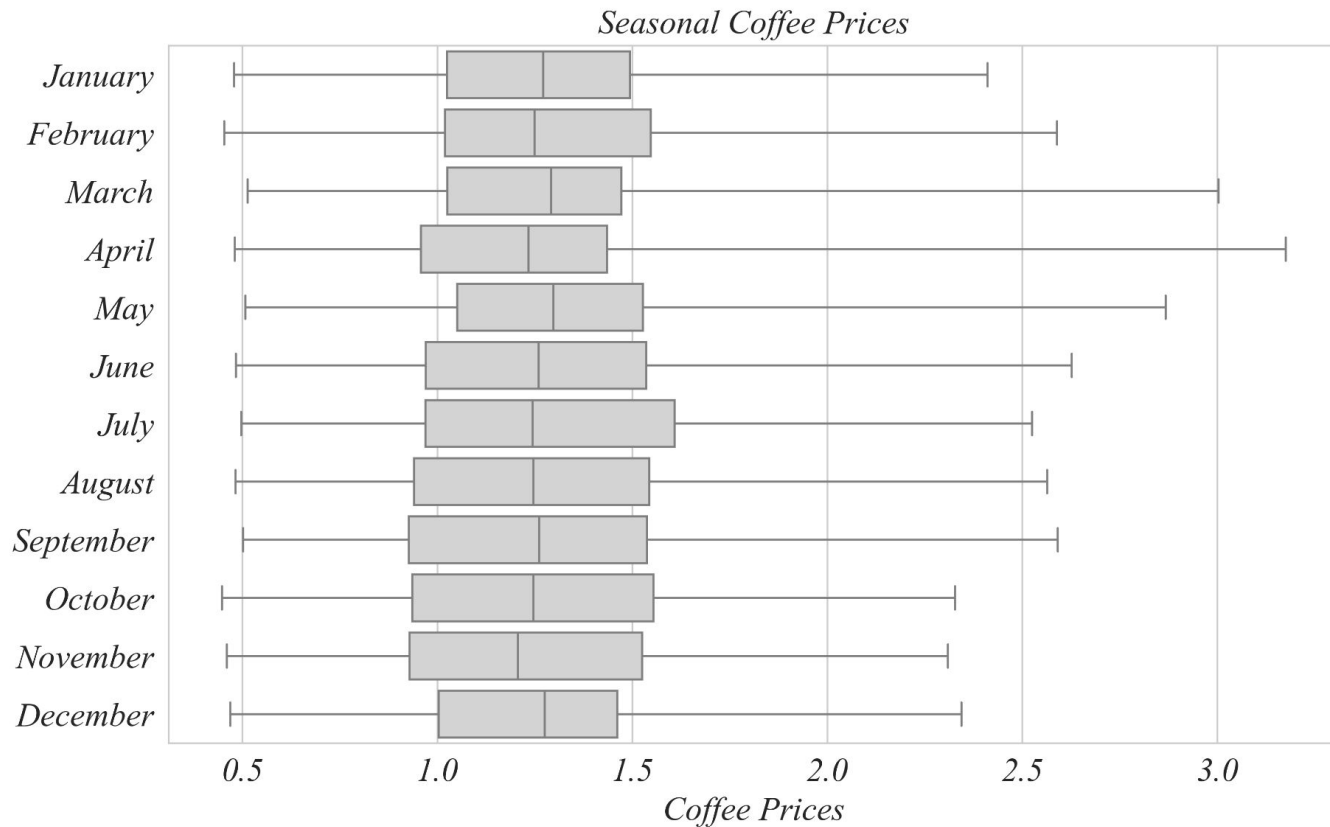
# Timeseries: Data Connected Through Time

Q. In which season are prices most spread out?



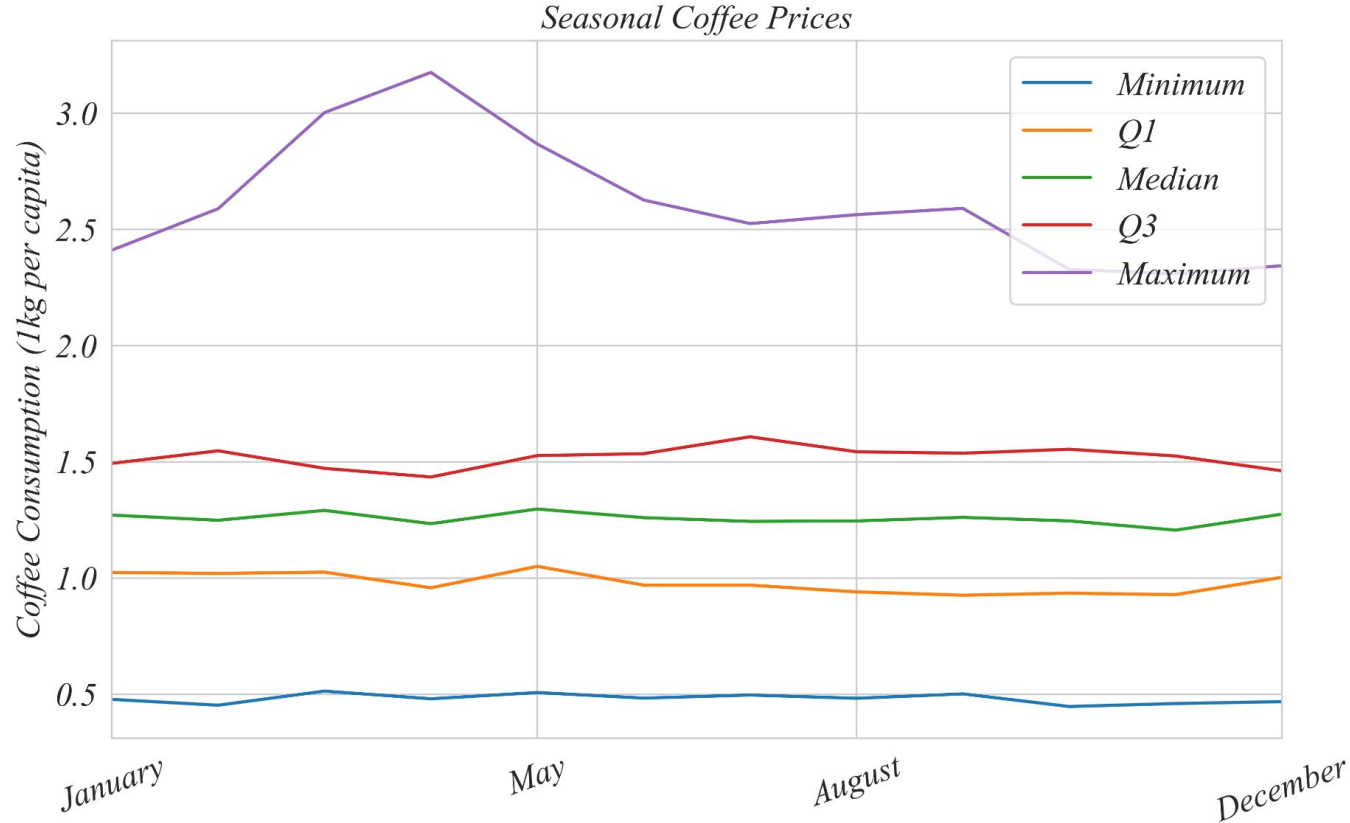
# Timeseries: Data Connected Through Time

Q. What's the trend in the median price?



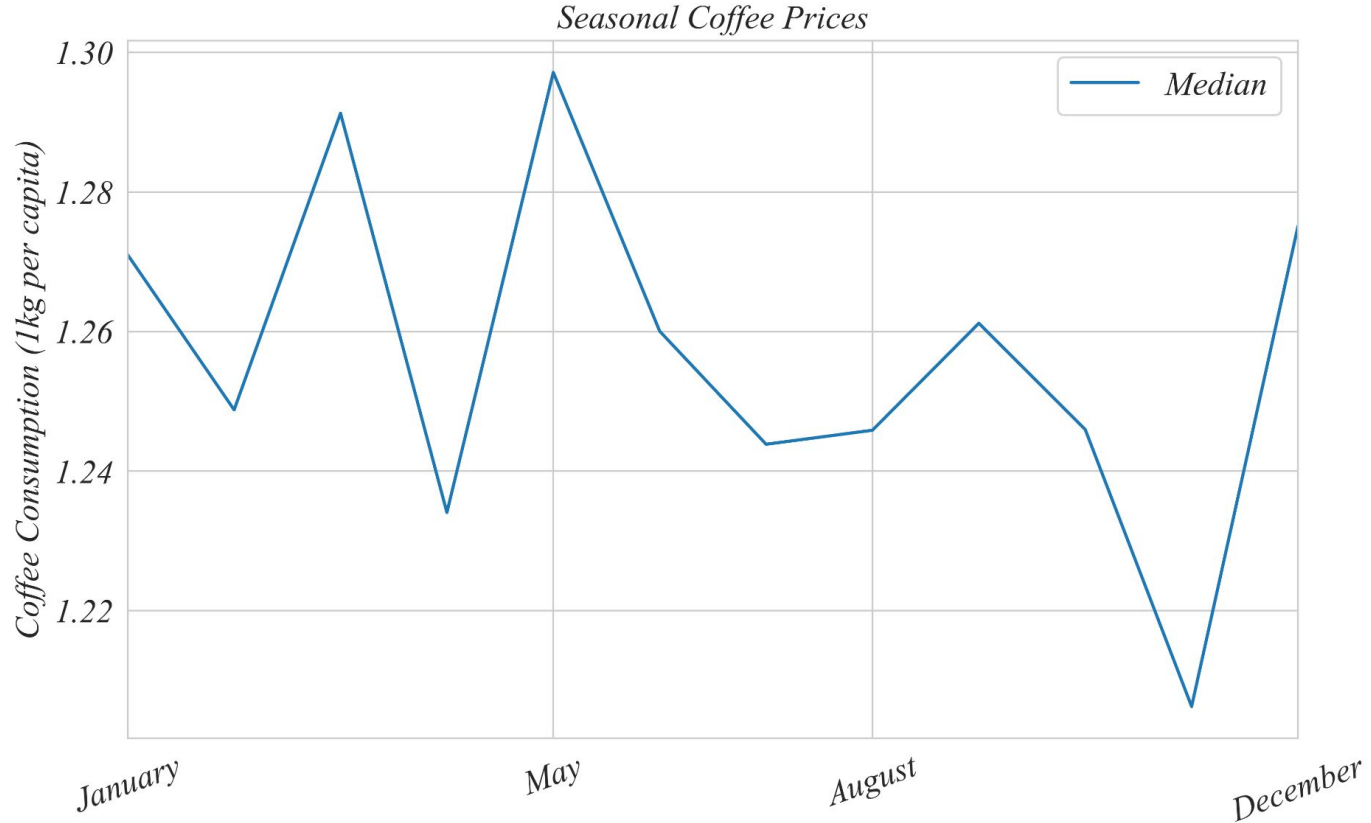
# Timeseries: Data Connected Through Time

Q. What's the trend in the median price?



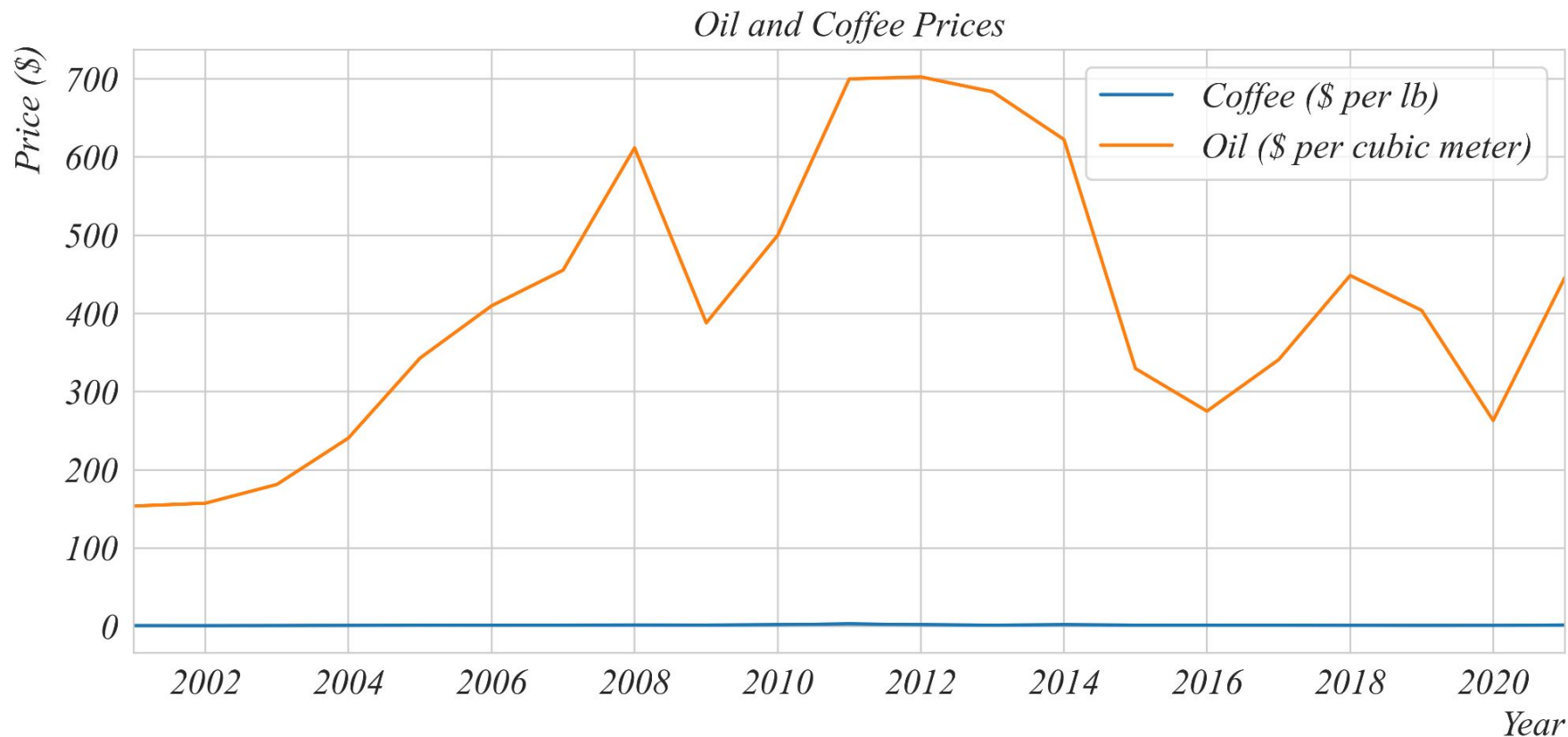
# Timeseries: Data Connected Through Time

Q. What's the trend in the median price?



# Timeseries: Relationships Through Time

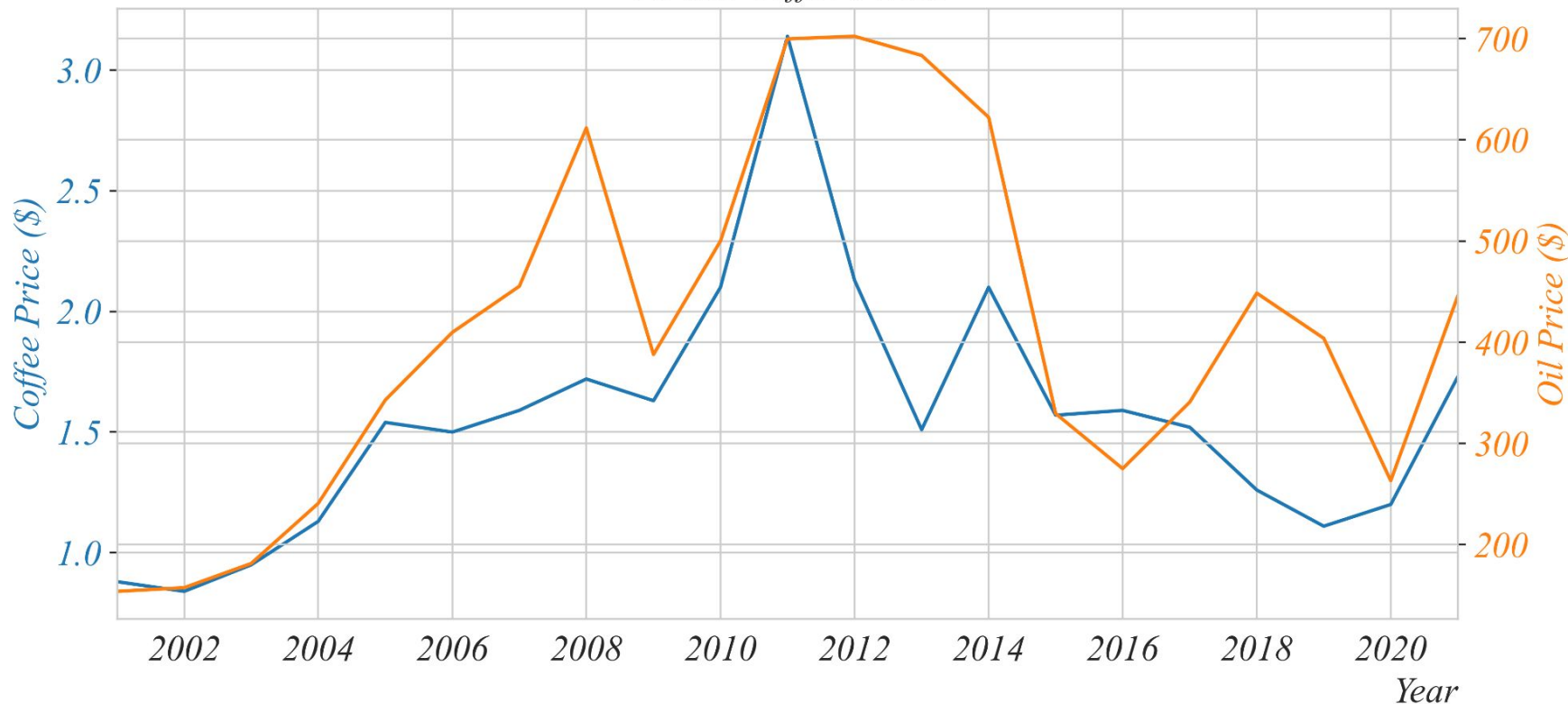
Q. How to the two *commodity* prices relate to each other?



# Timeseries: Relationships Through Time

Q. How to the two *commodity* prices relate to each other?

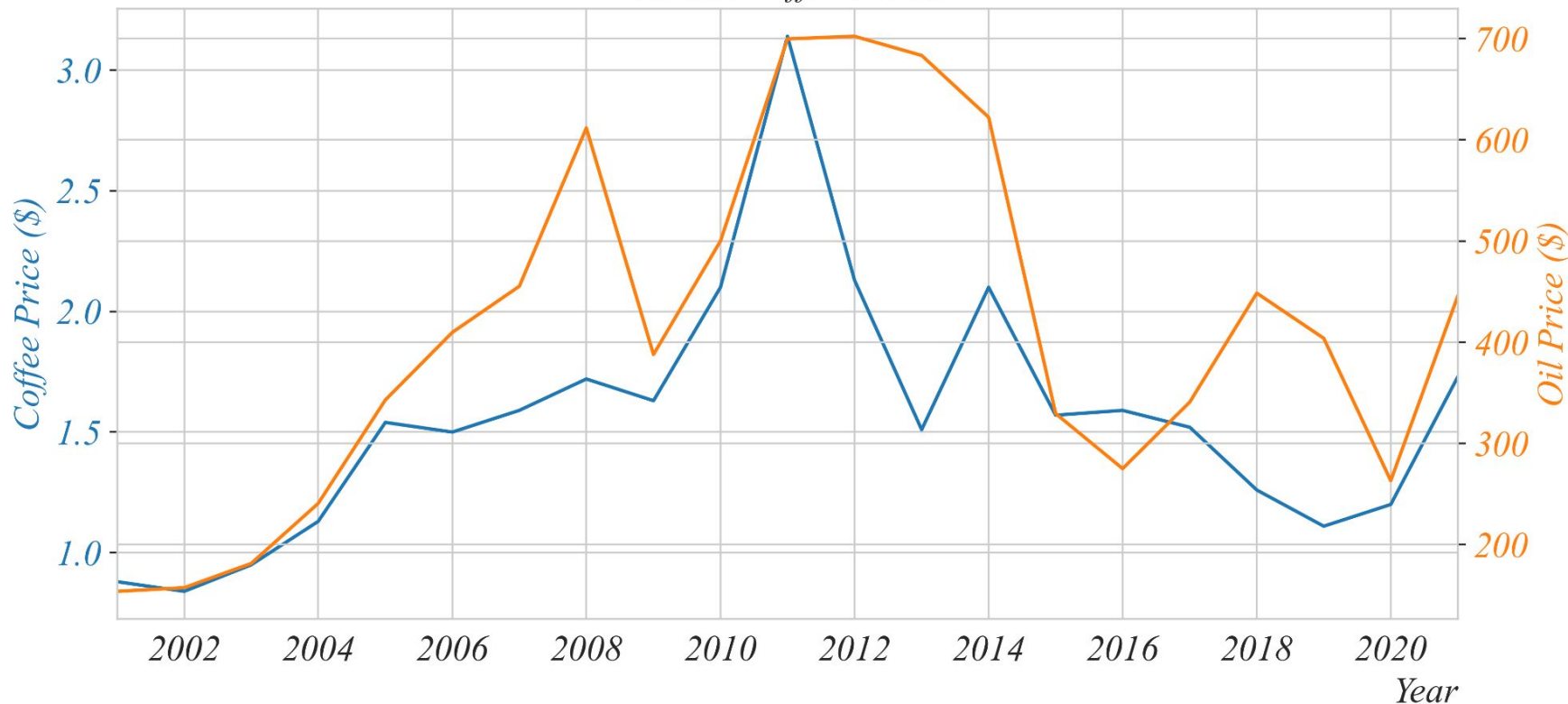
*Oil and Coffee Prices*



# Timeseries: Relationships Through Time

Q. In which years did oil and coffee prices move in *opposite* directions?

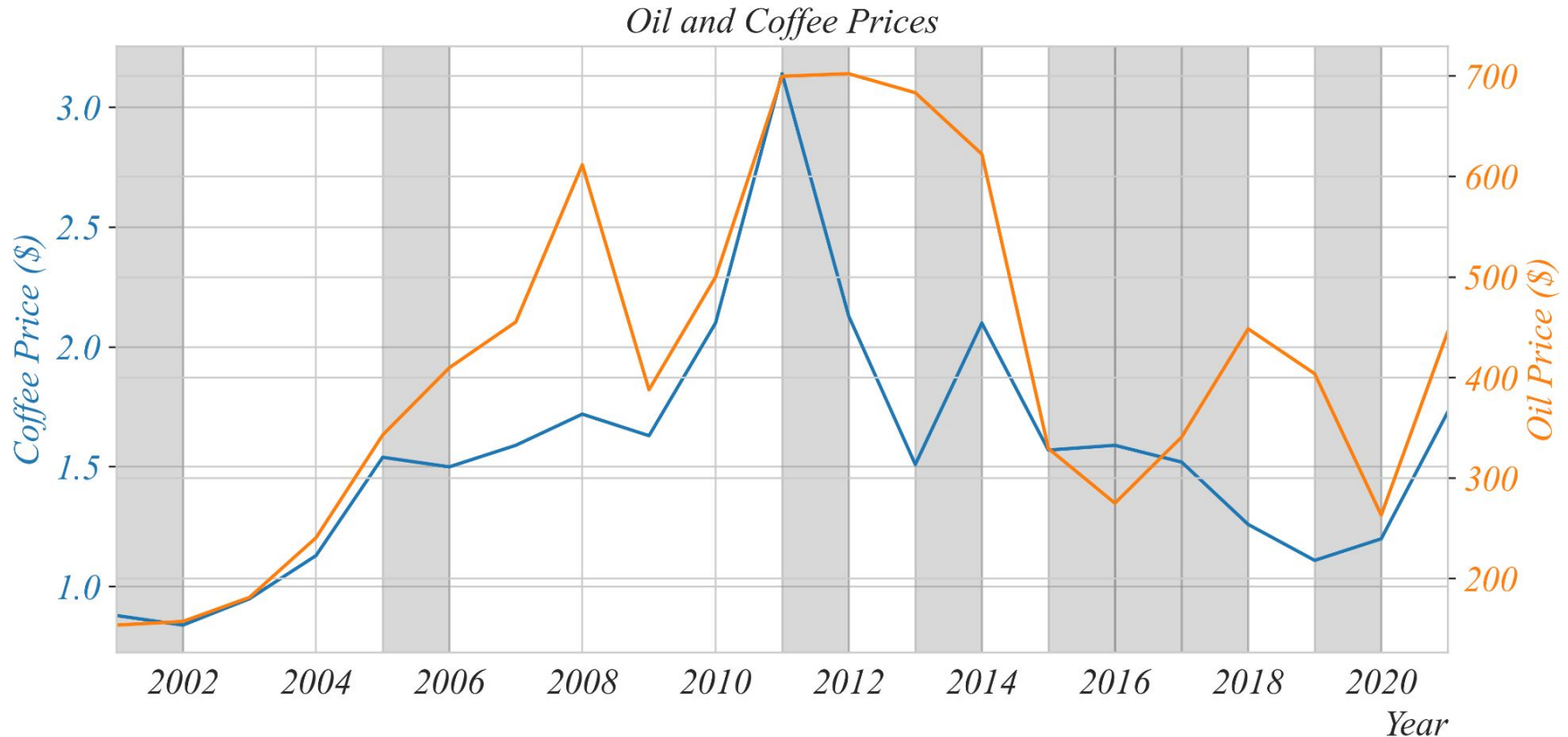
*Oil and Coffee Prices*





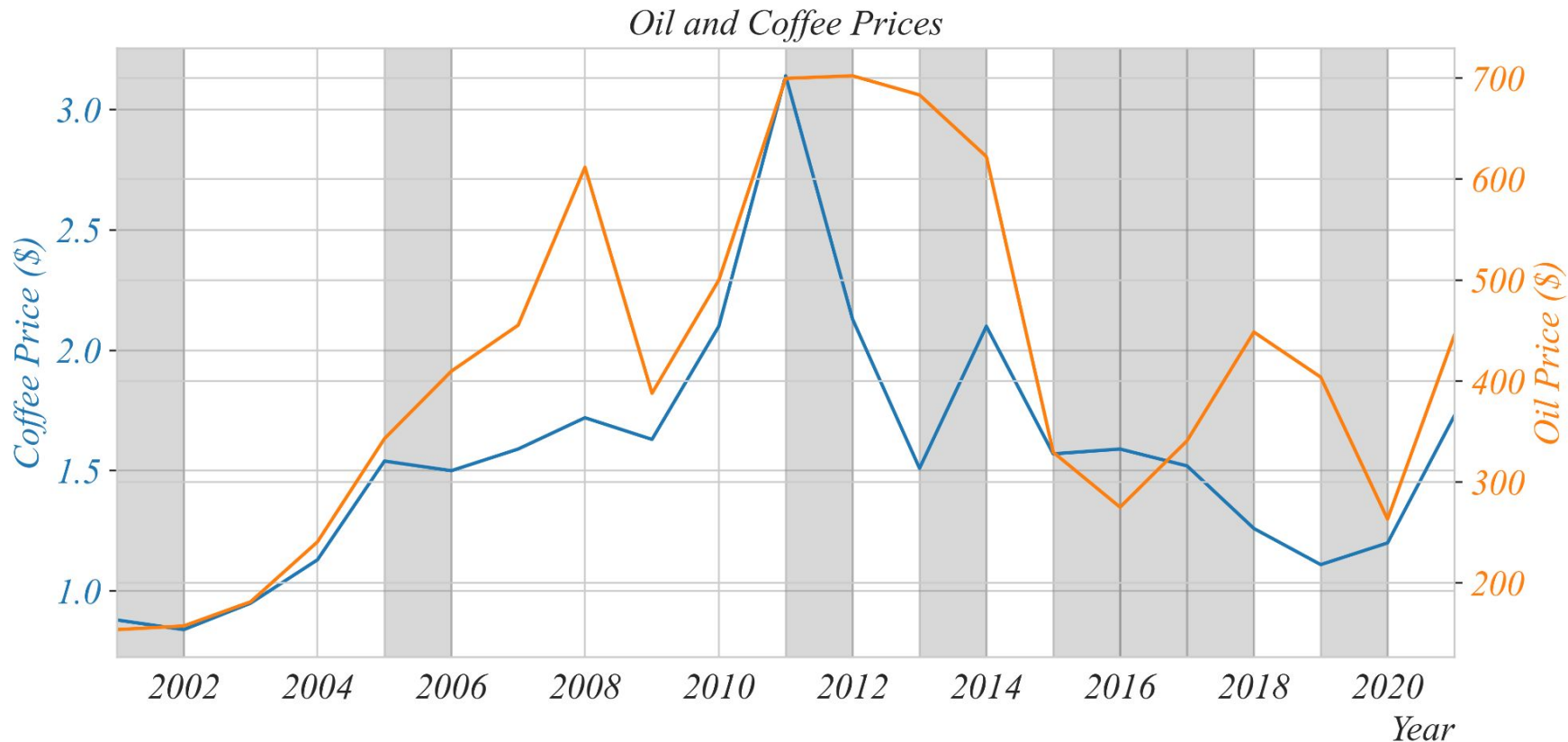
# Timeseries: Relationships Through Time

Q. In which years did oil and coffee prices move in *opposite* directions?



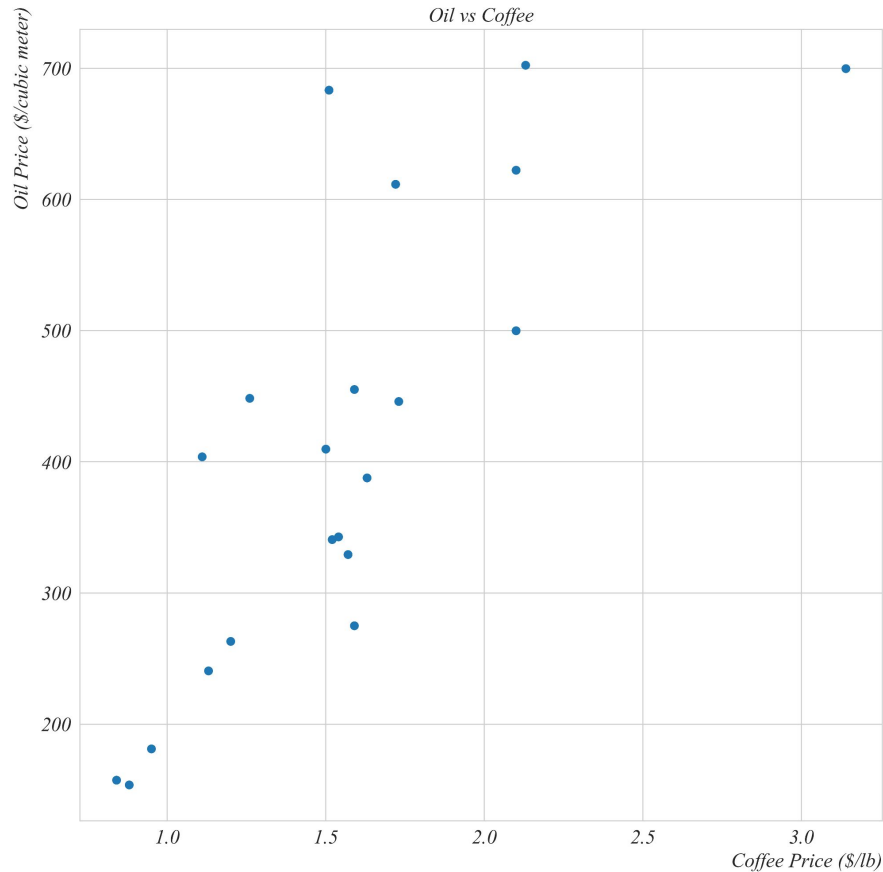
# Timeseries: Relationships Through Time

Q. But are the two prices positively or negatively related to each other?



# Timeseries: Relationships Through Time

Q. But are the two prices positively or negatively related to each other?



# Timeseries: Relationships Through Time

Q. Does the price of oil determine the price of coffee?

