Forecasting for Report

- Need to forecast consumption, investment, unemployment, inflation, GDP(min)
  - → NOT oil prices

Auto ARIMA

→ runs lots of lags...

→ for residuals, not good when out of blue borders

* What is forecast horizon

→ ARIMA forecasts always predict return to mean, faster when you have few q and p

→ to improve, can add exogeneous variables which conditions forecast on exogeneous var.

* Find reasonable paths for ex. variables, and also relevant exog. var.

* What does stationary time series mean?

→ for ten-year interest rate, use Y.Y difference NOT log difference

→ to fill in blanks for Sep. GDP and CPI and Aug. GDP
use iterated VAR

* don't start later than 2000, ideally start 1993

* SC = BIC
  - SC: Schwartz Criterion
  - BIC: Bayesian ...

→ to choose lag length, usually more than two for monthly data

→ if values are close to unit circle, it means model is drifting around a random point?

* Use Granger-causality test to figure out if you want to include variables
  - if null is rejected, we reject there is no causality ∴ use variable

1) select base variables in VAR
2) Run VAR
3) check Granger-causality
4) transform if needed (unit circle problem)
5) Add exogeneous variables

→ base-case scenario: what we think will most likely occur
  * predict oil prices and stock markets remain at current prices

→ for presentation, we look at multiple scenarios