ECO 328, Winter 2026, HW#2

Instructions: Complete and submit by 9:30 AM on April 8. Work together if you like, but compose your own answers, and present your own set of variables. Do not use AI. This will be lightly graded so focus on understanding the answers.

. 1. Describe a set of variables to use in a VAR/VECM/LP. To avoid redundancy with the forecasting presentations, do not include inflation, unemployment, or Treasury yields.

2. Why should I care about your dataset? What potential results would help answer interesting economic questions?

3. Transform your variables to make them appropriate for estimation. You should discuss, test for, and potentially correct any non-stationarity. You may also consider whether you should log or otherwise transform any variables.

4. For now, ignore any potential cointegration. Choose and defend an order for a VAR.

5. Choose the appropriate lag length for your VAR. Discuss if this lag length maximizes measures of fit such as r-squared.

6. Do you believe that you have fully eliminated omitted variable bias from your system?

7. Run a set of impulse response functions. Discuss one or two of the most interesting ones. What have we learned?

8. Provide a forecast using your VAR.

9. Now, test for cointegration. How many cointerating vectors exist?

10. Correct for cointegration by running a VECM. Assume your variables are cointegrated regardless of your results from #9.

11. Provide and economic forecast using your VECM.