

Place your name on the back of this sheet of paper and nowhere else. Staple your answers face up on the front of this sheet of paper. Failure to follow these directions will cost you 10 points. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Turn in the Excel file via Canvas. Place your name on an otherwise blank page of the Excel file. Failure to type this assignment will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

All questions except for Questions #1 & #2 should be done before class.

- 1) (20 points) Use the data in the sheet Lab 1 on the Excel sheet [lab7.xlsx](#) to run a regression to predict sales as a function of income and price. Do the quick checks for heteroscedasticity and autocorrelation. State what both results are and why they are or are not a problem. Explain how you know you had that problem. **If that problem is autocorrelation**, then run a regression which would adjust for that problem. Explain what you did. **If the problem is heteroscedasticity**, then do the formal test for it and explain what you did.
- 2) (20 points) Use the data in the sheet Lab 2 on the Excel sheet [lab7.xlsx](#) to run a regression to predict sales as a function of income and price. Do the quick checks for heteroscedasticity and autocorrelation. State what both results are and why they are or are not a problem. Explain how you know you had that problem. **If that problem is autocorrelation**, then run a regression which would adjust for that problem. Explain what you did. **If the problem is heteroscedasticity**, then do the formal test for it and explain what you did.
- 3) (20 points) Draw the SRPC/LRPC diagram for a country which is at full employment and has an inflation rate of 6%, which is what they expected. Suppose the central bank announces that they will decrease the money supply growth so that it will only grow 2%. Illustrate what will happen if the public believes them and the central bank actually has the money supply grow 1%. Explain why the curve(s) moved and how you found the new point where the economy is at.
- 4) (15 points) If you were in the government and wanted to move the LRPC to the left. How would you achieve that? Explain why you would choose that method.
- 5) (15 points) Look at the graph of Belarus' inflation rate on the link below. Click so that it shows the last 5 years. Look at the graph for China's inflation rate linked below. Click so that it shows the last 5 years. (Note the scales are different.) Which country do you think is more likely to have a "normal" shaped Phillips Curve? Explain your logic.
<https://tradingeconomics.com/belarus/inflation-cpi>
<https://tradingeconomics.com/china/inflation-cpi>
- 6) (10 points) Some economists feel that the Expectations-Augmented Phillips Curve is not usable for determining policy. Explain why they feel that.