

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 #1 should be done before class on 9/26. You will hand all of the answers in together. Because I will not be starting the lab class until 3:00, you will not have to do the lab during the hour after the lecture. So, I will give you 48 hours to do the lab and turn the whole thing in. So, it will be due on Sunday at 5:00.

1) Suppose the economy is described by $C_t = 600 + .8((Y_t + Y_{t-1})/2 - T_t)$, $T_t = .3Y_t$, $I_t = 0.4(Y_t - Y_{t-1})$, $G = 700$, $NX_t = 800 - 0.06Y_t$. Use these equations to answer this question.

A) (20 points) Use the system of equations to solve for Y as a function of exogenous variable(s) and parameters.

B) (15 points) Put the equations into an Excel spreadsheet. Use it to find the GDP for the next 10 years if the last year's GDP was \$3400. Have Excel plot the GDP over that period. Is that monotonic convergence, monotonic divergence, oscillating convergence, oscillating divergence, or something else? Explain your logic.

2) (20 points) Draw the LRAS/SRAS/AD diagram. Illustrate the effects a cut in income taxes, which people assume are permanent. Explain why the curve(s) moved as drawn. What happens to inflation, unemployment rate, and real GDP?

3) (20 points) Draw a LRAS/SRAS/AD diagram. Former President Trump has proposed large increase in taxes on imports. Illustrate the effects of that on the graph. Explain why the curve(s) moved as drawn. What happens to inflation, unemployment rate, and real GDP?

4) (20 points) What is the current unemployment rate? (Make sure you provide the citation.) Draw the LRAS/SRAS/AD diagram for that situation. Explain how it shows that unemployment rate. If the economy is left alone, how will it get back to full employment. Illustrate that on the graph and explain why the curve(s) move as drawn. What happens to inflation, unemployment rate, and real GDP?

5) (5 points) Given your graph in Question #4, what would be the best thing to do with government spending and taxes? Explain why that is best.

You will probably want to read these two articles about the two main presidential candidate's proposed fiscal policies. Do either of them really fit with your answer to Question #5?

<https://budgetmodel.wharton.upenn.edu/issues/2024/8/26/trump-campaign-policy-proposals-2024>

<https://budgetmodel.wharton.upenn.edu/issues/2024/8/26/harris-campaign-policy-proposals-2024>

Note that UPenn is a well respected, Ivy League university, and Trump described the Wharton School as "super geniuses".