Barreto

Macro Topics

Introduction to the Keynesian Model

Overview and Major Ideas

Delete this before using. Draw K Cross on board and explain each function carefully.

Discussion of the *Intro* sheet.

Proceed to the *Model* sheet.

Click the See Math button. Using your economy’s parameter values from task 1, write out the C, I, and G functions and draw the Keynesian Cross diagram on the back of this handout. Solve for ye and display this solution on your graph.

Choose a value for Y > ye and compute PE for this value. Compute C, I , and G. Is PE < or > Ye? Why?

Enter your analytical solution value for Ye in cell B16 and look at the chart. Does this make sense?

Return to the *Math* sheet to see how Ye can be found in a more “general” form. Enter this analytical solution as a formula in cell B17. Are cells B16 and B17 equal? Makes sense, right?

Increase your investment intercept by $2 trillion. Now cells B16 and B17 don’t agree. B16 is a dead number, while B 17 is a live formula which has the new Ye solution. Cell B17 will instantly update if you change any parameter values. Cell B16 requires that you run Solver after every shock.

Below, explain how your economy will equilibrate, reaching the solution in cell B17. Please focus your answer on the economic forces at work, not the math or graph.

Let’s connect Y versus YF to the unemployment rate.

Use FRED to download unrate, gdpc1, and gdppot. For all three, row 2 is lin (or empty since lin is default), row 3 is Q, and row 4 is 1/1/1949.

Compute the GDP gap as (1 – gdpc1/gdppot)\*100. With GDP in D8 and Potential GDP in F8, the formula is =(1-D8/F8)\*100. This is the same as Y as a percentage of YF and negative numbers mean the economy is “over potential GDP” (so really booming).

Plot the unemployment rate as a function of the GDP gap and fit a line to it.

Note: the GDP gap must be on the x axis because we want to know what the unemployment rate is for a given GDP gap.

Draw your graph below and report the fitted line. Interpret the intercept and slope of your fitted line.

HW: Watch all 3 screencasts and complete tasks 1 and 2 by noon Wed in MoneyMarket.xls.