

Homework 7

Eco 10350, Prin of Macro, Kevin R Foster, Colin Powell School at CCNY

Due 8am Friday April 5

(I think of the deadline as being midnight somewhere on the planet after class, operationalized as 8am EST in NYC on day after)

Each student should submit a separate assignment, even if it is an identical computer file to the rest of your study group. When submitting assignments, please include your name and the assignment number as part of the filename. Please write the names of your study group members at the beginning of your homework.

1. What are the names of the people currently in your study group?
2. In the OpenStax textbook, please answer 13.21, 14.31, 15.38.
3. Assume an economy can be modeled with these equations:

$$C = 200 + 0.8(Y - T)$$

$$T = 5 + 0.3Y$$

$$I = 450$$

$$G = 300 - 0.1Y$$

$$X = 300; M = 325$$

- a. What is equilibrium output?
 - i. First, substitute the equation for T into the equation for C and get an equation with C on the left and Y as the only variable on the right.
 - ii. Next use the national income identity to get an equation with all of the components.
 - iii. Solve for Y .
- b. Sketch the Keynesian cross diagram for this model.
- c. If government spending rises by 10, what is impact on output?
- d. If taxes are cut by 20 (so new equation is $T = -15 + .3Y$) what is impact on output?
- e. What if tax rates are cut so new equation is $T = 5 + .25Y$ what is impact on output?