Economics 285
Chris Georges — Practice Problems 4

Chapter 10:

1. Questions For Review numbers 4,5 (p. 303).

   For #4 add: What if government spending increased rather than the money supply?

2. Problems and Applications number 3 (p. 304).

   Note: with a fixed money supply, a decline in velocity is a decline in spending.

Chapter 11:

3. Questions For Review numbers 1,3,4 (p. 329).

4. Problems and Applications 1,2,4 (p. 330) with the following modifications.

   2. For consistency with the next chapter, please interpret the assumption that $I = 200$ as follows: $I = 300 - 25\,r$, and $r = 4$. I.e., investment depends on the real interest rate r (which is expressed here as a percentage rate), but for now we are assuming that this rate is fixed at 4 percent per year and consequently that investment is fixed at 200 per year.

      Please add the following parts.

   2f. Consider the dynamics of the multiplier process in part **c**. If each round of spending in the multiplier took one month, how close to the new equilibrium would the economy be four months after the increase in government purchases?

   2g. Reconsider parts **d and e**. Suppose that the government wishes to achieve GDP of 2,400 but wishes to do so without increasing the budget deficit? It can do this by raising both government purchases G and taxes T by an equal amount. What is that amount?

   2h. Suppose that, instead of net taxes T being a fixed amount, net taxes are proportional to income. Specifically, suppose that $T = .2\,Y$. How would this affect the magnitude of the multiplier in the Keynesian cross model? Hint: recall that the multiplier is 1/(1-slope PE).

   2i. Suppose that, instead of $I = 300 - 25\,r$, investment spending depended on both the real interest rate r and total real spending Y. Specifically, suppose that $I = 100 - 25\,r + 0.1\,Y$. How would this affect the magnitude of the multiplier in the Keynesian cross model?

5. Consider the so called "great recession" of 2007-09 in the U.S. Suppose for simplicity that the primary cause of this recession was a fall in autonomous investment spending caused by the bursting of the housing bubble. Now suppose that there had been a balanced budget law in place at the time. Is it likely that this law would have had a stabilizing or destabilizing effect on the economy during the recession?

Chapter 12:

6. Problems and Applications number 1 (p. 359).