

Problem Set 1

Due at the beginning of lecture, Wednesday, October 8

1. Suppose that the following behavioral equations characterize an economy (quantities are in billions of dollars):

$$C = 2000 + 0.9 Y_d$$

$$I = 1800$$

$$G = 1800$$

$$T = (1/3) Y$$

- (a) Solve for equilibrium real GDP, Y .
- (b) Solve for equilibrium disposable income, Y_d .
- (c) Solve for consumption expenditures.

2. Calculate the multiplier for the economy of problem 1.

- (a) What is the predicted increase in real GDP for an increase in government expenditures of \$100 billion?
- (b) How much do taxes rise with this increase in real GDP?
- (c) What is the net change in the government deficit ($G-T$)?

3. An algebraic version of the simple model of the economy is:

$$C = c_0 + c_1 Y_d$$

$$Y_d = Y - T$$

$$I = \bar{I}$$

$$Z = C + G + I$$

- (a) Solve for the algebraic expression for equilibrium GDP as in class or the text.
- (b) Solve for an expression for the change in equilibrium GDP for an increase in government expenditures equal to ΔG when taxes are held constant.

4. Problem 8, Chapter 3 of Blanchard, p. 61.

5. Problem 4, Chapter 4 of Blanchard, p. 83.

6. Problem 5, Chapter 4 of Blanchard, p. 83.

Work out the following problems, but do not turn in your answers:

Problems 4, 5 and 6 of Chapter 2 of Blanchard, p. 37.