

Problem Set 3

Due at the beginning of lecture, Wednesday, November 5

1. Problem 3, Chapter 9 of Blanchard, p. 199.

2. Problem 7, Chapter 9 of Blanchard, p. 200.

3. Consider the accelerationist Phillips curve,

$$\pi_t - \pi_{t-1} = -\alpha(u_t - u_n),$$

and suppose that an oil price shock increases the markup. The unemployment rate initially equals the natural rate of unemployment.

a. If the central bank keeps the unemployment rate unchanged, then what will happen to the inflation rate?

b. How does the natural rate of unemployment change? To keep the unemployment rate equal to the initial unemployment rate what would the central bank need to do? Explain using the AD curve and Okun's law in addition to the accelerationist Phillips curve.

c. What would be a better policy response on the part of monetary authorities to a permanent oil price shock? Explain using the three relationships.

4. Problem 7, Chapter 11 of Blanchard, p. 244.

5. Problem 8, Chapter 11 of Blanchard, p. 244.

6. Problem 6, Chapter 12 of Blanchard, p. 264.