Problem Set #9
14.02

Note: A version of this p.s. was issued yesterday with a question on Okun's Law (question 11). This p.s. eliminates question11. Tesll your friends you have already downloaded the p.s. that they do not have to do #11. This short problem set deals with some of Chapter 16 and 17. It will not go fully into Chapter 17 since you will not have covered it all in class by next Monday. At the end of this problem set are a few questions you may want to try. They will not be counted in your problem set score, but instead are there for those who want practice for the final examination.

1. The original Phillips curve implied that
a. the markup over labor costs is zero
b. there is no natural rate of unemployment
c. the expected inflation rate is equal to last year's inflation rate
d. a lower rate of unemployment causes an increasing rate of inflation
e. all of the above

2. In the Phillips curve equation, which of the following will cause a rise in the current inflation rate?
a. a rise in the expected inflation rate
b. a fall in the unemployment rate
c. a rise in the markup
d. all of the above
e. none of the above

3. If a country experiences persistently high inflation
a. wage indexation will become less important
b. nominal wages will be set for shorter and shorter periods of time
c. the markup over labor costs will decrease
d. all of the above
e. none of the above

4. In the long-run, an increase in the price of oil should cause
a. a decrease in output
b. an increase in the price level
c. an increase in the interest rate

d. all of the above
e. none of the above

5. One explanation for the lower natural rate of unemployment in Japan than in the US is that
a. the average worker is much younger in Japan
b. the average worker switches jobs less often in Japan
c. unemployment is defined differently in Japan
d. the labor force is defined differently in Japan

6. The data suggests that in the European Union countries, the natural rate of unemployment
a. is now higher than in the US
b. is no longer a relevant concept
c. has steadily declined over the past decades
d. will soon exceed the percentage of the labor force that is working
e. has become less "natural" since it is now almost entirely determined by the policies of a few large corporations

7. "Neutrality of money" means that changes in money cannot, in the long run, affect
a. the government spending
b. the price level
c. the markup
d. nominal wages
e. none of the above

8. An increase in the separation rate will definitely lead to:
a. a decrease in the average duration of unemployment
b. an increase in the participation rate
c. an increase in the unemployment rate
d. higher real wages for those who are employed
e. none of the above

9. Explain why the separation rate of teens is so high relative to middle-aged workers.

10. True, False, Uncertain. Explain. An increase in the minimum wage will lead to an increase in the markup, thereby raising the natural rate of unemployment.

12. Suppose that, for the next ten years, the Fed maintains zero inflation in the US. How do you think people may form expectations of inflation in the next ten years? What do you expect the Phillips curve to look like?

13. Assume that a new government is elected, and passes measures which abolish unemployment benefits and medicaid (health insurance to the poor), and, as a result, balances the budget. We want to study the long- and short-run impacts of these policies. Be careful to consider all of the potential impacts.

a. In the wage-setting, price-setting relation, draw the effect of these policies. What happens to the natural rate of unemployment?

b. Draw the short-run implications of these policies in the ISLM model.

c. Draw the short-run implications of these policies in AS-AD space.

d. Characterize the long-run policy effects in the AS-AD model.

e. Characterize the long-run policy effects in the ISLM model.

f. Discuss the following statement: "Forcing people to be responsible for themselves, and the government to live within its means may be painful in the short run, but will make for a stronger economy, and happier people in the long run."

14. Using the Economic Report of the President, compute the change in the inflation rate and the deviation (difference between) unemployment and its natural rate over the most recent 12-month period. Assume that u_n=5%. Compute the inflation rate using the CPI. If $\alpha = 1$, is the relationship between these two differences consistent with the modified Phillips curve equation? Why or why not (this is a matter of your opinion and intuition)?

OPTIONAL QUESTIONS

15. Which of the following would allow the unemployment rate to remain 1% below its natural rate?

a. nominal money growth of 1%

b. nominal money growth that is 1% greater than the normal growth rate of output

c. nominal money growth that is 1% greater than the inflation rate

d. nominal money growth that is 1% greater than the sum of the inflation rate and the normal output growth rate

e. none of the above

16. Suppose the "normal" output growth rate is 3%, money growth is 5%, and the unemployment rate is 1% above the natural rate. The output growth will be

a. -1%
b. 0%
c. 1%
d. 2%
e. 3%

17. Which of the following will increase the inflation rate in the long-run?

a. a permanent increase in the price of oil
b. a large budget deficit
c. a permanent increase in the nominal money growth
d. all of the above
e. none of the above

18. In the long-run, a reduction in nominal money growth from 7% to 3% will cause the unemployment rate to

a. decrease by 4%
b. decrease by 2%
c. increase by 4%
d. increase by 2%
e. remain unchanged

19. During the 1980s, the Italian government upheld and enforced a wage indexation policy in the face of very high inflation rates. Is there a relationship between a wage indexation policy and inflation? If so, describe.