

## **Economics 101b; Fall 2001; Problem Set 7**

***Due in class November 14***

1. What is the Lucas critique? How would the Lucas critique suggest that you should design a policy to try to reduce inflation from 10% per year down to 2% per year?
2. What is "dynamic inconsistency"? Why does dynamic inconsistency strengthen the case for having policy rules rather than leaving economic policy to the discretion of authorities?
3. Under what circumstances should the Federal Reserve focus on keeping the interest rate stable? Under what circumstances should the Federal Reserve focus on keeping the growth rate of the money stock stable?
4. Why do economists today tend to believe that monetary policy is superior to discretionary fiscal policy as a stabilization policy tool? In what circumstances that you can imagine would this belief be reversed?
5. The sacrifice ratio is the ratio of the total excess unemployment above the natural rate (in percentage points times years) to the amount by which inflation is permanently reduced by a policy that aims at "cooling off" the economy. Suppose that the economy

has adaptive expectations. How does the sacrifice ratio depend on the slope of the Phillips curve?

6. Suppose that the level of investment spending does not depend at all on the interest rate. Does this mean that the IS curve is vertical? If not, how can it be that central bank changes in the real interest rate effect the equilibrium level of real GDP?

7. In 2000 the unemployment rate averaged 4.0 percent, and the rate of growth of potential output was 3.5 percent per year. Assuming that the rate of growth of potential output remains unchanged and that Okun's law holds, how much higher would you expect real GDP to be in 2002 than in 1999 if in year 2002 the unemployment rate averages 7 percent?