Course in Macroeconomics and Global Economics
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Practice 6

Exercise 1

1. In what sense is money neutral? How is monetary policy useful if money is neutral?
2. Fiscal policy, like monetary policy, cannot change the natural level of output. Why then is monetary policy considered neutral but fiscal policy is not?
3. Discuss the statement: "Because neither fiscal nor monetary policy can affect the natural level of output, it follows that, in the medium run, the natural level of output is independent of all government policies".

Exercise 2

Suppose that the Phillips curve is given by:

$$\pi_t - \pi_t^e = 0.08 + 0.1\mu_t - 2u_t \tag{1}$$

where μ is the mark-up of prices over wages. Suppose that μ is initially equal to 20% , but that as a result of a sharp increase in oil prices, μ increases to 40% in year t and after.

1. Why would an increase in oil prices result in an increase in μ ?
2. What is the effect of the increase in μ on the natural rate of unemployment? Explain in words.
3. Rewrite equation (1) in terms of the difference between actual unemployment and the natural rate of unemployment. According to this new equation, how is the NAIRU defined?

Exercise 3

Suppose that the Phillips curve is given by:

$$\pi_t - \pi_t^e = 0.1 - 2u_t \tag{2}$$

where

$$\pi_t^e = \pi_{t-1} \tag{3}$$

Suppose that inflation in year t - 1 is zero. In year t, the authorities decide to keep the unemployment rate at 4% forever.

1. Compute the rate of inflation for years t, t + 1, t + 2 and t + 3.

Now suppose that half the workers have indexed labour contracts.

2. What is the new equation for the Phillips curve?
3. Re-compute your answer to point 1.
4. What is the effect of wage indexation on the relation between π and u?