

1. What distinguishes the short run from the medium run? Please focus on the differences in output and prices.

2. Why might a very low unemployment rate be problematic for an economy? Please be as detailed as possible.

3. Equilibrium outcome in the labor market.

a) Draw a well labelled diagram representing the equilibrium in the labor market.

b) Explain the impact that the abolition of the minimum wage law have on the equilibrium unemployment rate and the equilibrium real wage.

c) Depict the changes you described above in a diagram.

4. Discuss the following statements.

a) The Phillips curve implies that when unemployment is high, inflation is low, and vice versa. Therefore, we may experience either high inflation or high unemployment, but we will never experience both together.

b) As long as we do not mind having high inflation, we can achieve a low a level of unemployment as we want. All we have to do is increase the demand for goods and services by using, for example, expansionary fiscal policy.

5. The theoretical Phillips curve is given by

$$\pi_t = \pi_t^e + (m + z) - \alpha u_t$$

a) This tells us that when people expect inflation to be high, actual inflation is also high. Appealing to the labor market, explain why this is the case.

b) Suppose that $m + z = 7.4\%$ and $\alpha = 1.2$. If people can accurately predict the inflation rate, what is the natural rate of unemployment?

- c) Suppose that the difference between actual inflation and expected inflation is 2%
 $m + z = 2.8\%$, and $\alpha = 0.16$. What is the natural rate of unemployment?

6. Consider an economy that is in the following situations:

| Situation | C | I | G | $i(\%)$ | $\pi(\%)$ | $u(\%)$ | $x(\%)$ |
|------------------|-----|-----|-----|---------|-----------|---------|---------|
| A | 730 | 150 | 170 | 4 | 3 | 3 | 1 |
| B | 670 | 150 | 130 | 4 | 1 | 8 | 1 |
| C | 700 | 150 | 150 | 4 | 2 | 5 | 1 |

When the economy is producing at potential, the following values apply: $Y_n = 1000$; $u_n = 5\%$; $r_n = 2\%$; $x = 1\%$; $\pi^e = 2\%$.

a) In which situation(s) is the economy in medium run equilibrium? Explain.

b) In the situations in which the economy is not in medium run equilibrium, what action must the central bank take to return to equilibrium?

7. Discuss the following statement: *A fiscal expansion leads to an increase in the natural rate of interest.*