

ECON10003
Introductory Macroeconomics
Semester 1, 2021

Review Session 3

Questions to be discussed

1. Monetary Policy in Keynesian Models of the Macroeconomy

a) Recall that the Keynesian consumption function is:

Provide an intuitive explanation for this equation. Define all terms.

b) Consider the simple Keynesian model studied in lectures with fixed prices. Suppose consumption demand is given by the function described in part a) above, and investment demand is given by

What is the effect of an increase in the real interest rate on economic activity? Use a diagram to help explain your answer.

c) Consider the AD-AS model with flexible prices. Assume that an economy is initially in an equilibrium with output equal to potential output. Then suppose the central bank alters its policy reaction function so that for any given inflation rate and output gap it sets a lower real interest rate. Explain what effect this change in policy will have upon the short run in the AD-AS model.

d) Explain the impact of the policy change considered in part c) above, on the long run behaviour of the economy. Describe how inflation and output change over time.

e) Part of the challenge of monetary policy is that the level of potential output is not observed. Assume that the economy is in an equilibrium with output equal to potential output. Suppose the latest economic news leads the central bank to incorrectly raise their estimate of potential output. Use the AD-AS model to describe what will happen to output and inflation in both the short run and long run as a result of this mistake. Explain your reasoning in full.

2. Consider the following Keynesian model of an economy used for policy purposes

$$C = 3,600 + 0.75(Y - T) - 10,000r$$

$$I^P = 2,000 - 5,000r$$

$$G = 1,800$$

$$X = 8,000$$

$$M = 1,000 + 0.25(Y - T)$$

$$T = 3,000.$$

The real interest rate is expressed as a decimal and has a value of 0.10.

- a) If Y^* is 30,000 by how much would G have to increase or decrease to make equilibrium Y equal to Y^* ? Show in an appropriate diagram to describe the economy and your findings.
 - b) Suppose in this economy the central bank is very credible and effective while fiscal policy stimulates the economy only with a long period of lag. Also, we know that given the recent inflation experience is at the lower end of the central bank's target and suppose that it is not so concerned about inflation but more focused on reducing unemployment.
Use the AD-AS model to show how a monetary policy can reduce the output gap assuming expected inflation is fixed and equal to the actual inflation.
3. In the AD-AS model, a temporary shock to the aggregate supply function that leads to an increase in inflation, with other things equal, will have
- a) a negative effect on output in the short run but no long term impact on inflation or output
 - b) a positive effect on output in the short run but no long term impact on inflation or output
 - c) a negative effect on output in the short run and long run
 - d) a positive effect on output in the short run and long run
4. Suppose the government wishes to reduce output to eliminate an expansionary output gap. To do so, it could _____ government spending or shift the monetary policy reaction function _____.
- a) increase, upwards
 - b) decrease, upwards
 - c) increase, downwards
 - d) decrease, downwards
5. In the context of the aggregate demand and aggregate supply model, if the central bank shifts its policy reaction function down by lowering the aggregate demand curve will _____ and in the long run the rate of inflation will _____ it was before the change made by the central bank.
- a) shift to the right; be higher or lower than
 - b) be unchanged; be the same as
 - c) shift to the left; be higher or lower than
 - d) shift to the right; be lower than

