Monetary Policy Theory
ECON 4673
Dr. Keen

Answers

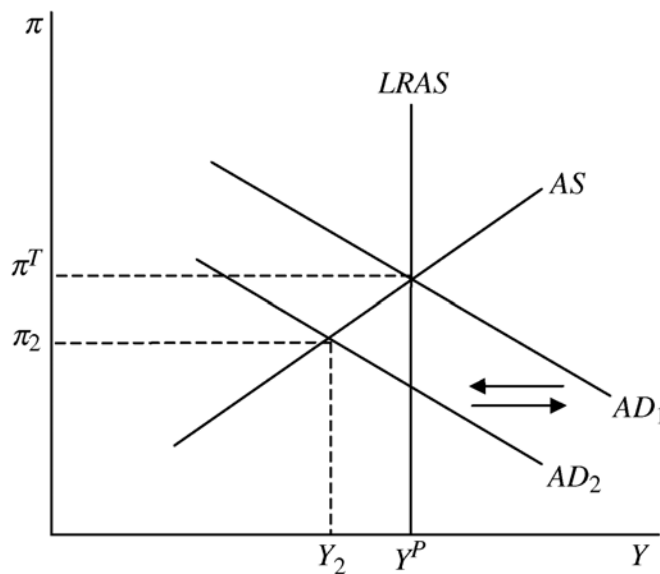
1. *Suppose the current administration decides to decrease government expenditures as a means of cutting the existing budget deficit.*

   a. *Using an aggregate demand and aggregate supply graph, show the effects of such a decision on the economy in the short run. Describe the effects on inflation and output.*

   According to aggregate demand and supply analysis, a decrease in government expenditures results in the aggregate demand curve shifting to the left, as output decreases at every inflation rate. The new aggregate demand curve then intersects with the short-run aggregate supply curve at lower levels of output and inflation, as shown below. Thus, output is below its potential and inflation is below its target.

   b. *What will be the effect on the real interest rate, the inflation rate, and the output level if the Federal Reserve decides to stabilize the economy?*

   If the Federal Reserve decides to stabilize the economy, it will reduce its nominal interest rate target which will lower the real interest rate at every inflation rate. The lower real interest rate will increase investment and output and restore the economy to its long-run equilibrium. That change is represented by a downward shift in the MP curve and a rightward shift in the aggregate demand curve. The end result is that the inflation rate will return to its target π* and output will return to its potential again. The only long-run effect of this policy action is that the real interest rate will be permanently lower.



2. *Why do temporary negative supply shocks pose a dilemma for policymakers?*

   With a negative aggregate supply shock, both inflation and the unemployment rate increase. A policy that seeks to reduce the unemployment rate will also put more upward pressure on inflation. In contrast, a policy aimed at reducing the inflation rate requires policymakers to further increases the unemployment rate. Thus, with a negative supply shock, stabilization policy requires a tradeoff between achieving the objectives of inflation stabilization and output stabilization.

3. *In what way is a permanent negative supply shock worse than a temporary negative supply shock?*

   With both short-run and long-run aggregate supply shocks, inflation rises and output falls. In the case of a permanent negative supply shock, however, the long-run effects on output and inflation are permanent. When a temporary negative supply shock impacts the economy, inflation will increase and output fall, but eventually the self-correcting mechanism moves the economy back to the long-run equilibrium where both output and inflation will return to their original levels.

4. *Suppose three economies are hit with the same temporary negative supply shock. In country A, inflation initially rises and output falls; then inflation rises more and output increases. In country B, inflation initially rises and output falls; then both inflation and output fall. In country C, inflation initially rises and output falls; then inflation falls and output eventually increases. What type of stabilization approach did each country take?*

   In country A, policymakers choose to increase aggregate demand to stabilize output. In country B, policymakers choose to decrease aggregate demand to stabilize inflation. In country C, policymakers do not adjust policy and instead wait for the self-correcting mechanism to move output and inflation back to their original levels.

5. *Is stabilization policy more likely to be conducted through monetary policy or fiscal policy? Why?*

   Stabilization policy is more likely conducted using monetary policy rather than fiscal policy because implementing fiscal policy requires making changes in taxes and government spending that take longer to enact than it does to make and implement monetary policy decisions.