

Introductory Macroeconomics

Pre-Tutorial #6
Week Starting 19th April 2021

The Tutorial. This week's tutorial looks at aggregate demand and supply.

Note that your tutor is under no obligation to go through the answers to the pre-tutorial work in detail. The focus in the tutorial will be on the tutorial work itself – the questions here are preparatory.

Reading Guide. You should look carefully over lectures 11 and 12. You may also find Chapter 11 of BOFAH useful.

Key Concepts. Aggregate demand and supply. Monetary policy reaction function.

Problems.

1. What is the monetary policy reaction function? If a central bank was to become more aggressive in fighting inflation, how would you expect the policy reaction function to change? Explain.
2. Why is the AD curve downward sloping? Explain how the AD curve would shift if there was:
 - (a) a sudden loss in consumer confidence
 - (b) an unexpected increase in government spending
 - (c) a recession abroad that decreases demand for our exports
3. If the natural real rate r^* increases, the AD curve shifts in. True or False?
4. If inflation is at target, $\pi = \pi^*$, then actual output must coincide with potential output, $Y = Y^*$. True or False?
5. Consider the AD-AS model

$$Y = Y^* - \alpha\gamma(\pi - \pi^*) + \varepsilon_D$$

$$\pi = \pi^e + \phi\beta(Y - Y^*) + \varepsilon_S$$

Suppose the parameter values are $\alpha = 0.5$, $\gamma = 2$, $\phi = 0.5$, $\beta = 2$ with inflation target $\pi^* = 0.02$ and natural output normalized to $Y^* = 1$.

- (a) Suppose the economy begins in an initial long run equilibrium and there is then a temporary demand shock $\varepsilon_D = -0.05$. Compute the short run and long run effects of this shock on output and inflation.
- (b) Suppose the economy begins in an initial long run equilibrium and there is then a temporary supply shock $\varepsilon_S = 0.04$. Compute the short run and long run effects of this shock on output and inflation.

