

Practice Problems Chapters 8 and 9

- 1) Using the AD-AS framework, suppose the economy is initially in long-run equilibrium. For each of the shocks listed below, explain the short-run effects on output and the price level.
 - (a) A stock market crash reduces consumers' wealth.
 - (b) Businesses decide to expand inventories.
 - (c) The government cuts defense spending.
 - (d) Foreign countries buy more U.S. goods.

- 2) Using the AD-AS framework, suppose the economy is initially in long-run equilibrium. For each of the shocks listed below, explain the long-run effects on output and the price level.
 - (a) Labor supply decreases.
 - (b) Government spending falls.
 - (c) Productivity increases.

- 3) Identify changes in three variables that would cause the *FE* line to shift to the right.

- 4) Draw a saving–investment diagram to show how each of the following changes shifts the *IS* curve.
 - (a) Future income rises.
 - (b) The future marginal productivity of capital increases.
 - (c) Government purchases decrease temporarily.
 - (d) The effective corporate tax rate increases.

- 5) If the money supply is increased, which curve shifts in the *IS–LM* model? What direction does it shift? What is the intuition behind this shift?

- 6) Desired consumption is $C^d = 100 + 0.8Y - 500r - 0.5G$, and desired investment is $I^d = 100 - 500r$. Real money demand is $M^d/P = Y - 2000i$. Other variables are $\pi^e = 0.05$, $G = 200$, \bar{Y} or full employment output = 1000, and $M = 2100$.
 - (a) Find the equilibrium values of the real interest rate, consumption, investment, and the price level.
 - (b) Suppose the money supply increases to 2800. Find the equilibrium values of the real interest rate, consumption, investment, and the price level. (Assume that the expected inflation rate is unchanged.)

- 7) Using the IS-LM framework, for each of the following changes, what happens to the real interest rate and output in the very short run, before the price level has adjusted to restore general equilibrium?
 - (a) Wealth declines.
 - (b) Money supply declines.
 - (c) The future marginal productivity of capital declines.
 - (d) Expected inflation rises.
 - (e) Future income rises.

- 8) Suppose the Federal Reserve's short-run response to any change in the economy is to change the money supply to maintain the existing real interest rate. What would happen to money supply if there were a reduction in government purchases? Given the Fed's policy, what would happen in the very short run (before general equilibrium is restored) to output and the real interest rate? What must happen to the LM curve and the price level to restore general equilibrium?