

### Final Review Questions

The final exam will cover the entire course. The main topic areas include the long run economy, the short run economy, and the microeconomic foundations of macroeconomics. We have covered a lot of different models.

**I. The Big Picture:** We want to use our models of the macroeconomy to help us answer some basic questions about government policy. For any country, we want to use the most appropriate model for their specific situation.

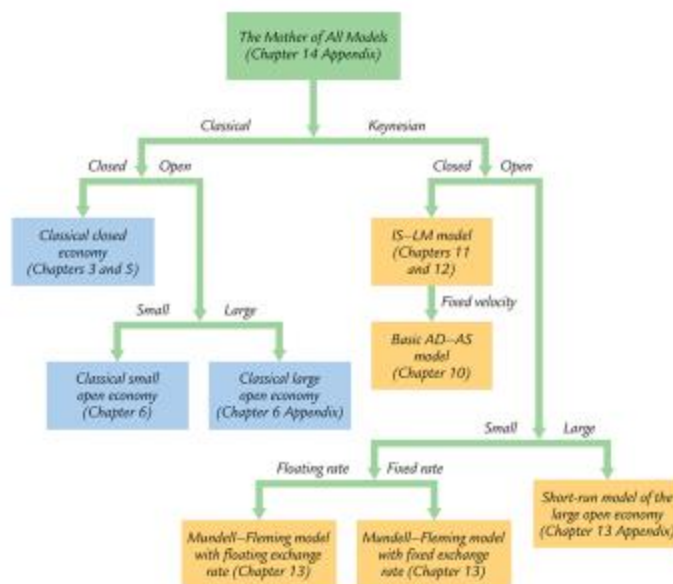
1. Effect of Fiscal Policy: If we increase  $G$ , what happens to output  $Y$ , consumption  $C$ , investment  $I$ , net exports  $NX$ , the real interest rate  $r$ , the price level, and the real exchange rate  $\epsilon$  in each of the following cases:

- a. long run, closed economy
- b. long run, small open economy
- c. long run, large open economy
- d. short run, closed economy
- e. short run, small open economy, fixed exchange rates
- f. short run, small open economy, flexible exchange rates
- g. short run, large open economy, fixed exchange rates
- h. short run, large open economy, flexible exchange rates

2. Effect of Monetary Policy: If we increase money supply  $M$ , what happens to output  $Y$ , consumption  $C$ , investment  $I$ , net exports  $NX$ , the real interest rate  $r$ , the price level, and the real exchange rate  $\epsilon$  in each of the following cases:

- a. long run, closed economy
- b. long run, small open economy
- c. long run, large open economy
- d. short run, closed economy
- e. short run, small open economy, fixed exchange rates
- f. short run, small open economy, flexible exchange rates
- g. short run, large open economy, fixed exchange rates
- h. short run, large open economy, flexible exchange rates

This diagram from the book provides a roadmap for all of these models.



3. Assume that the economy begins in long-run equilibrium. Explain what happens to output and prices in the short run and the long run when:

- the Federal Reserve reduces the money supply.
- the general public chooses to hold a larger fraction of their income in cash balances.
- the velocity of money rises.

4. If the Fed increases money supply by 5% and the quantity theory of money is true

- what happens to the AD curve?
- what happens to output and prices in the short run and the long run?
- what happens to the real interest rate in the short run and the long run?

5. Draw the short run and long run Phillips curves. Explain what would shift these curves.

6. Draw the DAD curve and DAS curve. Explain what would shift these curves.

## II. The Long Run Economy

- What determines the total production of goods and services?
- How is national income distributed to the factors of production?
- What determines the demand for goods and services?
- What brings the supply and demand for goods and services into equilibrium?
- What determines the real interest rate?
- What determines the inflation rate?

7. What determines the nominal interest rate?
8. What determines the trade balance in a small open economy?
9. What determines the trade balance in a large open economy?
10. What determines the natural rate of unemployment?
11. Can you draw the Solow growth model diagram?
12. What determines the steady state level of output per worker?
13. What is the golden rule level of capital?
14. What is the convergence hypothesis?
15. Using the Solow model, what kinds of policies would increase the steady state level of output per worker?

### **III. The Short Run Economy**

1. Explain why the IS curve has a negative slope in  $(i, Y)$  space. Explain why the LM curve has a positive slope in  $(i, Y)$  space.
2. An increase in government spending has a larger impact on output in the Keynesian cross model than in the IS-LM model, and a larger impact in the IS-LM model than in the AS-AD model. Explain why.
3. An increase in money supply has no effect on output in each of the following three cases.
  - a. vertical IS curve
  - b. vertical AS curve
  - c. fixed exchange ratesExplain why.
4. Within the IS-LM framework, explain the impact on income and interest rates of the following:
  - a. an increase in the demand for money
  - b. an increase in investment demand
  - c. an increase in consumer savings
5. Why is the AS curve upward sloping? Provide at least two different explanations.
6. Consider a small open economy with flexible exchange rates. Explain the impact of the following on  $Y$ ,  $i$ , and  $e$ .
  - a. a decrease in taxes
  - b. an increase in money demand
  - c. the imposition of import quotas

7. Now consider a large open economy with flexible exchange rates. Explain the impact of the following on  $Y$ ,  $i$ , and  $e$ .
- a decrease in taxes
  - an increase in money demand
  - the imposition of import quotas

#### **IV. Microeconomic Foundations of Macroeconomics**

1. Why is the short run MPC smaller than the long-run MPC? What would Franco Modigliani say? What would Milton Friedman say?
2. Under what conditions would consumption follow a random walk? Explain.
3. What is Ricardian Equivalence? Under what conditions might it fail?
4. Why might the stock market be closely tied to fluctuations in output and employment according to James Tobin?
5. We usually model investment as a function of the real interest rate.  $I = I(r)$ . What does the neoclassical model, Tobin's  $q$  model, and the accelerator model say about this relationship?
6. If most shocks to the economy are IS shocks, should the Federal Reserve target money supply or the interest rate in order to stabilize the economy? Explain.
7. If the Federal Reserve wants to target the money supply, should they target the monetary base or the interest rate? Explain.
8. Even though the monetary base rose between August 1929 and March 1933, the money supply fell 28%. Why might you expect this given the numerous runs on banks resulting from frequent bank failures?
9. Make the case for passive policy rather than active policy.
10. Make the case for policy conducted by rules rather than by discretion.
11. The national debt is now larger than our GDP. Should we worry? Why is the debt a burden, and why is the debt not a burden?