

Final Exam Question Pool

The final examination will be held at 9:00-12:00, Thursday, May 1, 2003, in our regular classroom. The examination will comprise questions selected from the following pool. Students are permitted to work together to prepare questions. The examination is closed book and closed notes. **Bring blue books.**

Exam office hours: Thursday, April 24, 1:00-2:30, Monday-Wednesday, April 28-30, 1:00-2:00

1. True or false? Explain in detail. Be sure to explain whether the stated increase has a direct effect on the schedule, an indirect effect on the schedule, or no effect on the schedule.
 - a. An increase in the rate of interest shifts the AD schedule toward higher P.
 - b. An increase in autonomous consumption shifts the AD schedule toward higher P.
 - c. An increase in the money supply shifts the AS schedule toward higher P.
 - d. A decrease in labor supply shifts the AS schedule toward higher P.
 - e. An increase in the technology parameter of the production function (A) shifts the AS schedule toward higher P.

2. What economic forces explain, according to Krugman, why the natural rate of unemployment risen in Europe but not in the US?
 - a. What does Krugman mean when he says that "...a likely explanation for this rise is the collision between welfare state policies that attempt to equalize economic outcomes and market forces that are pushing toward greater inequality."?
 - b. Why does Krugman believe that there is a connection between rising inequality in the US and rising unemployment in Europe? What does he mean by inequality?
 - c. What evidence does Krugman provide to explain why a technology shock provides a better explanation of rising inequality in the US that does "globalization." Along the way, explain what Krugman means by globalization.

3. True or False? Explain. A good answer will use a model that incorporates all relevant economic forces learned in our course.
 - a. "In the long run, monetary policy can change the nominal rate of interest but can not change the real rate of interest."
 - b. "In the long run, an increase in the rate of money growth causes an increase in the rate of inflation and no change in the rate of output growth."

4. Some economists have argued that the export sector of the U.S. economy functions like an automatic stabilizer.
 - a. Define an automatic stabilizer.
 - b. Use IS-LM-BP to explain whether the export sector would offset or reinforce a decline in consumer confidence. Be sure to explain the direct effect of a decline in consumer confidence and how the export sector responds to such a shock.
 - c. Use the IS-LM-BP to explain whether the export sector would offset or reinforce a price-increasing supply shock. Be sure to explain the direct effect of the price shock and how the export sector responds to such a shock.

5. Consider the IS-LM-BP model.

- a. Explain what happens to the following variables as the result of an increase in lump sum taxes. Explain how you arrive at your answer and why it makes economic sense.
- (1) Y
 - (2) R
 - (3) NX
- b. Do the predictions of the IS-LM-BP model that you derive in part a. provide a good explanation of what happened in the US economy as a result of the Reagan tax cuts in the early 1980's? Explain.
6. This question is about Robert Lucas' essay, "Some Macroeconomics for the 21st Century."
- a. What, according to Lucas, accounts for the extraordinarily high rate of growth that occurred in the world between 1960 and 1990?
 - b. Why, according to Lucas, are growth rates of nations highly unequal in each year in the 1960 through 1990 period?
 - c. What does Lucas mean when he says that his model is a "model of spillovers"?
 - d. Do you agree with Lucas when he describes his model as an "economic" model?
7. In the United States between 1950 and 1972, output per worker grew at the annual rate of 2.56 percent. Between 1972 and 1988 output per worker grew at the annual rate of 1.26 percent.
- a. Consider a version of the Solow model in which steady state growth in output per worker is possible. Use the model to determine the affects on long run equilibrium values of capital per worker and output per worker that result from a permanent decrease in economy-wide saving.
 - b. Can a decline in economy-wide saving (such as associated with a tax cut) provide an explanation for the decline in the growth rate of output per worker? Explain why or why not using your results from part a. If you conclude that a decrease in saving can not explain the decline, what sort of shock could explain it?
8. Why does Meyer believe it would be a good idea for the Federal Reserve to set an explicit target for the inflation rate?
- a. Why would such a target improve the "transparency" of monetary policy?
 - b. Does Meyer believe that setting an explicit inflation target is compatible with a dual mandate?

9. Let u be the unemployment rate and π be the inflation rate. The following model can be used to discuss the case for policy rules.

$$\begin{aligned} u' &= u^n + \alpha(\pi - \pi^e) \\ L(u, \pi) &= u + \gamma \pi^2 \end{aligned}$$

- a. Where does the equation for u come from and what does it mean?
 - b. Where does the equation for L come from and what does it mean?
 - c. Use the two equations to make the case that a policy rule is superior to policy discretion. Along the way, make sure to provide the intuition behind the result.
10. Suppose the economy starts out in long-run equilibrium. Use the AD-LRAS-SRAS model to explain what happens to the economy after a recessionary shock to aggregate demand. In particular, explain:
- a. What happens to the economy during the period when price and inflation expectations are unchanging?
 - b. What happens to the economy after price and inflation expectations change?
 - c. What economic institutions lie behind the idea that SRAS shifts as price and inflation expectations change.
11. Concerning the Kotlikoff article on the privatization of social security:
- a. According to Kotlikoff, will privatization enhance or undermine generational equity of the social security system?
 - b. Why, according to Kotlikoff, will privatizing social security increase economic efficiency?
 - c. How does Kotlikoff use the concept of a Pareto improvement to answer the question of generational equity?
12. Write a one-two page letter to the Gregory Mankiw, Chair of the Council of Economic Advisers, in which you comment on the wisdom of the tax cut proposal that President Bush sent to Congress in January. In your letter, please:
- a. Reveal a correct understanding of the proposal details.
 - b. Apply the economic models of this course.
 - c. Take a stand on in support of or opposition to the tax cut.