

Econ 132
Intermediate Macroeconomics
Instructor: Chao Wei
Final

Instructions:

The exam starts at 2:00 pm and ends at 4:00 pm on May 4th, 2002.

The exam is made up of three parts:

Part I (35 points): Multiple Choice Questions.

Part II (35 points) Problems and Applications

Part III (10 points) Discussion Questions

Part II. Problems and Applications

1. (35 points) Consider the economy of Hicksonia. The investment function is

$$I = \bar{I} - 25r$$

Government purchases and taxes are both 100.

The money demand function is

$$\left(\frac{M}{P}\right)^d = Y - 100r$$

The money supply M is 1,000.

- (a) Suppose that the consumption function is given by

$$C = 200 + 0.75(Y - T)$$

The price level P is fixed at 2, and $\bar{I} = 250$.

- i. Derive the equations for the IS and LM curves;
- ii. Find the equilibrium values of the interest rate r , income Y .
- iii. Suppose that firms become very pessimistic about the economy and as a result, \bar{I} falls from 250 to 200. How much does the IS curve shift? What are the new equilibrium levels of the interest rate r , income Y , consumption C and investment I .
- iv. If Fed A cares only about keeping the interest rate stable, how should Fed A respond to a decrease in \bar{I} ? If Fed B cares only about keeping output at its natural rates, how should Fed B respond?

- (b) Suppose that the consumption function is given by

$$C = 200 + 0.75(Y - T)$$

and $\bar{I} = 250$. Now consider an economy where the price level is flexible, and the income is at its natural rate level, $\bar{Y} = 1200$.

- i. Find the equilibrium values of the interest rate r .

- ii. Suppose \bar{I} falls from 250 to 200. What are the new equilibrium levels of the interest rate r , the price level P , consumption C and investment I ?
- (c) Suppose a more sophisticated consumption function can be described as

$$C = 200 + 0.75(Y - T) - 25r$$

Note that consumption now depends negatively on the interest rate. The rationale for this specification is that people save more and consume less if the interest rate is higher.

Again $\bar{I} = 250$. The price level P is fixed at 2.

- i. How does this change in the specification of the consumption function alter the slope of the IS curve? Explain.
- ii. Find the equilibrium values of the interest rate r , income Y .

Part III Discussion Question (10 points)
on “Fuzzy Math Returns” by Paul Krugman:

1. Paul Krugman argues that Bush’s stimulus package “violates the basic principle that stimulus proposals should be only short-term”. How would an economist use IS-LM model and AS-AD model to justify the above “basic principle”?

