

University of Connecticut  
College of Arts and Sciences  
Department of Economics  
Christian Zimmermann

**Fall 2003, Intermediate Macroeconomics, section 2**

## **ECON 219 Quiz IV**

**General recommendations:**

- Read questions thoroughly.
- Please respond on this copy.
- You have 20 minutes.
- Work individually.
- There are two pages.
- Good luck!

**Your name:**

1. Circle the appropriate answer on each of the following items. Circle multiple items if necessary:
  - (a) For a competitive equilibrium in a two-period model, it must be true that:
    - 1) Each consumer picks first- and second-period consumption given the real interest rate;
    - 2) There must be an equal number of borrowers and lenders;
    - 3) The government's intertemporal budget constraint holds;
    - 4) The credit market clears.
  - (b) An important reason why the Ricardian equivalence may fail is if:
    - 1) borrowing and lending is done through intermediaries;
    - 2) borrowing and lending rates are different;
    - 3) state and local governments also engage in debt finance;
    - 4) some households face binding credit constraints.
  - (c) Any increase in the present value of taxes for the household implies:
    - 1) an increase in lifetime wealth  $we$  and an increase in the current labor supply  $N^s$ ;
    - 2) an increase in  $we$  and an decrease in  $N^s$ ;
    - 3) an decrease in  $we$  and an increase in  $N^s$ ;
    - 4) an decrease in  $we$  and an decrease in  $N^s$ .
  - (d) When drawn against the real interest rate  $r$ , the output supply curve is upward sloping because labor supply is:
    - 1) increasing in  $r$  and the labor demand is independent of  $r$ ;
    - 2) decreasing in  $r$  and the labor demand is independent of  $r$ ;
    - 3) independent of  $r$  and the labor demand is increasing in  $r$ ;
    - 4) independent of  $r$  and the labor demand is decreasing in  $r$ .
2. Explain what present value is.

3. Explain in words why the aggregate supply of goods is upward sloping with respect to the real interest rate.
4. Explain why government expenses do not depend on the real interest rate.
5. How is the optimal investment of the firm affected by an increase in current capital? Why?

**Bonus question:** Imagine that climatic change increases the depreciation rate. What would the consequence be on investment in the short run? In the long run?