Homework 2
Principles of Macroeconomics: ECO 212
Due: Thursday, March 2, 2006

Question 1.

Suppose the economy has the following monetary situation:

- Monetary Base: $300.
- required reserve ratio: 1/3.
- currency to deposit ratio: 2/3.

a. What is the money multiplier?

b. What is the money supply?

c. Calculate the currency held by the public, bank reserves, and the value of all checking accounts.

d. Suppose the FED buys $600 worth of treasury bills. What is the change in the money supply?

e. Intuitively (ie no calculation needed) what must happen to bank reserves?

f. Suppose instead of buying tbills, the FED lowers the required reserve ratio to 1/6. What is the new money supply?

g. Suppose that due to the advent of ATMs and debit cards, consumers decide to hold less currency relative to deposits so that the currency to deposit ratio is now 1/3. Calculate the money supply and money multiplier (use the original monetary base, $300, and required reserve ratio, 1/3).

Question 2.

a. Give an alternative to using money as a medium of exchange. Is money or the alternative a better medium of exchange? Explain.

b. Give an alternative to using money as a store of value. Is money or the alternative a better store of value? Explain.

c. Give an alternative to using money as a provider of liquidity. Is money or the alternative a better provider of liquidity? Explain.

Question 3.

Give the three ways the FED can REDUCE the money supply (be specific, for example raise or lower). Which method is most commonly used?

Question 4.

Explain the difference between a money supply of $10 and spending $10.

Question 5.

In 2001, the government of Argentina faced large expenditures and tax revenues were low due to a recession, so Argentina was running a deficit. Printing money to pay for the deficit was not possible since Argentina had a currency board, which fixes the amount of cash which can be printed. Further, the government could not borrow abroad to finance the deficit. Foreign investors refused to lend because they feared Argentina would default.

Therefore, the government forced local banks to make loans to the government. The government lowered the required reserve ratio, took the existing bank reserves, and gave the banks I.O.U.'s which the govnerment later defaulted on. Since the reserves were gone, the local banks were unable to repay depositors and went out of business.

a. At the end of the day, who paid for Argentina's deficit?

b. How should have depositors responded if they believed ahead of time that Argentina would default on the I.O.U.'s?

c. Suppose depositors responded as in your answer to (b). What happens to:

- the money supply?
- the currency-to-deposit ratio?
- the price level?