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Spring 2006, Intermediate Macroeconomics, section 2

ECON 219 Final Exam

General recommendations:

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

Your name:

1. **[20 points]** Circle the appropriate answer on each of the following items. Circle multiple items if necessary:

   (a) Liquidity demand increases with income in the CIA model because:
   a) rich people do not like to go to the bank; b) of the income effect on consumption; c) Ricardian equivalence; d) money is neutral.

   (b) The stylized fact that economies exhibit steady growth is:
   a) mostly true in the data; b) mostly not true in the data; c) true in the endogenous growth model; d) not true in the endogenous growth model.

   (c) What disadvantages does commodity money have?:
   a) anybody can issue it and walk away; b) it has other uses; c) its value fluctuates with the scarcity of the commodity; d) it is subject to dollarization.

   (d) What is the cyclical behavior of money in the CIA model with monetary shocks only:
   a) procyclical; b) acyclical; c) countercyclical; d) we cannot say.

   (e) Which of the following is an example of money as a medium of exchange:
   a) making a cash gift; b) buying an item with cash; c) saving cash for future purchases; d) buying an item with a credit card.

   (f) Currently, money circulates in the following form(s) in the US:
   a) commodity-backed paper currency; b) transactions deposits at private banks; c) fiat money; d) credit cards.

   (g) Examples of endogenous growth models are:
   a) models with population growth; b) models with human capital accumulation; c) models with money growth; d) models with research and development.

(h) The Fisher relationship says:
a) $R = r + i$; b) $r = R + i$; c) $i = R + r$; d) $r = -i$.

2. **[20 points]** Money concepts.

(a) Explain the three ways a central bank has for increasing the money supply.

(b) Why are only these three ways available?

(c) In our modelling of money, which monetary aggregate from the data do we have in mind? Why?

3. **[20 points]** Growth models.

   (a) Using the Solow growth model, should what would happen to the Golden Rule per capita capital if the population growth rate decreases. Explain.

   (b) What is the key distinction of endogenous growth models from exogenous growth models? Explain.

4. **[40 points]** Take the intertemporal model with money. Assume the economy is at equilibrium. Then increase total factor productivity.

   (a) Show graphically what the consequences are for all endogenous variables of the model.

   (b) Why can we say that this kind of shocks may be a good explanation of the business cycle? Give details.

(c) Why is this not a definite answer, that is, why do we use the word *may* in the previous question?

(d) Given such shocks to total factor productivity, how could shocks to the money supply lead to procyclical prices?

(e) Why would we care about procyclical prices?

5. **Bonus question [10 points]**

(a) Imagine the Solow growth rate with a negative savings rate. What should happen to such an economy?

(b) The aggregate savings rate in the US is currently negative. Why is your prediction from above not borne by the data?