Midterm Exam #2: 14.02

Full Name:
TA Name:
Section Time:

STOP! Failure to follow these instructions could be detrimental to your grade.

Please answer all of the following questions completely. You have two hours to complete the exam, which should be more than enough time. Please use four blue books for the exam, one for each set of questions. Be sure to LEGIBLY write your full name, section (which should consist of your TA's name and section time), and question number on the front of each blue book. When finished with the exam, you must return all four blue books and this signed exam sheet to a proctor.

Part I: True, false, uncertain **Blue Book #1**

1. As long as a bank's assets are worth more than its liabilities, depositors have nothing to worry about.

2. Higher interest rates are generally associated with depreciating currencies, so it is foolish to imagine that a currency can be strengthened by increasing interest rates.

3. Because the yen has appreciated sharply in the last month, over the next few months Japan's trade surplus should decline quite a lot.

4. Coordinated macroeconomic policies can help fight a world recession.

5. Countries that attract large inflows of capital run large trade deficits.

6. Current account deficits are good news: they mean that a country is able to generate high domestic investment.

7. In a world of fixed exchange rates, no country would have an effective monetary policy.

8. Exchange rates change only when interest rates change.

Part II: Long questions

Blue Book #2

1. Writing in response to one discussion of the level of stock prices, an irate reader wrote: "Why do all these calculations only take account of future dividends? Everybody knows that most investors plan to sell their stocks eventually, and realize some capital gains - so what they care about is the future price, not just the dividends. Do I have to explain this to professors?"

a. Is the commentator right, or not? Explain your answer.
b. Suppose that a company is expected to pay a dividend of $1 per share this year, and that this dividend will grow by 10% per year forever. Suppose also that the interest rate is 6%. What "should" the share's price be? Explain the calculation. If you are having problems, you may reverse the two growth rates, but make a note.
c. A real estate developer is considering buying an office building for $100 million. Its tenants currently pay $3 million in rents; the developer believes that in the future rents will rise with the overall price level. (Ignore any maintenance costs, and assume the building will last essentially forever). The interest rate on long-term bonds is 5.5 percent. What would the developer have to believe to make this purchase worthwhile?

Blue Book #3

2. At the end of this year, continental Europe - "euroland" - will have a common currency, the euro. Its economy will be described by the following equations:

$$Y = C(Y-T) + I(i) + G + NX(Y, Y^*, EP^*/P)$$

$$M/P = YL(i)$$

$$i = i^* + (E^e - E)/E$$

where i^*, Y^*, P^* are the interest rate, GDP, price level in the "rest of the world" - which we take to be the United States - and can be taken as given. We also take the European price level as given, and the expected future exchange rate E^e as given. Please answers using graphics AND/OR text. No math is requried (given the functional forms have been supressed).

a. The United States is currently at full employment, while Europe is not. European politicians want the European central bank to adopt expansionary policies; they also want to stabilize the euro-dollar exchange rate. Discuss.

b. There is a possibility that European governments will adopt expansionary fiscal policies, while the independent European central bank will tighten the money supply because it worries that budget deficits are inflationary. Allow for a flexible exchange rate.

Analyse the effect of this policy collision on Europe's macroeconomy, including the international aspects.

c. Suppose that there is a a severe recession in the United States - that is, Y* falls. How will this affect Europe assuming no change in policy? How would it affect Europe if the politicians had their way, and the euro/dollar rate were stabilized?

d. Suppose that a political crisis in the United States led to expectations of a large future depreciation of the dollar. Analyze the effects on euroland, again with unchanged policies and with a fixed exchange rate.

Blue Book #4

3. Japan is suffering from a prolonged recession, and there are many calls for monetary and fiscal stimulus. However, a major problem is dealing with expectations. Explain why each of the following limits the effectiveness of policy:

a. While Japan is currently running a large budget deficit, the government is worried about the long-term debt of the government, and often suggests that today's tax cuts will need to be reversed once the economy's situation improves.
b. Interest rates are now very low. However, government officials have suggested that in the long run they want a strong yen, and will try to raise interest rates to achieve this as soon as conditions allow.

Now consider two alternative policies that have been suggested, and describe whether they would suffer from the same expectational problems.

c. Some advisers have suggested that the government hand out "gift coupons"- certificates that can be spent in stores (which can redeem them with the government), but will be worthless unless spent within 6 months.
d. Others have suggested a temporary reduction in sales taxes, which would be eliminated or at least reduced (making consumer goods cheap) for a year, then returned to normal levels.

One final question: although the current interest rate in Japan is virtually zero, making conventional monetary policy ineffective, some have argued that Japan can still engineer a recovery by driving the yen down (depreciation). Using the standard open-economy IS-LM framework, describe how or whether this would work.