Economics 227: Intermediate Macroeconomics
Problem Set #3

This assignment is due by 5PM on Monday, April 4th

1. Suppose the government of a small country passes a new law that requires its Central Bank to maintain a monetary policy that eliminates inflation completely.

   (a) The government of this country imposes a tax on nominal capital gains. If the inflation rate were initially 2%, how might savings and investment change after the law is passed? Assume a closed economy.

   (b) What is the growth rate of the money supply before and after the law takes effect?

   (c) Now assume this country is a small open economy. What is the long-run effect of this law on the real exchange rate? What about the nominal exchange rate?

2. Suppose the government of a small country promises to cut both taxes and government spending. Furthermore, it promises to cut spending more than taxes in order to eliminate the government budget deficit.

   (a) What is the long-run effect of this plan on public saving, private saving, and national saving?

   (b) In a closed economy, what is the effect of this plan on investment and the real interest rate?

   (c) If instead the economy is small, open, and has a trade deficit, what is the long-run impact of this plan on national saving, investment, the size of the trade deficit, and the real interest rate?

3. Due to continuing reports of the excellence of Lebanese wine, Lebanon is experiencing a continual increase in the demand for its wine.

   (a) Do you expect the increasing taste for Lebanese wine to lead to an increasing trade balance surplus or deficit over time? Explain.

   (b) What other consequences will this increase in the demand for Lebanese wine have for Lebanon's economy, especially the real exchange rate? Is the rising demand for wine likely to help or hurt Lebanon's other industries?

   (c) Can the Banque du Liban prevent this trend from affecting other industries?

4. Suppose that consumption depends on the level of real money balances, since real money balances are a part of wealth.

   (a) Suppose the Central Bank announces that it will increase the money supply in the future, but doesn't change the money supply now. What happens to velocity? What about real money balances?

   (b) How does this announcement affect consumption, investment, and the real interest rate in the long-run model?

   (c) Does the Fischer effect hold in this case? In other words, does the nominal interest rate increase one percentage point, following a one percentage point increase in expected inflation? Explain.