Practice Problems: Money Basics
Updated: 9/22/2011

1. Explain why the demand for real money balances slopes downward.

2. Explain why the supply of real money balances is vertical.

3. Explain how it is possible that the demand for real money balances actually reflects the demand for goods and services in an economy. Use both a verbal explanation and the dimensions of the variables in the definition of real money balances.

4. Starting in equilibrium, show the effects of an increase in the nominal money supply.
    a. Using the money market diagram (both short and long run), show what happened to interest rates and explain why.
    b. Show the effects in an Aggregate Supply – Aggregate Demand model.

5. Starting in equilibrium, show the effects of an increase in real GDP.
    a. Using the money market diagram (both short and long run), show what happened to interest rates and explain why.
    b. Show the effects in an Aggregate Supply – Aggregate Demand model.

6. Suppose half of the country's money stock is suddenly destroyed. Using the equilibrium condition in the money market, show and explain the effect of this destruction.
    a. Show the time paths for nominal money, the price level and real money balances if prices change instantly.
    b. Show the time paths for nominal money, the price level and real money balances if prices are slow to change.
    c. Show result in part (b) in an Aggregate Demand – Aggregate Supply graph. Add time paths for output and unemployment.

7. Use hat algebra and the Quantity of Money Identity (letting the change in velocity be zero) to answer the following.
    a. If the money supply is growing at 5% a year and real GDP is growing at 3% a year, what is the rate of inflation in this economy?
    b. If real GDP is growing at 4% a year and the central bank would like 3% inflation, at what rate should they print money?

8. If domestic inflation is 10% and foreign inflation is 7%, what is the rate of change of the nominal exchange rate? Is this an appreciation, depreciation or no change in the value of the currency? Explain the intuition behind this result.

9. If domestic inflation is 10% and foreign inflation is 12%, what is the rate of change of the nominal exchange rate? Is this an appreciation, depreciation or no change in the value of the currency? Explain the intuition behind this result.