Econ 121 Money and Banking
Problem Set 2
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1. Mishkin textbook P118, Questions and Problems Q7.

   The liquidity preference framework. When the economy booms, the demand for money increases: people need more money to carry out an increased amount of transactions and also because their wealth has risen. The demand curve, M^d, thus shifts to the right, raising the equilibrium interest rate. The opposite is true at the time of recession.

   The bond supply and demand framework. When the economy booms, the demand for bonds increases: the public's income and wealth rises while the supply of bonds also increases, because firms have more attractive investment opportunities. Both the supply and demand curves (B^d and B^s) shift to the right, but as is indicated in the text, the demand curve probably shifts less than the supply curve so the equilibrium interest rate rises. The opposite is true when recession happens. Thus interest rates are seen to be procyclical.

2. Use either bond supply and demand analysis or liquidity preference framework to predict how each of the following events would affect the interest rate. Explain your answer.

   (a) The tax deduction for home mortgage interest payment is eliminated.

   Multiple effects are possible. First, the increase in the after-tax mortgage payment reduces people's wealth, and as a result, reduces demand for bonds (supply of loanable funds). Second, higher after tax mortgage payment leads to a decline in demand for mortgages, which means that demand for loanable funds declines. The resulting effect on interest rate depends upon the strength of the above two effects.

(b) The popular reality TV series Apprentice runs every night, causing people to stay home to watch it and spend much less money than usual.

Since people spend much less money than usual, the demand for money balance declines, and as a result, the interest rate declines. If pushed even further, decline in consumption spending may lead to weak economy, which often coincides with declines in interest rates.

(c) A sudden increase in the volatility of gold prices.

Higher risk of gold prices increases the demand for bonds, raises the bond prices, and reduces the interest rate.

(d) A large federal deficit.

A large federal deficit often implies higher than usual bond supply. As a result, bond price will go down and interest rates will go up.

(e) Brokerage commissions on stocks fall.

The fall in stock brokerage commission makes stocks more attractive relative to bonds. As a result, the demand for bonds declines, the bond price declines, and interest rates increase.

3. Mishkin textbook P140 Q13.

Abolishing the tax-exempt feature of municipal bonds would make them less desirable relative to Treasury bonds. The resulting decline in the demand for municipal bonds and increase in demand for Treasury bonds would raise the interest rates on municipal bonds, while the interest rates on Treasury bonds would fall.