

## Problem Set 5

***Answer the following questions:***

- 1) List and describe six costs of inflation.
  
- 2) Explain how an increase in the price level affects the real value of money.
  
- 3) According to the Fisher effect, how does an increase in the inflation rate affect the real interest rate and the nominal interest rate?
  
- 4) Suppose that this year's money supply is \$500 billion, nominal GDP is \$10 trillion, and real GDP is \$5 trillion.
  - a. What is the price level? What is the velocity of money?
  - b. Suppose that velocity is constant and the economy's output of goods and services rises by 5% each year. What will happen to nominal GDP and the price level next year if the Fed keeps the money supply constant?
  - c. What money supply should the Fed set next year if it wants to keep the price level stable?
  - d. What money supply should the Fed set next year if it wants inflation of 10%?
  
- 5) Define the nominal exchange rate and real exchange rate and explain how they are related. If the nominal exchange rate goes from 100 to 120 yen per dollar, has the dollar appreciated or depreciated?

6) If a Japanese car costs 500,000 yen, a similar American car costs \$10,000, and a dollar can buy 100 yen, what are the nominal and real exchange rates?

7) Describe the difference between foreign direct investment and foreign portfolio investment. Who is more likely to engage in foreign direct investment—a corporation or an individual investor? Who is more likely to engage in foreign portfolio investment?