Exercise Session 6

- 1. A central bank's setting (or altering) of the money supply is known as
- a. open-market operation.
- b. interest rate policy.
- c. monetary policy.
- d. employment policy.
- 2. If the Federal Open Market Committee decides to increase the money supply, then the Federal Reserve
- a. creates dollars and uses them to purchase government bonds from the public.
- b. sells government bonds from its portfolio to the public.
- c. creates dollars and uses them to purchase various types of stocks and bonds from the public.
- d. sells various types of stocks and bonds from its portfolio to the public.
- 3. If the discount rate is lowered, banks borrow
- a. less from the Fed so reserves increase.
- b. less from the Fed so reserves decrease.
- c. more from the Fed so reserves increase.
- d. more from the Fed so reserves decrease.
- 4. If P denotes the price of goods and services measured in terms of money, then
- a. 1/P represents the value of money measured in terms of goods and services.
- b. P can be regarded as the "overall price level."
- c. an increase in the value of money is associated with a decrease in P.
- d. All of the above are correct.
- 5. When the money market is drawn with the value of money on the vertical axis, as the price level increases, the value of money

- a. increases, so the quantity of money demanded increases.
- b. increases, so the quantity of money demanded decreases.
- c. decreases, so the quantity of money demanded decreases.
- d. decreases, so the quantity of money demanded increases.
- 6. Monetary neutrality means that a change in the money supply
- a. does not change real GDP. Most economists think this is a good description of the economy in the short run and in the long run.
- b. does not change real GDP. Most economists think this is a good description of the economy in the long run but not the short run.
- c. does change real GDP. Most economists think this is a good description of the economy in the short-run and the long run.
- d. does change real GDP. Most economists think this is a good description of the economy in the long run but not the short run.
- 7. According to the quantity equation, the price level would change less than proportionately with a rise in the money supply if there were also
- a. either a rise in output or a rise in the rate at which money changes hands.
- b. either a rise in output or a fall in the rate at which money changes hands.
- c. either a fall in output or a rise in the rate at which money changes hands.
- d. either a fall in output or a fall in the rate at which money changes hands.
- 8. One year a country has negative net exports. The next year it still has negative net exports and imports have risen more than exports.
- a. its trade surplus fell.
- b. its trade surplus rose.
- c. its trade deficit fell.
- d. its trade deficit rose.
- 9. Suppose that real interest rates in the U.S. rise relative to real interest rates in other countries. This increase would make foreigners

- a. more willing to purchase U.S. bonds, so U.S. net capital outflow would fall.
- b. more willing to purchase U.S. bonds, so U.S. net capital outflow would rise.
- c. less willing to purchase U.S. bonds, so U.S. net capital outflow would fall.
- d. less willing to purchase U.S. bonds, so U.S. net capital outflow would rise.

True/False Questions:

- 1. If banks hold any amount of their deposits in reserve, then they do not have the ability to influence the money supply.
- 2. The Federal Reserve can alter the size of the money supply by changing reserves or changing reserve requirements.
- 3. The money demand curve is downward sloping because as the value of money falls people desire to hold a larger quantity of money.
- 4. The classical dichotomy is useful for analyzing the economy because in the long run nominal variables are heavily influenced by developments in the monetary system, and real variables are not.
- 5. According to the Fisher effect, if inflation rises then the nominal interest rate rises.
- 6. Net capital outflow is the purchase of domestic assets by foreign residents minus the purchase of foreign assets by domestic residents.
- 7. Other things the same, an increase in foreign prices raises the real exchange rate.

Answer the following questions:

- 1) Suppose that the reserve requirement is 10 % and that banks do not hold any excess reserves.
- a. If the Fed sells \$1 million of government bonds, what is the effect on the economy's reserves and money supply?

- b. Now suppose the Fed lowers the reserve requirement to 5 %, but banks choose to hold another 5 % of deposits as excess reserves. Why might banks do so? What is the overall change in the money multiplier and the money supply as a result of these actions?
- 2) List and describe six costs of inflation.
- 3) Explain how an increase in the price level affects the real value of money.
- 4) According to the Fisher effect, how does an increase in the inflation rate affect the real interest rate and the nominal interest rate?
- 5) 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%?
- 6) 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?
- 7) 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?
- 8) 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?