

Economics 202  
Homework Assignment # 2

Instructions: Please write your answers in the space provided for each question. Answers to short essays should be concise and to the point. If necessary, use a separate piece of paper for your computations. Make sure to turn in **all your work and DO NOT change the format of the file.**

1. In January 2009 the Banco de Mexico (the Central Bank of Mexico) reported that bills and coins outside the banks were 175 billion pesos. The Mexican banks had checkable deposits of 418 billion pesos and savings deposits and time deposits of 1782 billion pesos. Currency inside the banks was 28 billion pesos. The Mexican banks had deposits at the Banco de Mexico of 186 billion pesos. Calculate:

- a. The bank's reserves \_\_\_\_\_
- b. The monetary base \_\_\_\_\_
- c. M1 \_\_\_\_\_
- d. M2 \_\_\_\_\_

2. List the policy tools available to the Fed and sketch the way in which each tool works to change the supply of money.

3. The First Student Bank has the following balance sheet (in millions of dollars)

Assets		Liabilities	
Reserves at the Fed	25	Demand deposits	90
Cash in ATM's	15	Savings deposits	110
Government securities	60		
Loans	100		

The required reserve ratio on all deposits is 5 percent

- a. What, if any, are the bank's excess reserves? \_\_\_\_\_
- b. What is the bank's deposit multiplier? \_\_\_\_\_
- c. How much will the bank loan? \_\_\_\_\_
- d. How much money will be created from the funds loaned in c)? \_\_\_\_\_

4. The Fed conducts an open market purchase of securities. Indicate (up, down, unchanged etc.) the effects of this action in the short-run.

- a. The quantity of money supplied \_\_\_\_\_
- b. The quantity of money demanded \_\_\_\_\_
- c. The nominal interest rate \_\_\_\_\_
- d. The real interest rate \_\_\_\_\_

5. If the velocity of circulation is constant, real GDP is growing at 3 percent a year, the real interest rate is 2 percent a year, and the nominal interest rate is 7 percent a year.

- a. What is the inflation rate? \_\_\_\_\_
- b. What is the growth rate of money? \_\_\_\_\_
- c. What is the growth rate of nominal GDP? \_\_\_\_\_

6. Watch the video posted on the following link:

[http://www.pbs.org/newshour/extra/video/blog/2009/03/where\\_does\\_all\\_the\\_money\\_come.html](http://www.pbs.org/newshour/extra/video/blog/2009/03/where_does_all_the_money_come.html)

7. In 2009, the United States is in a recession. Then the following measures are implemented:

- a. The Fed increases the quantity of money, and all other influences on aggregate demand remain the same. Illustrate the effect of the increase in the quantity of money on aggregate demand in the short-run. Indicate the change in real GDP, the price level and unemployment rate.

- b. The federal government cuts taxes, and all other influences on aggregate demand remain the same. Illustrate the effect of the tax cut on aggregate demand in the short-run. Indicate the change in real GDP, the price level and unemployment rate.

8. In a deep recession, the FED, Congress, and the White House are discussing ways of restoring full employment. The President wants to stimulate aggregate demand but to do so in a way that will give the best chance of boosting investment and long-run economic growth.

a. Would a tax cut best meet the President's objectives? Explain

b. Would an increase in government purchases best meet the President's objectives? Explain

c. Would an increase in the quantity of money and cut in the federal funds rate best meet the President's objectives? Explain

9. The California State government is proposing decreasing its expenditures. Indicate the likely effect of this measure on:

- a. Aggregate demand \_\_\_\_\_
- b. Real GDP \_\_\_\_\_
- c. Unemployment rate \_\_\_\_\_
- d. The government's budget \_\_\_\_\_

10. Some commentators argue that the economy can recover from the recession without increasing the money supply and government spending. Agree/Disagree. Explain.

11. The Table below describes four possible situations that might arise in 2009, depending on the level of aggregate demand in this year.

	Price level (2008=100)	Real GDP (trillions of 2008 dollars)	Unemployment rate (percent of labor force)
A	102	8.0	9
B	104	8.1	7
C	106	8.2	5
D	108	8.3	4
E	110	8.4	3

a. Plot the Phillips curve and the aggregate supply curve for 2008.

b. Suppose the natural rate of unemployment is 6 percent in 2007. What is the expected inflation rate? \_\_\_\_\_

12. The following data describes the economy of Antarctica in 2050:

Item	(billions of Antarctica dollars)
Imports of goods and services	150
Exports of goods and services	50
Foreign investment in Antarctica	125
Antarctica's investment abroad	55

- Calculate Antarctica's current account balance\_\_\_\_\_
- Calculate Antarctica's capital/financial account balance\_\_\_\_\_
- Is the country experiencing a balance of payments crisis? Explain

13. Foreign exchange market.

a. Show graphically and explain the effect of the continuous decrease in US interest rates on the demand and supply of dollars. Indicate the resulting change in the exchange rate of Euros per U.S. dollars (appreciates, depreciates).

b. Early last year the US dollar appreciated relative to the Euro and currencies of most developing countries. Why? Illustrate your answer with a graph.