



Macroeconomics Unit 4

Free Response Questions

FRQ #1- Assume that the economy of Mexico has a positive output gap and that the central bank takes actions to restore the economy to full-employment.

- What open-market operation should the central bank take?
- Draw a correctly labeled graph of the money market and show the effect of the policy identified in part (a) on the nominal interest rate.
- Based on the change in the interest rate in part (b), what will happen to each of the following in the short run?
 - Prices of previously issued bonds.
 - The price level and real GDP. Explain.
- Now assume that households in Mexico increase their savings. Using a correctly labeled graph of the loanable funds market, show how the increase in savings will affect the real interest rate.
- Given the real interest rate change identified in part (d), what is the long-run effect on potential real gross domestic product in Mexico? Explain.

FRQ #2- The simplified balance sheet below is for Clifford Bank.

Assets		Liabilities	
Excess Reserves	\$3000	Demand Deposits	\$20,000
Required Reserves	\$2000	Owner's equity	\$10,000
Loans	\$15,000		
Government Securities	\$10,000		

- Calculate the required reserve ratio.
- Suppose that David deposits \$10,000 in cash into his checking account.
 - What is the immediate effect of the cash deposit on the M1 measure of the money supply?
 - Calculate the total excess reserves immediately after the deposit.
 - Calculate the maximum change in the money supply over time from the additional excess reserves from David's deposit.
- Suppose that instead of David depositing \$10,000, the central bank purchases \$10,000 worth of bonds from Clifford Bank.
 - Will demand deposits increase, decrease, or stay the same immediately after the purchase?
 - Calculate the change in excess reserves immediately after the purchase.
 - Calculate the maximum amount that the money supply can change as a result of the \$10,000 purchase of bonds by the Federal Reserve.
- Identify one reason why the actual change in money supply can be smaller than the maximum change you identified in part (d)(iii).