

Problem1:

Economics, Money



Problem1: C = currency in circulation D = checkable deposits $c = C/D$ = currency ratio = 0.45 ER = excess reserves $e = ER/D$ = excess reserves ratio = 0.02 RR = required reserves = \$50 r = required reserve ratio = 5% = 0.05 M = money supply R = total reserves MB = monetary base m = money multiplier

a) Find the checkable deposits, D ? Show your work. b) Using your answer to part (a), find excess reserves, ER , and currency, C . Show your work. c) Find the monetary base, MB ? Show your work. d) Using your answer to part (a) and (b) find M . Show your work. e) Using e , r and c , find m . Show your work. f) Without using e , r and c , find m again. Show your work.

Problem2: a) Prepare the balance sheet of a bank that has \$20 million in reserves, \$50 million in securities, \$110 million in loans, \$150 million in checkable deposits, \$20 million in discount loans, and \$10 million in bank capital. b) The required reserve ratio is 10%. Using the balance sheet from your answer above, show what happens at each stage when the following transactions occur (successively): i) The bank gives out all the excess reserves as loans, ii) a client deposits \$10 million in her checking account, iii) a big client withdraws \$20 million and the bank takes on a discount loan just enough to cover for the required reserves gap, iv) The bank sells securities to cover up only for the discount loan taken in the previous part.

Problem3: a) What procedures can the Fed use to control the federal funds rate? Why does control of this interest rate imply that the Fed will lose control of nonborrowed reserves? Explain your answer. b) " If the demand for reserves did not fluctuate, the Fed could pursue both a nonborrowed reserve target and federal fund target at the same time. " Is this statement true, false, or uncertain? Explain your answer

Problem4: a) State whether the following

statement is true or false AND explain why: " An increase in the interest rate paid on excess reserves will always cause an increase in the federal funds rate. " b) State whether the following statement is true or false AND explain why: " A decrease in the discount rate will always cause a decrease in the federal funds rate. "