

The Last One!

Place your name on the back of this sheet of paper and nowhere else. Staple your answers face up on the front of this sheet of paper. Failure to follow these directions will cost you 10 points. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Turn in the Excel file via Canvas. Place your name on an otherwise blank page of the Excel file. Failure to type this assignment will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

All questions except for Question #1 should be done before class.

The first question refers to the spreadsheet "Lab" on the Excel file "[lab8.xlsx](#)" from last week's lab. Each date is for the two-month period which starts then. So, "Jan. 2002" is for January and February of 2002.

1) (40 points) Run a regression to estimate the Sales as a function of Time. Use the results to create a column which is called trend. Use that column and the columns created in Lab #8, to create the column "normal." Now use this information to predict Sales up through the end of 2020.

2) (20 points) Use the balance sheet to the right to determine how much excess reserves the bank has. Show all work and briefly explain what you did. How much goes in the spot where the question marks are? Show all work and briefly explain what you did.

Assets		Liab. & Net Worth	
Loans	1000	Checking Accounts	900
Deposits at Fed	100	Savings Accounts	300
Cash	30	Other	200
Other	???	Equity	90

3) (20 points each) Answer each part in separate paragraphs. Illustrate the effects of each event on the Fed's balance sheet and a bank's balance sheet. (Do not worry about

what the balance sheets were like before, just do the changes.) State why you put the numbers where you put them. What happens to M1 and M2? State how you reached that conclusion.

A) The Fed buys a \$500 bond from an individual, who puts the money in their savings account.

B) The banks take \$300 billion in loans from the Fed in the week prior to 3/16.

<https://www.theguardian.com/business/2023/mar/16/cash-strapped-banks-have-borrowed-300bn-from-the-fed-this-past-week>