Wilfrid W. Csaplar Jr., Ph.D. Economics 350 Exam #3 2020/4/6

Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. The Excel file will be handed in via Canvas. Your name will only appear on a page of the file that has nothing else on it. Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 170 points) and is scheduled to take 50 minutes (but you can take the full 2 hours.) Therefore, expect to spend 1 minute for every 2 points. For example, a 10-point question should take 5 minutes.

1) (36 points) Use the data in the Excel file exam3.xlsx to forecast sales through the end of 2022. Seasonally adjusted sales for all periods? If their sales for 2022 were $1500, then how much would they expect to sell in April of 2022? Do all calculations in the Excel sheet. If you want to explain anything, then do it on the spreadsheet.

2) (8 points) Answer EITHER Part A OR Part B.
A) At the start of the J-curve, when a currency is devalued, the trade deficit gets bigger. Why?
B) For EITHER absolute PPP OR relative PPP, write the equation for it. Explain why it makes sense.

3) (10 points) Answer EITHER Part A OR Part B.
A) Loans are on both sides of a banks' balance sheets. Explain the difference between them.
B) Use the balance sheet to the right to answer this question. Show all work. Assume the bank decides to loan out all excess reserves and the currency-deposit ratio is 0. How much excess reserves does this bank have? If the bank loaned out all of its excess reserves and the money multiplier process went to its fullest, then how much would the money supply change?

Assets		Liabilities & N. W.	
Cash	70	Checking	1000
Reserves	120	Savings	200
Loans	1300	Loans	10
Other	20	Other	300

4) (14 points) Draw the supply/demand for the British pound, £, with the Japanese yen, ¥, as the other currency. Illustrate the effects of EITHER interest rates going up in Japan OR the British GDP improving. Explain why the curve(s) moved as drawn. Which currency appreciated? Explain your logic.

5) (14 points) Answer EITHER Part A OR Part B.
A) Draw the graph of the fundamental exchange rate and the pegged exchange rate. If the money supply was to the right of the intersection, what will bring it back to the intersection. Explain how that graph implies that a country cannot control both the exchange rate and the money supply.
B) Draw the graph of the fundamental exchange rate. Explain why it takes that shape.

6) (18 points) Answer EITHER Part A OR Part B.
A) Write the equation which relates the money supply to the money multiplier and the monetary base, including the formula for the money multiplier. If the Federal Reserve decreased the required reserve ratio, then what in that equation changes? Explain why it changes like that. What happens to the money supply, the money multiplier, and the monetary base? State how you reached each conclusion.
B) Explain the money multiplier process. In other words, explain how a $1000 bond purchase by the Fed will increase the money supply by more than $1000. Use a bank balance sheet two show the first two steps. Do not worry about putting the initial situation on the balance sheet. Only put the changes.