# Assignment | Unit 7

## Money, Banks, and the Federal Reserve System

- 1. Your Assignment should have a cover sheet with the following information:
  - Your Name
  - Course Number
  - Section Number
  - Date
- 2. You may submit your Assignment using the <a href="Unit 7 Assignment template">Unit 7 Assignment template</a>.
- 3. Your answers should follow APA formatting by being in double spaced paragraph format, with citations to your sources and, at the bottom of your last page, a list of references. Your answers should also be in Standard English with correct spelling, punctuation, grammar, and style.
- 4. Respond to the questions in a thorough manner, providing specific examples of concepts, topics, definitions, and other elements asked for in the questions. Your paper should be highly organized, logical, and focused.
- 5. Required Format:
  - Correct APA formatting for answers (cover sheet with name, course number, section number, unit number, date, answers double spaced, in Times New Roman 12-point font). Review the APA formats found in the Writing Center.
  - Correct citations within answers
  - Standard English with no spelling or punctuation errors
  - Correct references at the bottom of the last page

This Assignment deals with money, the Federal Reserve System, and the effects of money growth on the rate of inflation (Chapters 16 and 17).

#### Assignment

Assume you are hired as an assistant quantitative analyst at a bank. Given the scenarios provided in the Assignment, complete the tables and explain the computation results. View the Chapter 16: "Does the Federal Reserve Control Both the Money Supply and Interest Rates?" video and the Chapter 17: "Would You Explain Inflation?" video.

### This Assignment will assess your knowledge based on the following outcomes:

**AB204-4:** Describe the roles of money, banking, and the Federal Reserve System in the macro economy.

- 1) This section deals with increase money supply given two scenarios (see "a" and "b" below). In Westlandia, the public holds 50% of money one (M1) in the form of currency, and the required reserve ratio is 20%.
  - a) Estimate how much the money supply will increase in response to a new cash deposit of

\$500 by completing the accompanying table.

(**Hint:** The first row shows that the bank must hold \$100 in minimum reserves — 20% of the \$500 deposit — against this deposit, leaving \$400 in excess reserves that can be loaned out. However, since the public wants to hold 50% of the loan in currency, only \$400  $\times$  0.5 = \$200 of the loan will be deposited in round 2 from the loan granted in Round 1.)

Round	Deposits	Required reserves	Excess reserves	Loans	Loan proceeds held as currency	Loan proceeds deposited
1	\$500.00	\$100.00	\$400.00	\$400.00	\$200.00	\$200.00
2	\$200.00					
3						
4						
5						
6						
7						
8						
9						
10						
Totals						

b) How does your answer compare to an economy in which the total amount of the loan is deposited in the banking system and the public does not hold any of the loans in currency? (**Hint:** Complete the table below when none of the loan proceeds held in currency following the example for row 1.)

Round	Deposits	Required reserves	Excess reserves	Loans	Loan proceeds held as currency	Loan proceeds deposited
1	\$500.00	\$100.00	\$400.00	\$400.00	0.00	\$400.00
2	\$400.00					
3						
4						
5						
6						
7						
8						
9						
10						
Totals						

- c) What does this imply about the relationship between the public's desire for holding currency and the money multiplier? Which scenario will contribute more to increase in money supply?
- 2) Explain how each of the following changes quantity of money (money supply) in the economy.

a.	the Fed buys bonds
b.	the Fed auctions credit
c.	the Fed raises the discount rate
d.	the Fed raises the reserve requirement

3) Assume that in a country the total holdings of banks were as follows:

	Amount in million dollars
Required Reserve	\$45
Excess Reserve	\$15
Deposits	\$750
Loans	\$600
Treasury Bonds	\$90

Show that the balance sheet balances if these are the only assets and liabilities.

Assuming that people hold no currency, what happens to each of these values if the central bank changes the reserve requirement ratio to 2%, banks still want to hold the same percentage of excess reserves, and banks do not change their holdings of Treasury bonds? How much does the money supply change by?

## **Directions for Submitting Your Assignment**

Before you submit your Assignment, you should save your work on your computer in a location and with a name that you will remember. Make sure your Assignment is in the appropriate format (Microsoft Word), then, when you are ready, you may submit to the Dropbox.

Unit 7 Assignment: Money, Banking and the Federal Reserve System				
Content and Analysis	Points Possible	Points Earned		
Problem # 1  ■ Correctly Completed Table under ("a").	8			
<ul> <li>Correctly Completed Table under ("b").</li> </ul>	8			
<ul> <li>Explained the relationship between the public's desire for holding currency and the money multiplier. ("c")</li> </ul>	4			
Problem #2  ■ Identified changes in money under scenarios ("a–d").	8			
Problem #3  ■ Balance the balance sheet. ("a")	4			
Correctly calculate and explain the change in money supply when the reserve ratio changes. ("b")	4			
Writing style, grammar, and APA formatting.	4			
Total	45			