ECO 301: Money and Banking **Name:** ____________________

In-class Exercise: Money Multiplier

Directions: Work in groups of up to four people and answer the following questions. All papers will be collected, but only one member's paper will be randomly selected and graded and all members of the group will receive the same grade.

By signing below, you agree that the following work represents the efforts of everyone in the group, and you are willing to accept as your own grade for the group project the grade earned from this representation of your group's work. Every member must agree to these terms to earn a non-zero grade for this assignment.

Signature Group Member 1	Print Name	Date
Signature Group Member 2	Print Name	Date
Signature Group Member 3	Print Name	Date
Signature Group Member 4	Print Name	Date

1. Suppose the required reserve ratio in 2%, banks hold an extra 3% of deposits in excess reserves, and consumers hold currency balances that are about 10% of what they hold in deposits in banks. Suppose the Fed makes an open market sale of $150 million of government bonds.

   (a) What is the impact on the monetary base?

   (b) What is the impact on the M1 money supply?

   (c) What is the impact on the amount of deposits held in the banking sector.

   (d) What will be the impact on the interest rate in equilibrium?

2. Suppose the monetary base is $800 billion, the required reserve ratio is 5%, banks do not hold any excess reserves, and consumers hold currency balances that are about 5% of what they hold in deposits in banks. Suppose uncertainty increases in the banking sector regarding consumer default and depositors needs causing them to increase excess reserves to 10%.

   (a) What is the impact on M1 money supply?

(b) What is the impact on the amount of deposits held in the banking sector.

(c) What will be the impact on the interest rate in equilibrium?

3. Suppose an increase in computer financial technology causes consumers to decrease the amount of money they hold in currency from 5% of the amount they hold in deposits to 1%. The monetary base in \$650 million, the required reserve ratio is 3% and banks hold an extra 2% of deposits in excess reserves.

   (a) What is the impact on M1 money supply?

   (b) What is the impact on the amount of deposits held in the banking sector.

   (c) What will be the impact on the interest rate in equilibrium?