Discussion Handout #11 | **TA: John Stromme**
Econ 102 | UW Madison, Fall 2016
Prof. Eudey | Date: 11/18/16

Goals for this session

- Gain a good sense of why we care about money supply
- Understand a few of the 'tools' of monetary policy.

Pre-exercise: Capitol Hill Baby Sitting Co-op

(space for notes)

Note:

There are a few different 'tools' the federal reserve has to control the money supply. We are going to discuss two of them today: **Reserve Requirements**, and **Open Market Operations**. Other types we won't discuss today but may cover next time: Quantitative easing, discount rate, paying interest on reserves).

Problems

1. Changing Reserve Requirements
   (a) Draw a bank's 'balance sheet', and place the following liabilities and assets on it in the correct column:
      - Reserves ($300)
      - Loans ($1800)
      - Deposits ($2000)
      - Owners' equity ($100)

   (b) Money Multiplier
      - Draw the balance sheets of a few banks to illuminate how the money multiplier works on an initial $100 deposit.

- What is the formula for the money multiplier?
- How is it similar/different to the aggregate expenditure multiplier?

- What crucial assumption does this multiplier rely on?

(c) The Federal Reserve decides to lower the reserve requirement. This means banks can now lend out (more/less) money, and makes money supply (rise/fall). This will shift AD (out/in).

2. Open Market Operations

(a) What is an 'open market operation'?

(b) How do 'open market operations' affect the money supply?

(c) How might these operations directly affect the interest rate on bonds? (we will discuss interest rates more over the next 2 weeks of class)

Definitions we didn't cover today but you shouldn't forget about

- Three properties of money - (Medium of Exchange, Store of Value, Unit of Account)
- M1 vs. M2 definitions of money - (M1=currency+demand deposits+other checking deposits... M2 = M1 + savings/loans deposits + money market mutual funds. M2 is a broader definition of money supply)
- Structure of Federal Reserve System and the FOMC (See class notes/book)
- Purpose of the Federal Reserve (Monetary policy, supervision and regulation, banker's bank, lender of last resort... see your class notes/book)
- Dual Mandate of Federal Reserve (Stable prices, and full employment. This is the goal.)
- Stress Testing (simulation to determine if a bank's owner's equity is high enough to deal with various financial crisis scenarios.)
- Volker Rule (Prohibits banks from speculating against their customer's assets)