Review Notes – Money, Inflation, and Unemployment

- Money
  - What is money/what does money do?
    - Store of value
    - Medium of exchange
    - Measure of value
    - Standard of deferred payment
  - What characteristics are required for good money?
    - Durability
    - Divisibility
    - Homogeneity
    - Portability
    - Stability of supply
    - Relative scarcity
  - Commodity money
    - Definition = money which has some intrinsic value (i.e., value in use)
    - Advantages and disadvantages
  - Fiat money
    - Definition = money which has no intrinsic value (i.e., no value in use)
    - Advantages and disadvantages
  - The supply of money
    - What is currency?
    - Measures of the supply of money
      - M_1 = currency + Demand Deposits (what are those?)
      - M_2 = M1 + small time deposits (what are those?)
      - M3 = M2 + large time deposits + institutional money market funds
      - L = M3 + other liquid assets
      - What is the difference between these different measures?
  - The Creation of money
    - The reserve ratio (rr) = the percent of deposits which are <u>not</u> loaned out.
    - Use the following assumptions to see how money is created
      - All banks have the same reserve ratio (rr)
      - No banks hold excess reserves (reserves in excess of that implied by rr)
      - There are no cash drains from the system
    - What happens when $1,000 in extra money is deposited into a demand deposit account?
      - What is a t-account?
      - Assuming the rr=20 percent, the bank will
        - Keep $200 on hand to meet cash requirements

- Loan out $800 to another customer
- What does that customer do with the $800? Deposit it in a bank => demand deposits increase by a further $800

- Hence, the bank will loan out a further $640, which will be deposited in a bank
- Hence, the bank will loan out a further $512, which will be deposited in a bank
- Hence, the bank will loan out a further $410, which will be deposited in a bank
- Hence, the bank will loan out a further $328, which will be deposited in a bank
- etc.
- Every time demand deposits increase => the money supply increases
- How much in total has the money supply increased?
  - $1,000 increase in the money supply from the initial $1,000 deposit
  - Plus $4,000 additional increase in the money supply through fractional reserve banking

- The potential money multiplier = m_p = for every dollar in additional deposits, how much could the money supply increase?
  - $m_p = 1/rr$ (why? remember that rr = reserve ratio)
- The actual money multiplier = m_a = for every dollar in additional deposits, how much does the money supply increase?

- Controlling the Supply of money
  - What is monetary policy?
  - Who controls monetary policy?
    - The Federal Reserve (what's that?)
  - How does the Fed control the money supply
    - Discount rate
    - Legal reserve ratio
    - Open market operations
    - Etc.

- Inflation
  - Demand for money
    - Transactions demand for money
    - Quantity exchange equation – MV = PY
      - Define all terms and know what they mean
      - Real demand for money (M/P=kY – what's k?)
      - Why does money supply determine nominal GDP (PY)?
      - Why do increases in the money supply simply cause inflation?

    - Interest rates
        - Real interest rates vs. Nominal interest rates
            - How are they related?
            - $i = r + \pi$
            - Which of the two is the cost of holding money?
    - Costs of inflation
        - When inflation is expected
            - Shoe leather costs
            - Menu or re-pricing costs
            - Distortion costs
            - Cost of living costs
            - Inconvenience
        - When inflation is unexpected
            - Losers = creditors/those on fixed incomes
            - Winners = debtors

- Unemployment
    - Definitions
        - Natural rate of unemployment
        - Employed
        - Unemployed
        - Labor force
        - Labor force participation rates
        - Unemployment rate
        - Voluntary unemployment
        - Involuntary unemployment
    - Types of unemployment
        - Frictional unemployment
        - Structural unemployment
        - Seasonal unemployment
        - Cyclical unemployment
        - Induced unemployment
