Daphne Yu & Megan Tsou
4 April 2014

Money and Monetary Policy Study Guide

What is Money?
Money: liquid asset used to purchase goods and services (currency, checkable bank deposits)
Money Supply: liquid assets (currency, traveler's check, checkable bank deposits)

Roles of Money
Medium of change Store of value Unit of account

Measuring Money Supply: *Monetary aggregates*
M1: currency in circulation, traveler's checks, checkable bank deposits
M2: M1 + **near-moneys** (assets that can be converted to cash/deposits, pays higher interest; ie savings account, small denomination CDs)
Near-moneys: saving deposits, time deposits, money market funds, mutual funds
- Abuse printing money → inflation

Money Marker
Monetary base = bank reserve + money in circulation
Money supply = currency in circulation + checkable deposits
Money Multiplier = 1/rr

Types of Financial Assets
- **Loan**: lending agreement between individual lender and individual borrower
- **Bond**: IOU issued by borrower
  - **default**: borrower fails to make payments for loan or bond
- **Loan-backed securities**: assets made by pooling individual loans and selling shares in that pool (securitization)
- **Stock**: a share of ownership of the company

Structure of the Fed
- **7 Board of Governors** appt by Pres, approve by Senate (14 yr term)
- **12 Federal Reserve Banks & districts**
  - **NY**: open market operations
- **Federal Open Market Committee**: Board of Governors + 5 regional bank president

Functions of Fed
1. **Financial services** to local banks
2. **Supervise** and regulate banking institutions
3. **Maintain stability** of financial system
4. Conduct **monetary policy**

Job of Fed

Daphne Yu
4 April 2014

1. **Reserve requirement**: Local banks can borrow from other banks via **federal funds market** if fall short of rr
2. **Discount rate**: local bank borrow from Fed (interest is 1% higher)
3. **Open-Market Regulations**: buy/sell T-bonds with commercial banks

Monetary Policy

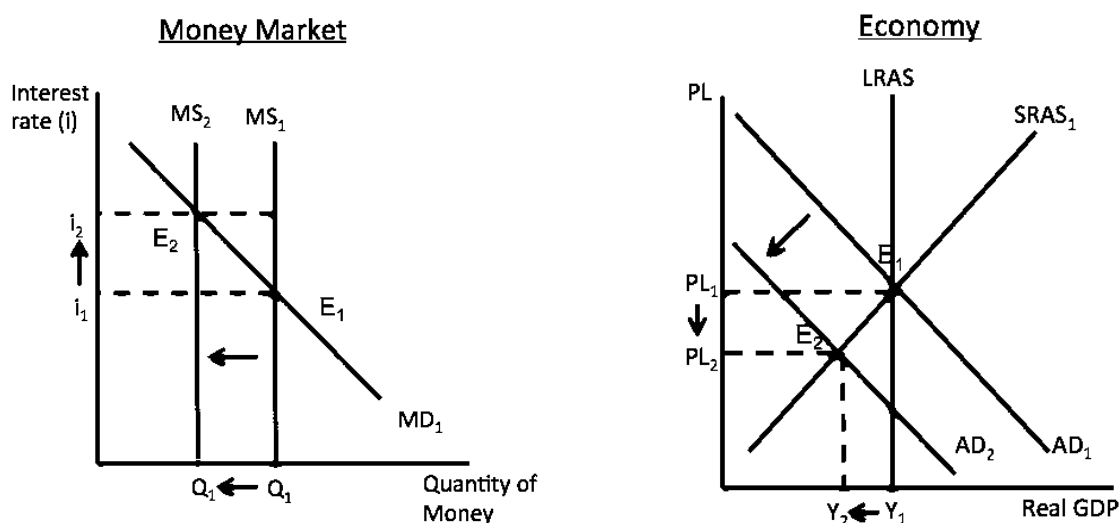
Expansionary monetary policy: monetary policy that increases AD

Fed buy T bonds/decrease reserve ratio → money supply inc → interest rate dec → investment spending inc → real GDP inc → AD inc

Contractionary monetary policy: monetary policy that decreases AD

Fed sell T bonds/ increase reserve ratio→ money supply dec → interest rate inc → investment spending dec → real GDP dec →AD dec

Ex: The Fed decides to sell treasure bonds to control inflation. Illustrate the short run affects of the Fed's actions in the money market and the economy.



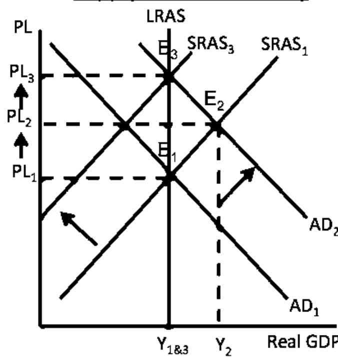
Short Run V. Long Run Analysis

Change in money supply → proportional change in aggregate PL & no change in other places

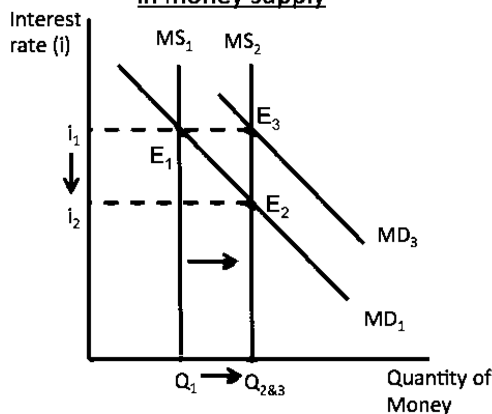
Money Neutrality: changes in the money supply have no real effect in the economy (in the long run)

Ex: The Fed buys T bonds to stimulate the economy.

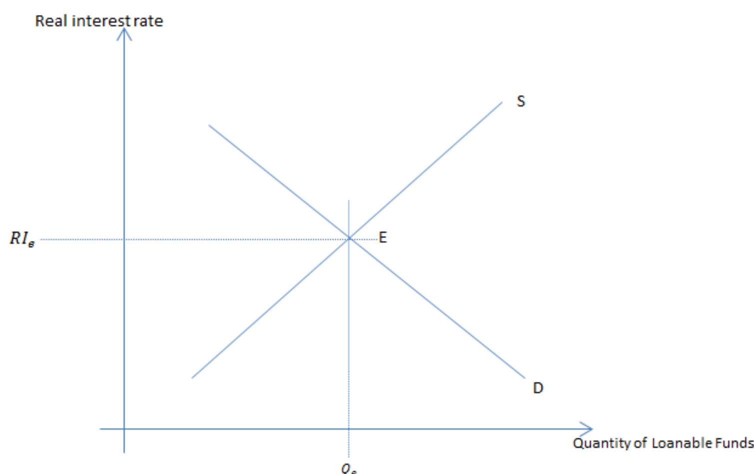
Daphne Yu
4 April 2014



- MS↑ → interest rate↓ → AD↑ → (AD_1→AD_2) → PL ↑ (PL_1→ PL_2) & Y ↑ (Y_1→Y_2)
- However, E_2 is not at long run equilibrium: $Y_2 > Y_1$ (potential output) → lead to increase in nominal wages
- nominal wage ↑→SRAS↓ ($SRAS_1$ → $SRAS_3$)→ PL↑ even more(PL_2→PL_3) & Y ↓to return to potential output (Y_2→$Y_{1\&3}$)



- initial increase in money supply (MS_1→ MS_2) → interest rates ↓(i_1→i_2)
- PL ↑ in proportion to ↑in MS → demand of money ↑ (MD_1→ MD_3)
- Interest rates return back to the original interest rate (i_1)



Loanable Fund Market

real interest rate= nominal interest rate-inflation

Supply: people/businesses/governments WITH money supply it to others, and in return get an interest rate they earn for supplying that money

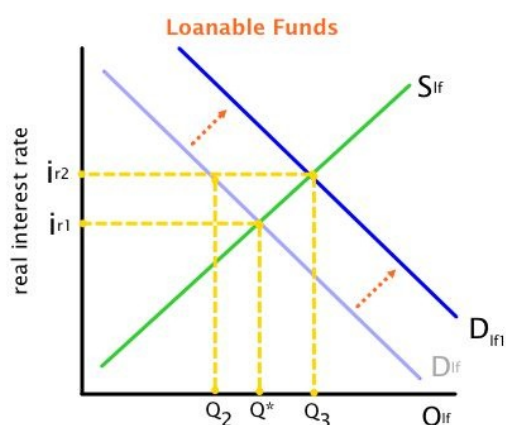
Daphne Yu
4 April 2014

Demand: People/businesses without money borrow it from others, and in return get an interest rate they PAY for demanding that money

When consumers/businesses/ or gov have surplus funds they want to place them in some type of savings/investments

demand for loanable funds comes from consumers/business/gov who dont have money, but want to borrow it to finance their purchases

Crowding out effect



Government deficit spending → shifts the demand for loanable fund to the right

Government borrow the money from the public and bank

Increased demand from the government increase real interest rates → private borrowing decrease investment due to high interest rate

The Bond Market

a certificate of indebtedness that specifies the obligations of the borrower to the holder of the bond

- date of maturity
- rate of interest

Consider when buying bonds:

1. term: the length of time until the bond matures
2. credit risk: the probability that the borrower will fail to pay some of the interest or principal (failure to pay=default)
3. tax treatment: the way in which the tax laws treat the interest earned on the bond

Stock Market

Stock: represents ownership in a firm and is therefore, a claim to the profit that the firm makes

1. prices: determined by the supply and demand for the stock in these companies (people become optimistic--> raise their demaind and bid up the price)
2. stock index: computed as an average of a group of stock prices. eg: dow jones industrial average