

CHAPTER 17

Tools of Monetary Policy

Fed tools

1. Open Market Operations
 1. change reserves and monetary base
2. Discount Rate
 1. change the monetary base
3. Reserve Requirements
 1. change the money multiplier

Plan:

how do they change the Fed funds rate using supply-demand analysis of the reserves market (where the Fed funds rate is determined).

Fed Funds rate: interest rate on overnight loans of reserves from one bank to another

The Market for Reserves and the Fed Funds Rate

Demand Curve for Reserves R^d

1. $R = RR + ER$
2. $i \downarrow$, opportunity cost of $ER \downarrow$, $ER \uparrow$
3. Demand curve R^d slopes down

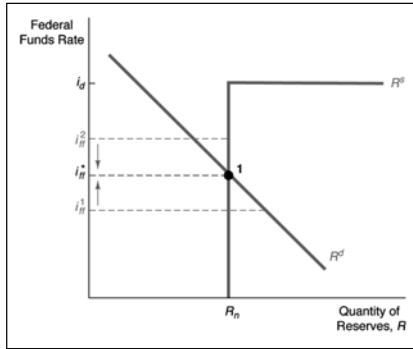
Supply Curve for Reserves R^s

1. $R^s = OMO \text{ non-borrowed reserves } R_n + \text{Discount loans}$
If i_{ff} is below i_d , then discount borrowing, $R^s = R_n$
2. Supply curve flat (infinitely elastic) at i_d because as i_{ff} starts to go above i_d , banks borrow more at i_d

Market Equilibrium

$$R^d = R^s \text{ at } i_{ff}^*$$

Supply and Demand for Reserves



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Fed tools

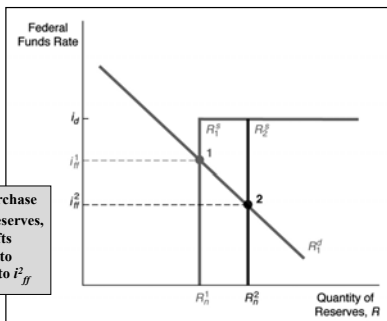
1. Open Market Operations
2. Discount Rate
3. Reserve Requirements

How do they change the Fed funds rate?

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Response to Open Market Operations



Open Market Purchase
Nonborrowed reserves,
 R_n , \uparrow and shifts
supply curve to
right R_n^1 ; $i \downarrow$ to i_H^2

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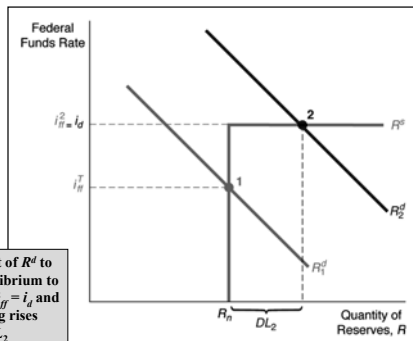
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Discount Loans

3 Types

1. Primary Credit : Healthy Banks (1 % above i_H)
2. Secondary Credit: (0.5 % above Discount rate)
3. Seasonal Credit

How Primary Credit Facility Puts Ceiling on i_{ff}



Rightward shift of R^d to R_2^d moves equilibrium to point 2 where $i_{ff}^2 = i_H^d$ and discount lending rises from zero to DL_2

Discount Policy

Advantages

1. Lender of Last Resort Role

Disadvantages

1. Confusion interpreting discount rate changes
2. Fluctuations in discount loans cause unintended fluctuations in money supply
3. Not fully controlled by Fed

Reserve Requirements

Advantages

1. Powerful effect

Disadvantages

1. Small changes have very large effect on M^s (*not good to fine-tune the money supply*).
2. Raising causes liquidity problems for banks
3. Frequent changes cause uncertainty for banks
4. Tax on banks
