

# Econ 1115: Principles of Macroeconomics

## Lecture 20: Fiscal Policy

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# Outline

- 1 Liquidity Preference
- 2 Monetary Policy
  - Monetary Policy in action
- 3 Fiscal Policy
  - Multiplier
  - Crowding-out

## Downward sloping AD

Remember, the AD is downward sloping for three reasons. They are:

- Wealth effect
- **Interest rate effect** (the most important, and relevant here)
- Exchange rate or Foreign purchases effect

# Liquidity Preference

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- In this model we assume household wealth comes in two forms
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  - 2 Bonds - pays interest, but is not very liquid

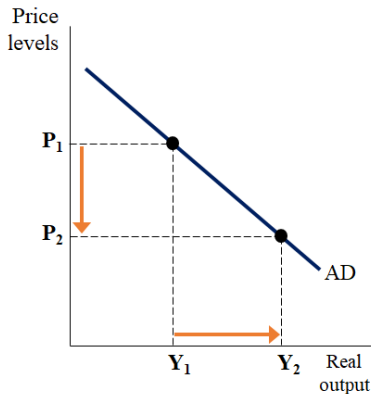
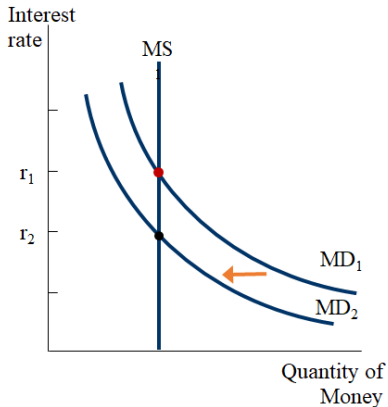
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- In this model we assume household wealth comes in two forms
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- If real incomes go up, people want to buy more goods and services, and the demand for money increases.



A fall in price leads to a decrease in MD, which reduces  $r$ . This leads to an increase in investment and consumption (durables).



The slope of the money demand curve is explained as follows:

- a. Interest rates rise as the Fed reduces the quantity of money demanded.
- b. Interest rates fall as the Fed reduces the supply of money.
- c. People will want to hold less money as the cost of holding it falls.
- d. People will want to hold more money as the cost of holding it falls.

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**Answer: d**

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- FDIC and deposit insurance
- Do we even need a reserve requirement?

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Interest rates!

# Federal Funds Rate

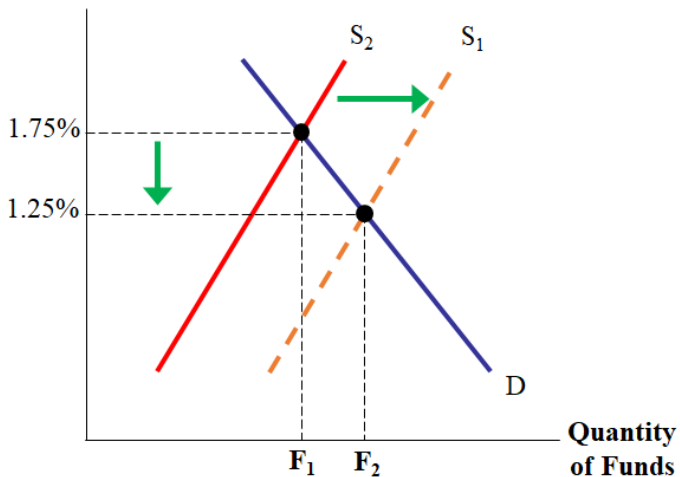
The Federal Funds Rate (FFR) is the

- The weighted-average
- Overnight, inter-bank lending rate (interest rate) of
- Over a million dollars.

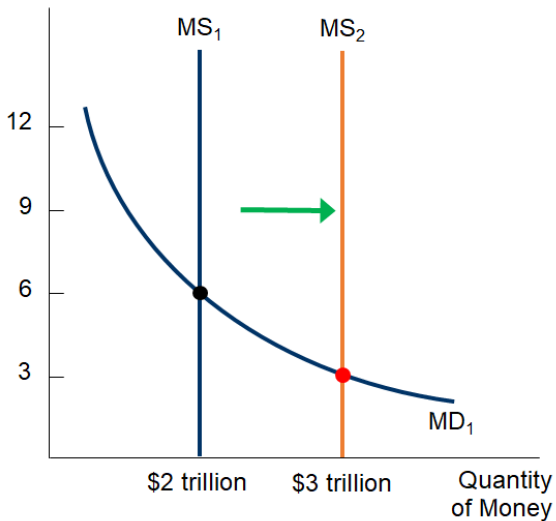
Determined in the market for overnight loans among banks and other depository institutions. Banks that have excess reserves can lend to banks that have fallen short.

The Fed does not control the FFR, but sets a target FFR and uses its monetary policy tools to achieve this target FFR. This is how it controls money supply.

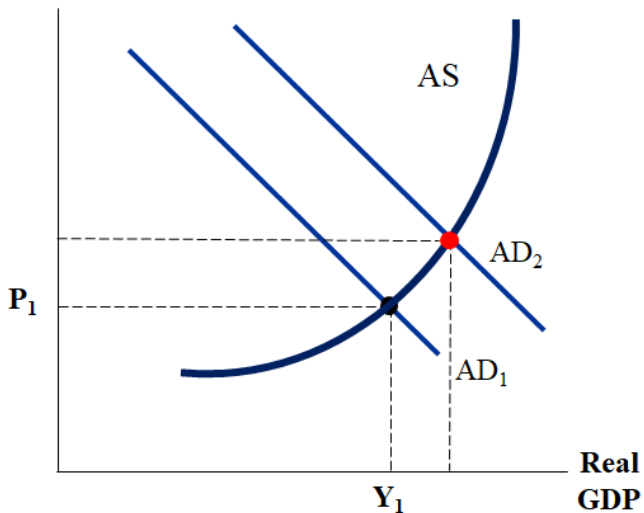
### FFR The Federal Funds market

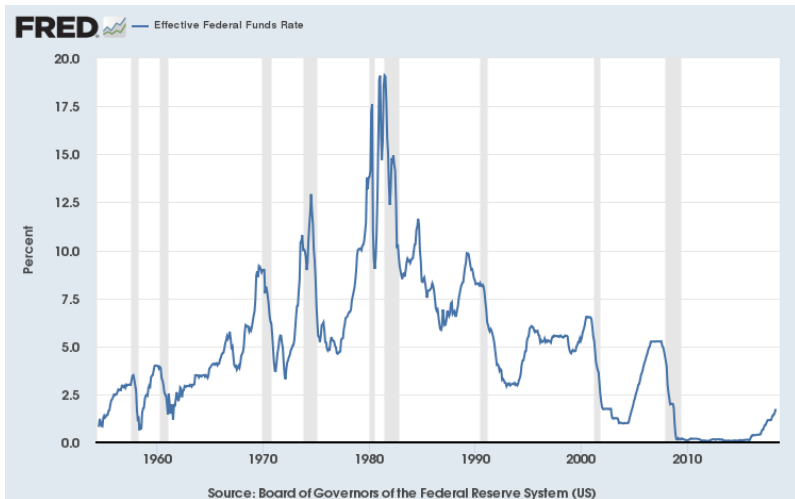


Interest rate



## Price level





The federal funds rate is the interest rate

- a. the Federal Reserve charges for loans it makes to the federal government.
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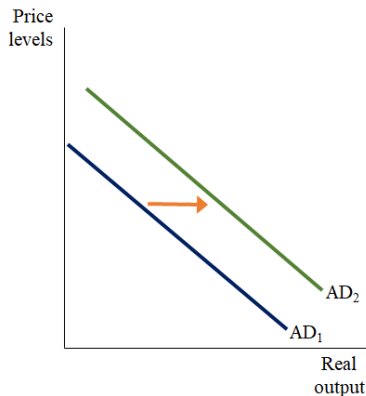
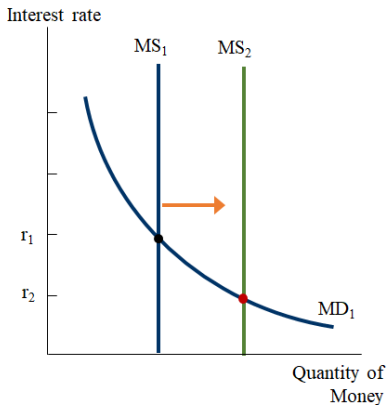
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- 3 The Fed stops buying/selling bonds when the target FFR is achieved.
- 4 The change in interest rates increases/decreases consumption and investment, and shifts the AD curve.

If the Fed pursues expansionary monetary policy, the Fed shifts the MS right,  $r$  falls,  $C_D + I$  go up and shifts the AD to the right.



- Liquidity Trap

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- Cyclical asymmetry
- Political independence
- Rule (automatic) vs Discretionary

# Kahoot

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Fiscal policy is government policy regarding government spending and taxation.

Much like monetary policy, Fiscal policy is a demand side policy.

- 1 Expansionary - increase  $G$ , cut  $T$ , or both.  
Shifts AD to the right
- 2 Contractionary - reduce  $G$ , increase  $T$ , or both.  
Shifts AD to the left.

# Multiplier effect

Recall the circular flow of income.

## Keynesian Multiplier

An increase in government spending of \$1 will lead to a more than \$1 increase in total spending (GDP).

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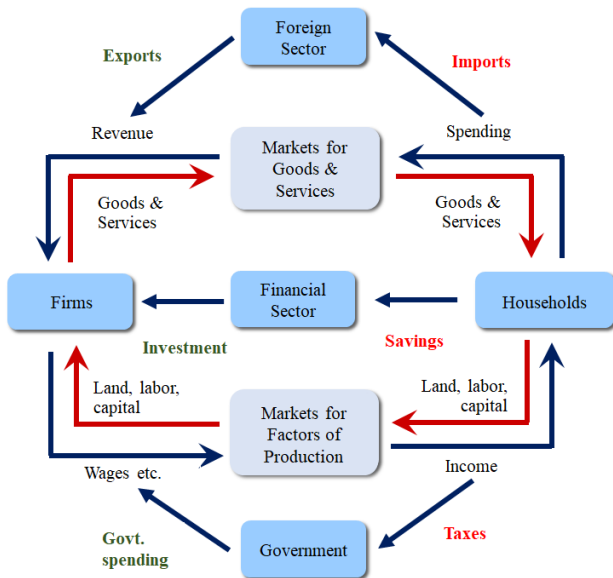
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$$k = \frac{1}{1 - c_1(1 - t) + m}$$





But for this class, we will deal with the simple multiplier.

$$\text{Multiplier for government spending, } k_G = \frac{1}{1-MPC}$$

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The multipliers are slightly different for taxes and government spending.

$$\text{Multiplier for taxes, } k_T = -MPC \times \frac{1}{1-MPC}$$

Why? With very low MPCs the multiplier effect can be less than 1.

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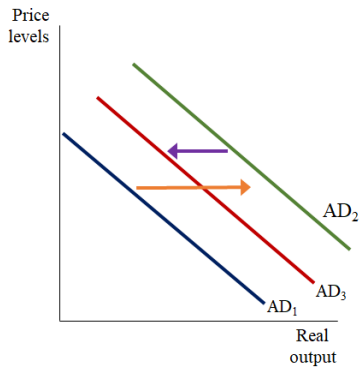
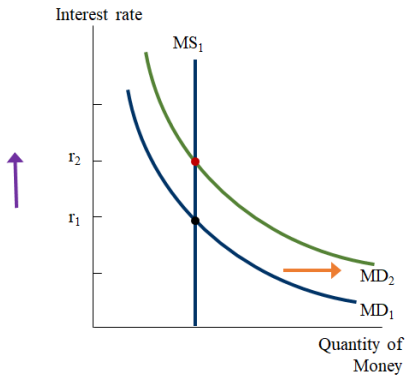
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- Restraining effect on increase in AD.
- Happens when expansionary fiscal policy raises the interest rate
- Thus investment spending goes down
- Which reduces the net effect on aggregate demand.

So, the size of the AD shift is smaller than predicted by the fiscal multiplier.





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- Automatic stabilizers