Different types of financial assets

Money	Stocks	Bonds
something used to facilitate the exchange of goods and services	shares in the ownership of a business	a certificate of debt issued by a business or a government
money is measured in liquidity. M1 is the highest liquidity (coins, cash, cd)		*open market operations*

fiat money: something that serves as money but has no other important uses

Monetary Policy

1. Change the required reserve ratio
2. Change the discount rate
3. Change the federal funds rate
4. Open-market purchase of government bonds by the central bank

Fiscal Policy

Government Spending	Income Taxes
Increase in gov. spending leads to more income = more consumption	Tax reductions lead to more consumption.
More consumption leads to more investments by firms.	Firms can produce more, which leads to greater investments.

- examples above are **expansionary** fiscal policy
- the opposite (raise taxes + lower gov spending) is **contractionary** fiscal policy
- these things shift *aggregate demand*

Federal Reserve Board (Board of Governors)

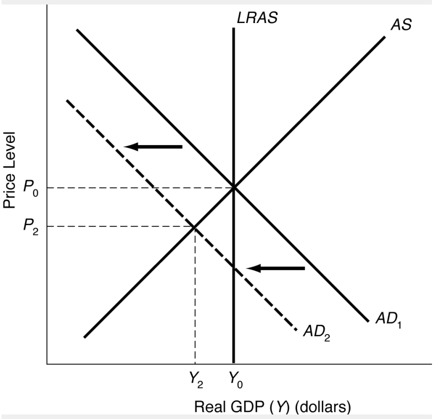
-independent regulatory agency	-#1 Goal: control the money supply	there are 7 board members who all serve 14 year terms
-US central bank	-also, to stabilize the banking system	they are chosen by the president

Federal Reserve Board (Board of Governors) (cont)

-created by the Federal Reserve Act of 1913

The Federal Open Market Committee aids the Board of Governors in conducting Monetary Policy .
buying and selling bonds

AD + AS Graph



P0 shows the market in equilibrium. P2 shows a shift in AD, creating a recessionary gap.

Shifters of AD + AS

Aggregate Demand	Aggregate Supply
Consumption	**I**nflationary expectations
Investments	**R**esource prices
Government spending	**A**ctions of the government
Xports (net)	**P**roductivity

Money Supply

What does the money supply mean?

> The money supply is the money in the economy at M1.

In a money market graph, why is the Money Supply curve vertical?

> Money supply is independent of interest rates because it is determined by monetary policy actions of the Fed

What are the shifters of money supply?

> 1. setting reserve requirements, 2. setting federal funds rate, 3. setting discount rates, 4. open market operations

How do banks create money?

After banks receive deposits from their customers, they put away enough to meet **required reserves**.

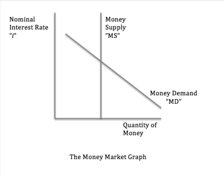
The rest of the money in their excess reserves, they can loan out.

That loan gets spent in the economy.

This means they created money because they have the same money in one person's savings that they loaned out, and that went into the economy.

Required reserves is the percentage of a deposit a bank is required to keep (cannot be loaned out).

Money Market Graph



Money Demand

Why is money demanded in an economy?

> 1. to perserve wealth in liquid form and 2. to use in transactions the market

What does the demand curve look like?

> Lower interest rates lead to a higher demand for money. The curve is downward sloping.

What are the shifters of money demand?

> 1. **T**echnology, 2. **R**eal GDP, 3. **I**nstitutions, 4. **P**rice Level (**TRIP**)

Shifters of Money Supply (extended)

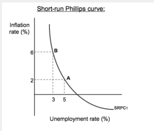
The Discount Rate	Rate the Fed charges banks to take out overnight loans from them.
Federal Funds Rate	Rate banks charge other banks to take out overnight loans
Open Market Operations	The Fed buying and selling bonds
	Big Money=Buy; Small Money=Sell

Formulas to Know

Quantity Theory of Money	MV = PQ
Money Multiplier	1/RR

Quantity theory of money shows that the money supply (M) will affect the price level (P) and/or the real output if the velocity of money (V) is fixed in the short run.

Phillip's Curve



shows inverse relationship between inflation and unemployment
if you want to lower inflation, unemployment will rise