Money supply, the Fed and Monetary Policy

Money Defined

- Money is anything that can be used as:
  - A medium of exchange
  - A store of value
  - A unit of account / Standard of Value
- Money works best when it meets these criteria:
  - Portable
  - Durable
  - Divisible
  - Acceptable
  - Stable

Money Facts:

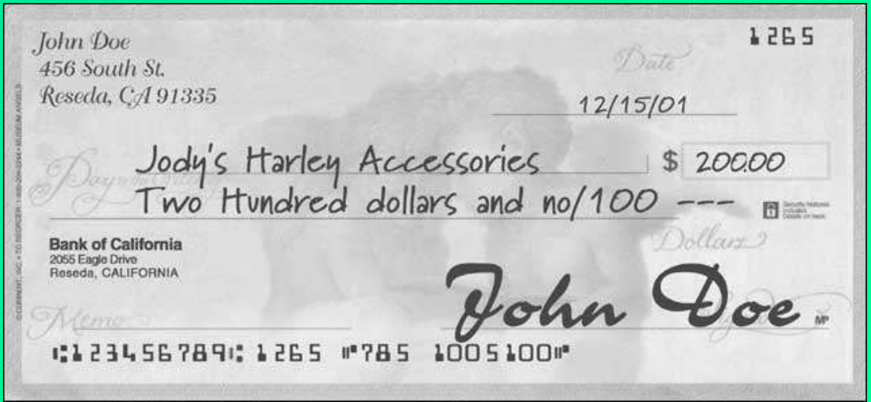
- **What backs the dollar and makes it valuable?**
  - Gold?
  - NO! The dollar is legal tender because the government says it's money and people willingly accept it. The Dollar is backed by FAITH.
  - This is referred to as an inconvertible fiat standard.

The Supply of Money

- In the United States, the Federal Reserve System is the sole issuer of currency.
  - This means the Fed has monopoly control over the money supply.
- There are two important measures of the Money Supply today.
  - M1
  - M2

M1

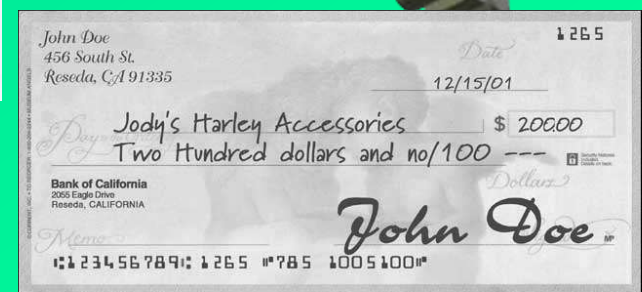
- **M1 serves primarily as a medium of exchange. It includes:**
  - **Currency and Coin**
  - **Demand Deposits**

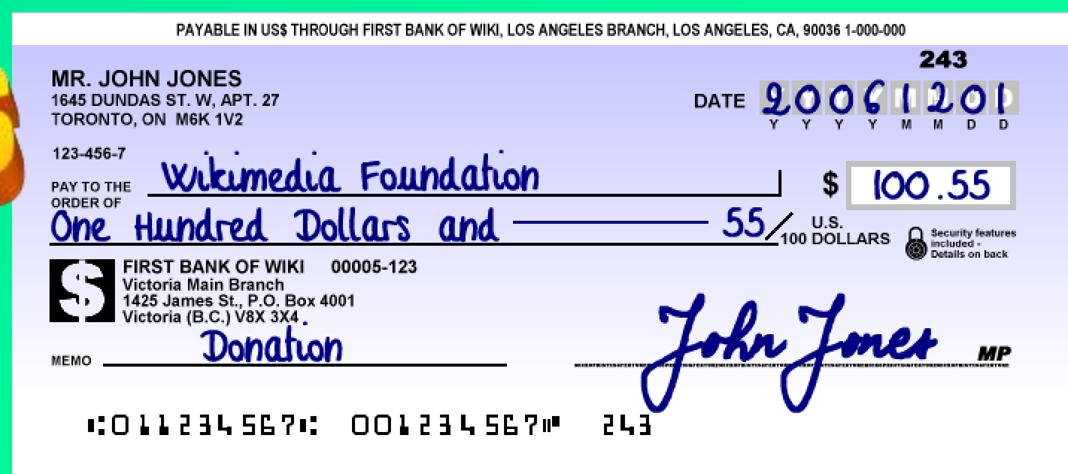


M2

Certificates of Deposit

- M2 serves as a store of value. It includes:
  - The M1
  - Time Deposits
  - Money Market Mutual Funds
  - Savings Accounts
  - CD's





Savings Accounts

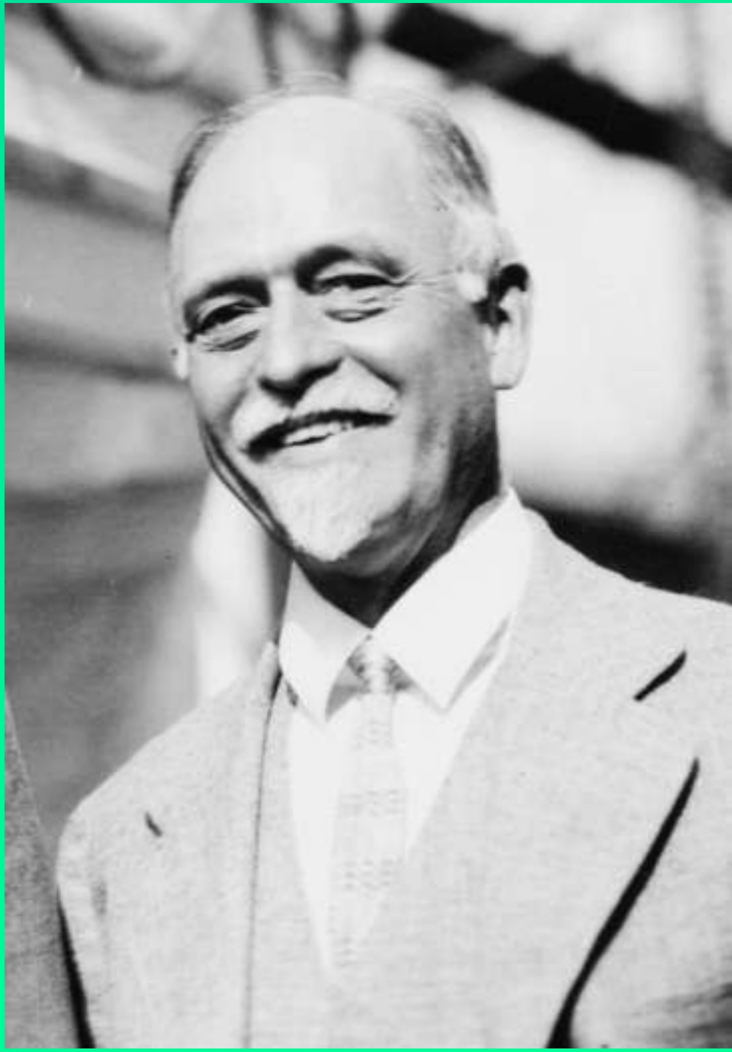
M1 & M2

- As we go from M1 to M2
  - The measure becomes larger
  - *Money becomes* ***less*** **liquid**
- As we go from M2 to M1
  - The measure becomes smaller
  - **Money becomes** ***more*** *liquid*

Relating Money to GDP

- Economist, Irving Fisher postulated that :

Nominal GDP = The Money Supply * Money's Velocity

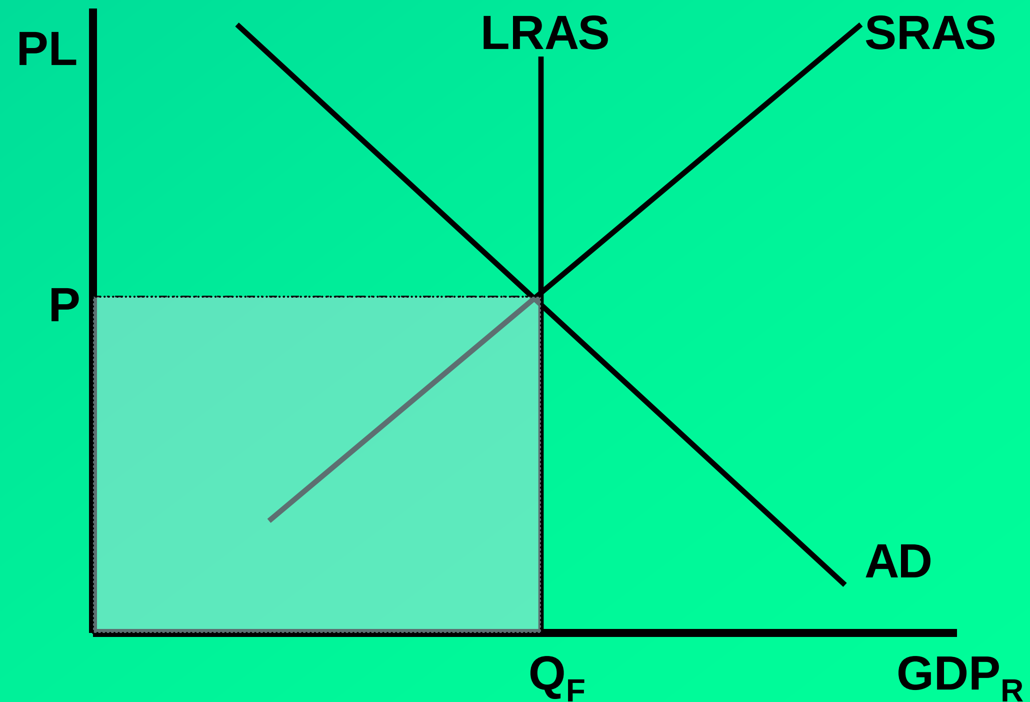


The Monetary Equation of Exchange

- MV = PQ
  - M = money supply
  - V = money's velocity
  - P = price level (PL on the AS/AD diagram)
  - Q = real GDP (sometimes labeled Y on the AS/AD diagram)
  - P*Q or PQ = Nominal GDP

The Monetary Equation of Exchange

- MV=PQ
  - M1=$2 trillion
  - V of M1 = 7
  - PQ = $14 trillion



The FED (Federal Reserve Bank)

This is Ben Bernanke. He is chairman of the FED.

What is the Fed?

- It is the central bank of the United States. There are 12 regional banks across the country, and the board of governo

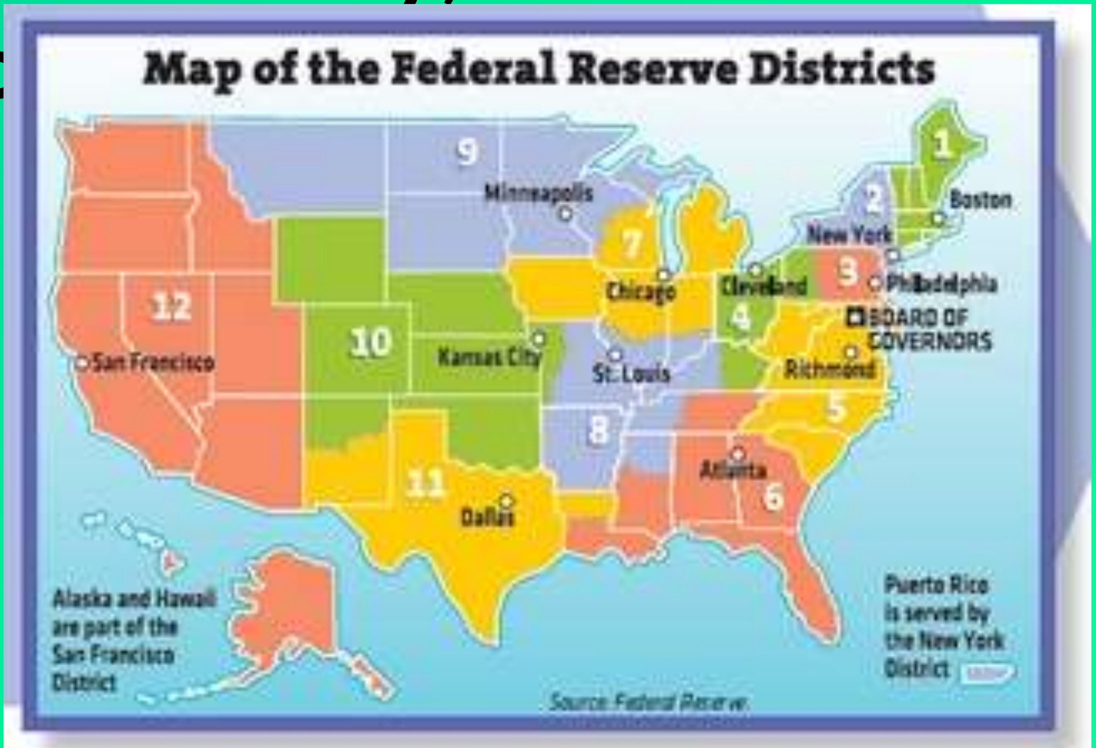


Figure 3: Fed regional banks reflect the U.S. population in 1913.

The Fed has 3 Functions:

- 1. conduct monetary policy.
- 2. regulate banks and make loans to them as necessary.
- 3. act as the bank of the government.

Function 1: Conduct Monetary Policy

- The purpose of monetary policy is to control the money supply. The Fed doesn't print money, but they do increase or decrease how much is in circulation. They also control interest rates.

- How do they do that?

- 3 tools of monetary policy
  - Discount rate
  - Reserve Ratio
  - Open market operations

The Tools of Monetary Policy

Discount rate – the interest rate charged by the central bank on loans to commercial banks.

- **Federal Funds rate: ir that banks charge each other: Fed doesn't directly control this**

http://www.bankrate.com/rates/interest-rates/prime-rate.aspx

How does changing the discount rate affect the economy?

- When the discount rate increases,

- When the discount rate decreases,

The Tools of Monetary Policy

Open market operations – the central bank buys and sells government bonds

How does buying and selling bonds change the economy?

- When the Fed buys bonds,

- When the Fed sells b

The Tools of Monetary Policy

Reserve requirement – the minimum level of deposit reserves commercial banks must hold.

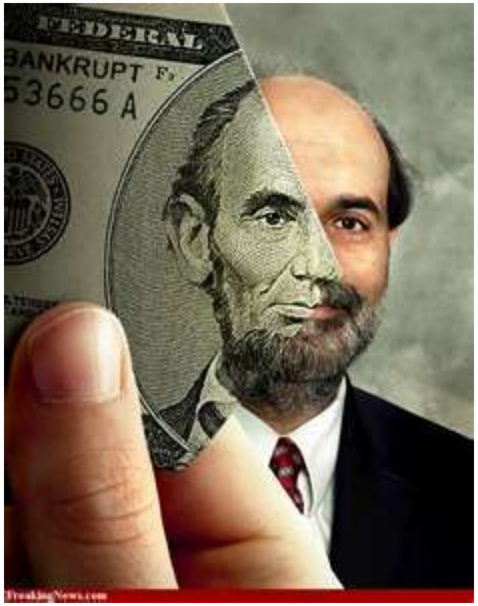
How does changing the reserve ratio affect the economy?

- When the reserve ratio increases,

- When the reserve ratio decreases,

Now it's time to ask yourself…..

- WWBBD?

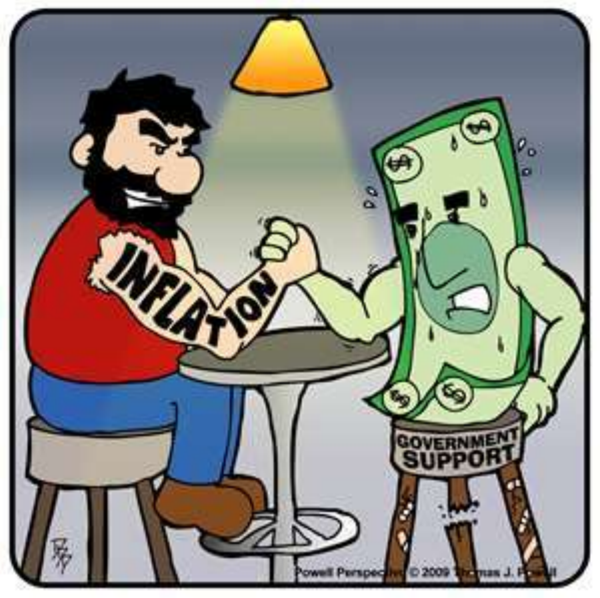


Expansionary Monetary Policy

- When the economy is in recession, the Fed may choose to EXPAND the economy by increasing the money supply and lowering interest rates.

Contractionary Monetary Policy

- When the economy is overheating or experiencing high inflation, the Fed may choose to CONTRACT the economy by decreasing the money supply and raising interest rates.



gure 38.4

ed Actions and Their Effects

Federal Reserve Action	Bank Reserves	Money Supply	Fed Funds Rate
A. Sold Treasury securities on the open market	↑ ↓	↑ ↓	↑ ↓
B. Bought Treasury securities on the open market	↑ ↓	↑ ↓	↑ ↓
C. Raised the discount rate	↑ ↓	↑ ↓	↑ ↓
D. Lowered the discount rate	↑ ↓	↑ ↓	↑ ↓
E. Raised the reserve requirement	↑ ↓	↑ ↓	↑ ↓
F. Lowered the reserve requirement	↑ ↓	↑ ↓	↑ ↓

	Monetary Policy Tool		
Problem	Discount Rate	Reserve Requirement	Open Market Operations
High Unemployment			
High Inflation			

To: Members of the Federal Reserve Board

Re: Current Economic Problems

I have received the following economic data and would appreciate your recommendations for future monetary policy.

	Unemployment Rate	Inflation Rate
Last Year	4.2%	2.6%
This Year	3.9%	5.4%
Forecast for Next Year	3.8%	7.3%

1. What is the major economic problem confronting the U.S. economy?

2. What appropriate actions should the Federal Reserve take to promote stability?