Test Yourself: Financial Intermediation and Banks

Any system which gives so much power and so much discretion to a few men, [so] that mistakes – excusable or not – can have such far reaching effects, is a bad system. To paraphrase Clemenceau: money is much too serious a matter to be left to the Central Bankers.

Milton Friedman

Who were the founders of our modern banking?

Goldsmiths, people who would keep other people's gold safe for a service charge, were the founders of modern banking.

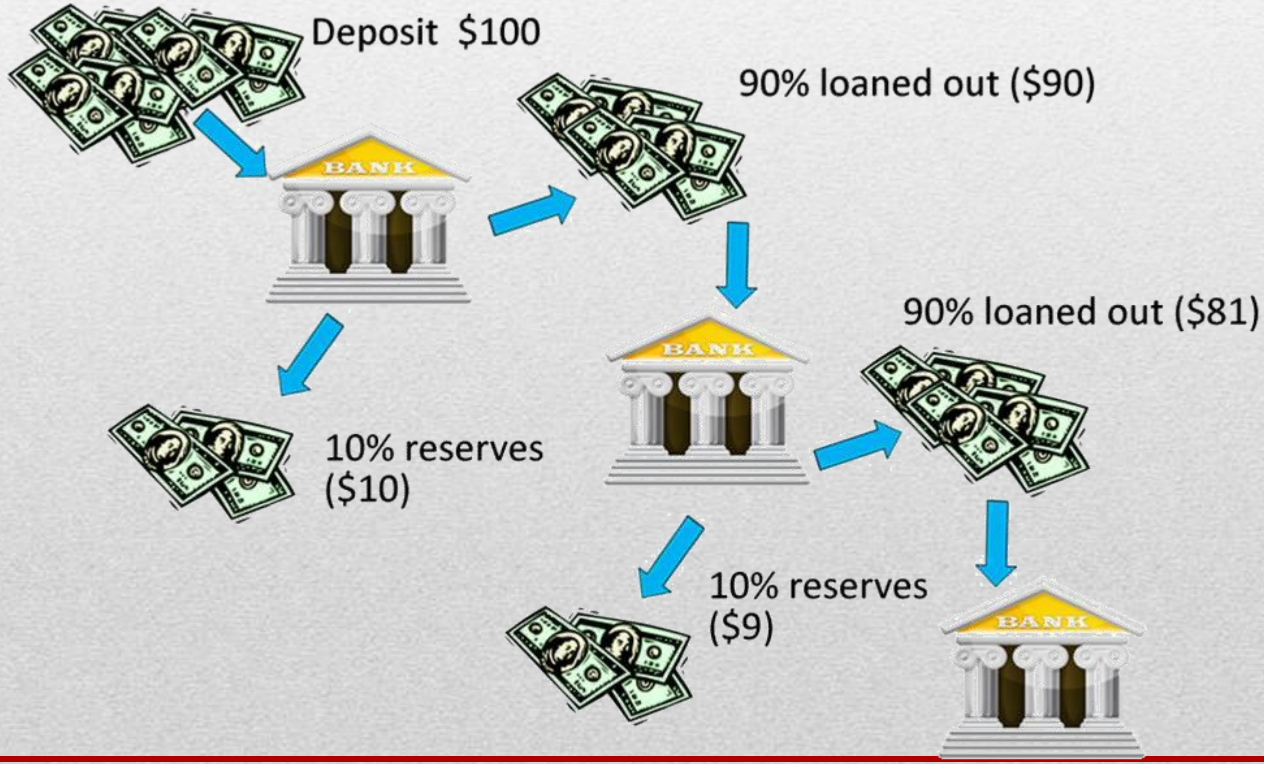
Some goldsmiths made loans and received interest.

Where do banks get money to lend?

Banks get money to lend from their *depositors*.

What is fractional reserve banking?

Fractional reserve banking is a system in which banks keep a small percentage (fraction) of their deposits in reserve.



What is required reserves / required reserve ratio?

Required reserves / a required reserve ratio is the minimum amount / percentage that the Fed requires a bank to hold in vault cash or on deposit with the Fed.

The current requirements are:

Liability Type	% of Liabilities Required	Effective as of
Net Transaction Accounts		
$0 to $15.2 million	0%	1-21-16
More than $15.2 million to $110.2 million	3%	1-21-16
More than $110.2 million	10%	1-21-16
Non-Personal Time Deposits	0%	12-27-90
Eurocurrency liabilities	0%	12-27-90

What are excess reserves?

Excess reserves are potential loan balances held in vault cash or on deposit with the Fed in excess of required reserves.

Total Reserves equals required reserves plus excess reserves.

Banks are allowed to loan money taken from their excess reserves. Ideally, banks continue to loan excess reserves until they're gone ... i.e. their total reserves equal their required reserves.

When will the money supply increase?

The money supply increases when banks lend money to borrowers.

change in money supply = (initial change in excess reserves (ER)) X (money multiplier (m))

$$\Delta M1 = (\Delta ER) \times (m)$$

What is the money multiplier?

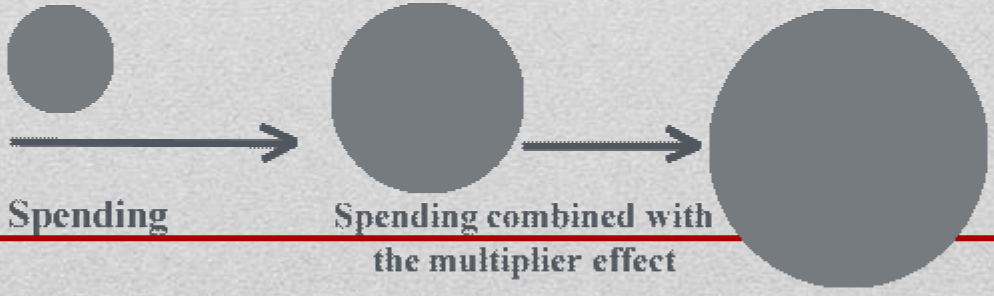
Because money is passed from person to person, there is a multiple effect (the money multiplier) on any initial money banks lend to borrowers.

What is the money multiplier equal to?

There is an *inverse* relationship between the size of the required reserve ratio (RR) and the money multiplier.

money multiplier = 1 ÷ required reserve ratio

$$m = 1 \div RR$$



If the required reserve ratio is 10%, what is the money multiplier?

$$m = 1 \div RR$$

$$10\% = 0.10$$

$$m = 1 \div 0.10$$

moneymultiplier $= 10$

If the required reserve ratio is 5%, what is the multiplier?

$$m = 1 \div RR$$

$$5\% = 0.05$$

$$m = 1 \div 0.05$$

moneymultiplier = 20

[Compare this answer to the previous answer and you'll see that the smaller the reserve requirement, the larger the money multiplier.

That's because (theoretically) the smaller the reserve requirement, the larger the amount of excess reserves available for lending.]

Can the multiplier be smaller than indicated?

Yes, the multiplier can be smaller than indicated because of cash *leakages* and the chance that banks will not use all of their excess reserves to make loans.

What is an example of leakage?

An example of **leakage** is people receiving money but deciding to save the entire amount instead of spending most of it. Because that money was not spent, it is no longer part of the money supply.

Keep in mind that if the money is in a bank's saving account, the bank can put part of it back into the money supply by lending it.

What is the Federal Reserve System?

The Federal Reserve System is the 12 central banks that service banks and other financial institutions within each of the Federal Reserve districts.

What is the Board of Governors of the Fed?

The Fed's Board of Governors consists of seven members appointed by the President and confirmed by the US Senate.

Each serves for a non-renewable fourteen-year term.

The BOG is responsible for supervising and controlling the US money supply and banking system.

Who is the chairman of the Board of Governors?

The President designates one member of the Board to serve as chair for a renewable four-year term.

Janet L. Yellen, the first woman to hold the position, is the current Chairman of the Board of Governors of the Fed.

What is the Federal Open Market Committee (FOMC)?

The FOMC is the Fed committee that directs the buying and selling of US government securities.

Its purpose is to increase the money supply if we have unemployment and decrease it if we have inflation.

What is the Federal Advisory Council (FAC)?

The FAC includes 12 prominent commercial bankers who council board members but who do not have voting rights.

What percent of all deposits reside in member banks?

About 70% of all deposits reside in member banks.

What does a Federal Reserve Bank do?

A Federal Reserve Bank:

- controls the money supply
- clears checks
- supervises and regulates banks
- maintains and circulates currency
- protects consumers
- maintains federal government checking accounts and gold

What is the Federal Deposit Insurance Corporation (FDIC)?

The FDIC is a government agency established in 1933 to insure commercial bank deposits up to a specified limit.

What is the Monetary Control Act?

The Monetary Control Act is a 1980 law that gave the Fed greater control of non-member banks and makes all financial institutions more competitive.

How does the Fed effect a change in the money supply?

The Fed effects a change in the money supply by *using its monetary tools to influence the liquidity of banks*.

What is liquidity?

Liquidity is a measure of the ease with which an asset can be converted into money without a significant loss in value.

When are banks most liquid?

When are banks least liquid?

Banks are *most* liquid when they have ample excess reserves.

Banks are *least* liquid when they have few excess reserves.

How does the Fed influence a bank's liquidity?

The Fed influences a bank’s liquidity through

- open market operations - buying and selling of government securities
- changes in the discount rate – the interest rate the Fed charges on loans to banks
- changes in the required reserve ratio - how much a financial institution must keep in reserve as a percentage of its total assets

What is the federal funds rate?

The federal funds rate is the interest rate banks charge for overnight loans to other banks.

The federal funds market is a market in which banks lend to each other for less than 24 hours.

What happens when a bank has ample excess reserves?

When a bank has ample excess reserves it will do everything it can to lend out the excess reserves.

What happens when a bank has few excess reserves?

When a bank has few excess reserves it cannot lend out much money.

What would the Fed do if we had inflation?

When we have inflation the Fed takes action to *make banks less liquid by decreasing the money supply*.

The Fed does this by:

- selling securities
- increasing the discount rate
- increasing the federal funds rate
- increasing the reserve ratio

What would the Fed do if we had unemployment?

When we have unemployment the Fed takes action to *make banks more liquid by increasing the money supply*.

The Fed does this by:

- buying securities
- decreasing the discount rate
- decreasing the federal funds rate
- decreasing the reserve ratio

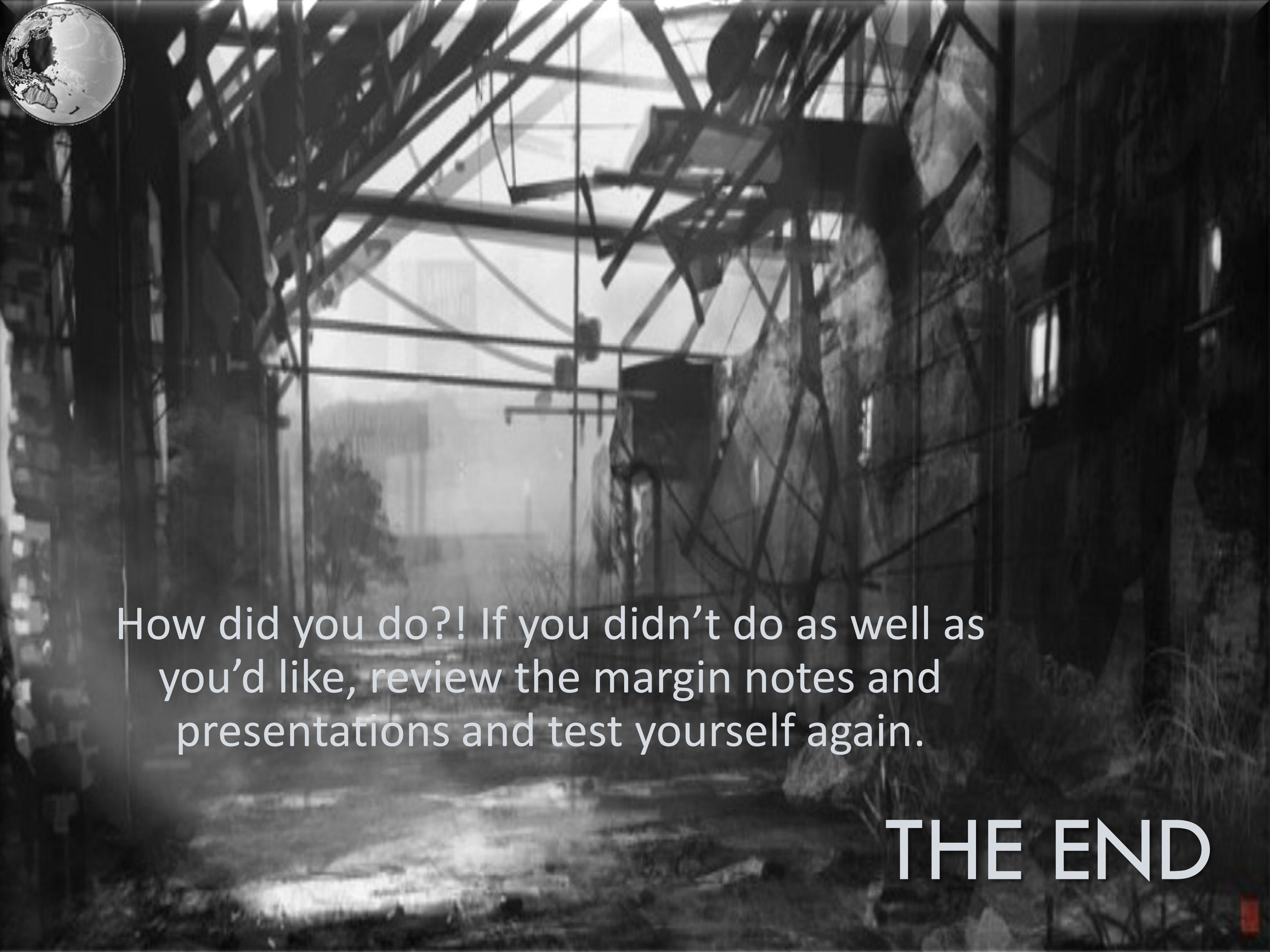
Is changing the reserve ratio a popular monetary tool?

No … changing the reserve ratio generates some instability and so is infrequently used.

What are the shortcomings of monetary policy?

The shortcomings of monetary policy include:

- multiplier inaccuracy
- competition of non-banks
- definition of money
- lag effects


How did you do?! If you didn't do as well as you'd like, review the margin notes and presentations and test yourself again.
THE END