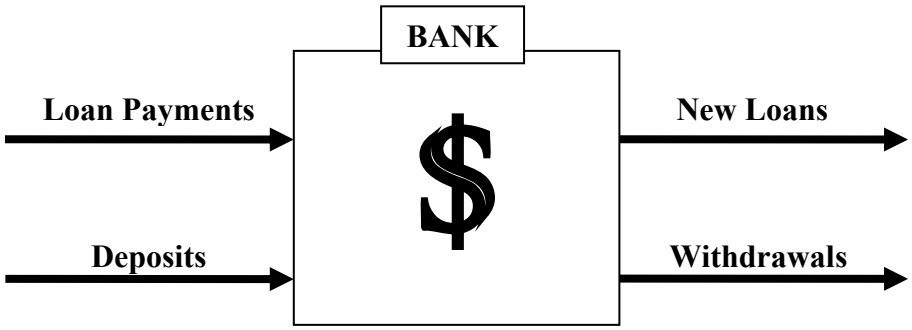
David Youngberg
ECON 201—Montgomery College

LECTURE 22: BANKS & THE GREAT DEPRESSION

I. Fractional reserve system
   a. Banks are *financial intermediaries*: they connect savers with borrowers. They make money by turning their liabilities (debts) into assets, such as lending out a deposit.
      i. *Reserve ratio* is the portion of deposits banks hold either in their vaults or at the Federal Reserve. Anything they don't hold onto, they lend out.[1]
      ii. This system is called the *fractional reserve system*; banks keep a fraction of what's deposited and the rest is lent out.
   b. A house of cards?
      i. So banks get money from depositors and then lend most of it out to others. But you can still stake a claim 100% of the money you deposited. How? It's not there anymore!!!
      ii. If you close your bank account, you'll be taking other people's deposits. This isn't a big deal—these individuals still have a claim to their money. People only want a fraction of the money in their checking account at any one time.
      iii. Every day, the bank brings in money from people paying back loans and from new deposits in accounts. Every day, money flows out in the form of loans and withdraws. Running a bank is all about doing what you can to manage those inflows and outflows.



[1] There's also this thing called the reserve requirement, or the percent of reserves that banks have to hold onto to cover withdraws. This is a regulatory requirement but even when the reserve requirement is zero, banks still have an incentive to keep cash on hand. No one wants to put money in bank and then not be able to get it back!

iv. The problem occurs when people take more out than what is there. This is called a bank run and when it happens, it becomes a disaster very quickly.

c. FDIC
   i. Stopping a bank run is very hard. The more people try to take money out, the more urgent it is to withdraw money. In emergencies, the government might declare a "holiday" and close the banks, but that doesn't really solve the problem.
   ii. The Federal Deposit Insurance Corporation insures all deposits under $250,000. If the bank fails, you'll still get your money. Just make sure your bank is a member of FDIC (it's a really shady bank if it's not).

d. Money creation
   i. If a bank gets new deposits, most of that money is lent out; that's the point of the system. Anyone who borrows money from a bank immediately gets that money in their bank account so they can spend it. (That's why people borrow money in the first place, after all.)
   ii. When a bank makes a loan, two things happen at the same time:
      1. It creates a new asset: the loan.
      2. It creates a new liability: the demand deposit of the same size as the loan.
   iii. The liability is *new* money; it is money creation. The vast majority of money creation happens though this lending process. It might sound like magic or it came out of nowhere but keep in mind that someone took out a loan—the money creation reflects genuine demand and thus cannot be made willy-nilly.

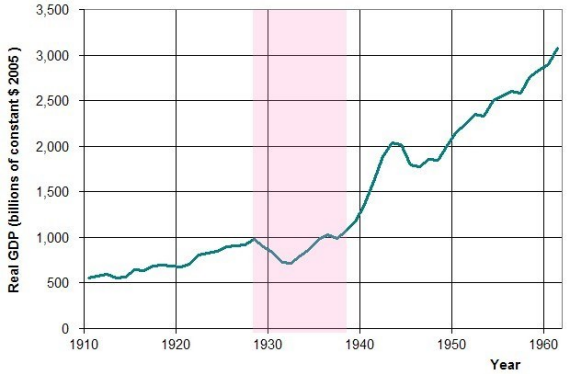
II. Basics of the Great Depression

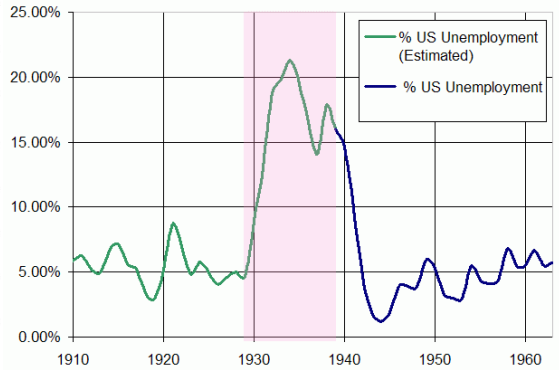
"To understand the Great Depression is the Holy Grail of macroeconomics."
—Ben S. Bernanke, 1994

a. The Great Depression was the longest, deepest economic downturn in U.S. history. The unemployment rate went over 20% and GDP fell as much as 24% in the first few years.[2]
b. There was also massive deflation; prices fell by about one-third in the first few years of the Depression.

[2] http://www.multpl.com/us-gdp-inflation-adjusted/table

c. Nor was it a uniquely American problem; it was a worldwide crisis, beginning in 1929 (or 1928 for some countries like Germany and Brazil) and lasted until 1939, though some argue it lasted until the end of WWII.





II. Background

a. Understanding the causes of the Great Depression requires understanding why it was a global event, and that requires understanding the gold standard, which was an important way economies at the time were linked together.

b. Before World War I, most countries were on the gold standard. Paper currency was backed by gold and people could exchange gold for currency and vice versa. During the War, countries switched to a pure fiat system to fund the war effort (so they were no longer constrained by their gold supply), and slowly readopted the gold standard during the 1920s.

c. At the same time, bank panics were not unusual. These were the days before deposit insurance: when even mere rumors of insolvent banks surfaced, bank runs, and subsequent failures, would follow.

   i. Banks failed throughout the 1920s, although these failures are relatively small scale and spread out.

   ii. There was a major recession in 1920-21, however this did not lead to massive bank failure because banks were less exposed to debt. Corporate and household debt levels were much lower in 1920 compared to later, in 1929.

d. Economic historians agree the initial cause of the Great Depression was a fall in the money supply.[3] The Depression would then be aggravated by the collapse of the banking system, then later by wage shocks. In our AD-AS diagram, these three events manifest as three

[3] Milton Friedman would win the Nobel Prize in Economics for his work in area. See the landmark book he wrote with Anna Schwartz, *A Monetary History of the United States*.

different shifts: a leftward shift in AD, a leftward shift in LRAS, and a leftward shift in SRAS. Note all of these shifts decrease real GDP.

II. Prices and the Gold Market

a. The market for gold linked economies together because (almost) all economies were on the gold standard. But a gold standard make the gold market strange because the price of gold is set by law.
    i. For example, in 1920s America an ounce of gold was worth $20.67. You could go to a bank and get one ounce of gold at that price. You bought gold from the government.

b. If the demand for gold increases, how do you reflect a change in the price of gold? After all, a dollar is *defined as* a certain amount of gold. The answer is to change the price of *all other goods*, or to change the price level.
    i. Imagine you have an ounce of gold and that gold has become more valuable because lots of people want it.
    ii. In normal circumstances, the price of gold would go up and if you sold the gold, you would get more money than usual, and could use that money to buy lots of stuff.
    iii. But gold prices *can't* increase because money is *defined* as a certain amount of gold. So how can we get to being able to have more stuff, like we should? By cutting the prices of everything else. And as we'll see, that exactly what happened.

III. AD Shifts Left

a. In the 1920s, central banks in the U.S. and France started buying gold. *Lots of it*. About <u>half</u> of the world's gold would be held by these two central banks.
    i. Why did France do this? There were few francs in circulation—people bought gold with foreign currencies and sold the gold to the central bank to get francs. It was the only way to get cash. Also, the French Monetary Law of 1928 required the French central bank to have a high minimum of gold reserves relative to the francs in circulation (at least 35 percent), which it often bought with foreign currencies. By 1930, France's "cover ratio" was over 50 percent.
    ii. Why did the U.S. do this? Concerns about stock market speculation encouraged the Federal Reserve to increase interest rates (so people wouldn't borrow money to put into the stock market). As interest rates rose, people sold gold to the Fed to get dollars, which they put in banks to earn these high interest rates.

b. Critically, neither central bank increased the money supply to balance out all this gold. The money supply fell. (AD shifts left.)
c. As the price level falls, investors (correctly) predict businesses will have a difficult time. The stock market crashes, the public gets scared. (AD shifts left more.)
d. As deflation deepened, banks started to fail because lenders, especially farmers, defaulted. People panicked and pulled money out; bank runs were common, meaning even more banks failed. Bank failures meant less money in the system (remember, banks create money through loans), and they scared people into keeping money at home, where it was functionally removed from circulation. (AD shifts left *even more*.)
e. This is a classic deflationary spiral—lower prices establishes expectations of lower prices in the future. Expected lower prices reduce the demand for investment, thus shifting AD left and causing even lower prices.