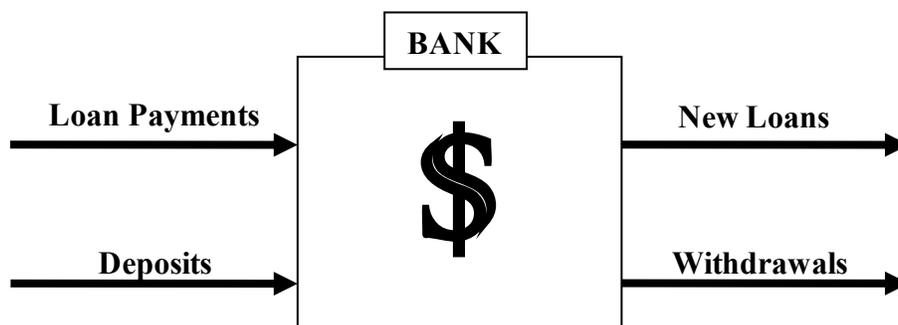


## LECTURE 22: BANKS & THE GREAT DEPRESSION

- 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.<sup>1</sup>
    - 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 withdrawals. Running a bank is all about doing what you can to manage those inflows and outflows.



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<sup>1</sup> There's also this thing called the reserve requirement, or the percent of reserves that banks have to hold onto to cover withdrawals. 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 through 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.

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

## II. Basics

- a. Understanding money and banking is fundamental to understanding the cause of the Great Depression.
- b. 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.<sup>2</sup>

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<sup>2</sup> <http://www.multpl.com/us-gdp-inflation-adjusted/table>

- c. There was also massive deflation; prices fell by about one-third in the first few years of the Depression.
- d. 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. To understand what caused the Great Depression, we need to understand how currency at the time worked.
- 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 (as they were no longer constrained by their gold supply), and slowly readopted the gold standard during the 1920s.
- c. This proved to be a big mistake because the world was now a very different place.
  - i. The major powers were decimated by the war while the U.S., a new and emerging power, was virtually unscathed.
  - ii. Reparations and war debts further hampered European economies.
  - iii. The U.K.'s decline was particularly problematic because the gold standard works best with a strong lead country to help manage gold flows between countries but it's sorry state after the War meant the U.S. became the de facto leader. This would be bad.
- d. At the same time, bank panics were not unusual. These were the days before deposit insurance: when even 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. Corporate and household debt levels were much lower in 1920 compared to 1929.
  - e. Economic historians agree the main cause of the Great Depression was a fall in the money supply.<sup>3</sup> It came about due to two forces ramming into each other: a poorly managed gold standard and poor policy during a major bank panic.
- II. Gold Standard
- a. Concerned about stock market speculation, the Fed drastically increased interest rates. As a result, gold flowed into the U.S. and the USD became more valuable (investors sold their gold to the U.S. in exchange for USD so they can put the money in U.S. banks and get these higher interest rates).
  - b. France also attracted these gold inflows—the interest rate was high, the franc was undervalued, and France had a reputation as a safe haven for capital.
  - c. By the late 1920s, *60 percent* of the world’s gold reserves were in these two countries. As gold flowed into these countries, other countries—such as Japan, Germany, the U.K.—experienced outflows.
  - d. As gold flowed out of these countries, they reduced their money supply, causing deflation. But, crucially, the central banks of France and the U.S. did not increase their money supply as they brought in more gold. They just hoarded it. As they accumulated more gold, deflation followed.
    - i. England used to be the *de facto* leader in the gold standard—most gold flowed into it because, before the War, England was the most powerful country in the world.
    - ii. The Bank of England was a for-profit bank. When it got a lot of gold, it sold anything it didn’t need to back its currency.
  - a. After the War, the U.S. was the new leader—it alone had 40 percent of global gold reserves—and was *not* for profit. It had no incentive to offload gold it wasn’t using.
- III. Banking panics break the fragile system
- a. It began in 1929, and looked much like a “normal” series of bank panics. People thought the economic downturn would be like the 1920

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<sup>3</sup> 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*.

crash (and thus would recover quickly). For a while, it looked like it would.

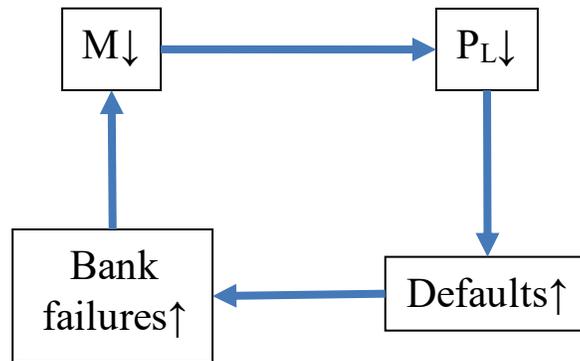
- b. Then bad news piles up again. Some items include: Bank of the United States failed the largest bank to fail up to that time (Dec 1930); Kreditanstalt, the largest bank in Austria, failed (May 1931); Britain left the gold standard (Sept 1931), creating even more uncertainty.
  - i. More panic set in, banks failed, and their role as financial intermediaries disappeared. Fewer loans were made, causing a fall in the money supply (remember, new loans create money). And people hoarded money, reducing the money supply even more. Deflation deepened, defaults rose, more banks failed, and it all got worse.
- c. Economic activity slowed, and prices fell, averaging about 7 percent each year between 1930 and 1933. This caused borrowers, especially farmers who could no longer get a good price on their crops, to default on the loans they made to buy seeds the previous spring.
  - i. Why did banks have all their money in farmers? Because they weren't allowed to diversify. U.S. restricted the creation of bank branches and thus a lot of small regional banks had few customers besides farmers.
- d. Banks failed. A lot of them. In 1929, there were 25,000 banks in the U.S. By 1933, there were just 15,000.<sup>4</sup> (There are currently around 4,000 banks with 75,000 branches.<sup>5</sup>) Bank runs were common and the money supply fell even more as people pulled their savings out of banks and kept it out of circulation.
  - i. Wait, isn't deflation good for lenders and bad for borrowers? Sure, but when deflation's so large that borrowers can't repay loans, it's bad for everyone! As industrialist Jean Paul Getty once said, "If you owe the bank \$100 that's your problem. If you owe the bank \$100 million, that's the bank's problem."
- e. Remember that banks are financial intermediaries; their collapse created a real problem because there were fewer institutions making loans and greasing the wheels of investment. There were markedly lower levels of lending and investment during the early 1930s.

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<sup>4</sup> <https://fee.org/articles/the-great-depression-according-to-milton-friedman/>

<sup>5</sup>

[https://banks.data.fdic.gov/explore/historical?displayFields=STNAME%2CTOTAL%2CBRANCHES%2CNew\\_Ch\\_ar&selectedEndDate=2021&selectedReport=CBS&selectedStartDate=1934&selectedStates=0&sortField=YEAR&sortOrder=desc](https://banks.data.fdic.gov/explore/historical?displayFields=STNAME%2CTOTAL%2CBRANCHES%2CNew_Ch_ar&selectedEndDate=2021&selectedReport=CBS&selectedStartDate=1934&selectedStates=0&sortField=YEAR&sortOrder=desc)



- f. Why didn't the central banks reflate the currency to save the commercial banks?
- i. Part of this is the gold standard: had the Federal Reserve reflatd (by lowering the interest rate it charges banks), gold would leave the country (because interest rates are lower), and the Fed would've had to raise the interest rate it charges bank (because less gold meant it could back fewer dollars), thus returning to deflation.
  - ii. Part of it was to due to tied hands: by law, many European central banks (including France's) weren't allowed to freely create new money. They couldn't, for example, buy
- g. The Great Depression illustrates the importance of maintaining the financial sector during economic downturns. It's why during the Great Recession, Bernanke (who was Fed chair at the time) bailed out banks. If the Fed had done something similar in the early 1930s, the Great Depression might well have been avoided altogether.