
Great Depression and Current Recession

Great Depression

1929-1933: Bank Runs

From “A Monetary History of the United States 1857-1960” by Milton Friedman and Anna J. Schwartz

Year-to-year Percent Changes				
Year ending	Real GDP	Price level	Bank deposits	Reserves
1929	5.9	2	-1.4	-3.1
1930	-9.3	-4	-4.7	4.3
1931	-8.0	-8.8	-20.6	-5.9
1932	-14.1	-9	-11.3	2.2
1933	-2.1	-2.6	-11.6	7.8
1934	7.4	7.7	16	35.8

Figure by MIT OpenCourseWare.

“Flight to Currency”

- Cumulative decrease of bank deposits over 1929-1933 was 48.2%
- Why??? It was not because reserves fell, given that they rose by 8.4%
- A fractional reserve banking system is fragile
- Two possible equilibria:
 1. people believe banks have enough reserves to cover withdrawals and hence they do
 2. people believe banks do not have enough reserves and hence they don't
- In 1929-33: three episodes of bank runs in 1930 and 1933
- Hence aggregate decrease in deposits due to bank failures + preemptive withdrawals from sound banks

The depression

- How can increased demand for currency precipitate a depression?
- To build up cash reserves, people sell off other assets (M^d shifts!)
- But the economy as a whole cannot get more liquidity if M is fixed.
- The only effect of this effort is that i increases
- Only possibility to hold more cash is to reduce cash outflows, and hence spending reduced by 58%
- Spending decline results in both deflation and decline in production.
- **Policy mistake for Friedman:** the Fed could have offset deposit decrease by increasing reserves, permitting/encouraging sound banks to expand deposits

Bank Regulation

- After 1933, Roosevelt administration introduced measures to prevent bank runs
- 1933: Glass-Steagall Act set up deposit insurance (FDIC)
- Only commercial banks permitted to issue insured demand deposits and regulated more tightly than investment banks
- Success to avoid bank runs BUT commercial banks get no return on reserves while investment banks can hold interest-bearing liquid assets
- Incentive for large depositors to move funds out of regulated banks and into unregulated (and uninsured) interest earning accounts (even more with inflation in the 70s)
- Become routine to move funds out of bank into other and higher return assets and then move them back just in time to make payments (“sweeps”)
- A legal evasion of the requirements that banks not pay interest on commercial accounts!

Current Recession

Financial Crisis 2007-08

- By 1990s businesses had moved most deposits out of commercial banks into short run securities that are thought to be **safe from default risk and yield a better return!**
- e.g REPO borrowing , short term governments and high-grade commercial papers, financial firms created low-risk derivatives out of packages of high risk assets,...
- People extending short term credit to Lehmann to get infinitesimally higher return than T-bill rate did not think (or did not admit) that they were taking on risk
- The mechanics of short term borrowing is very similar to issue of demand deposits: “give cash today and take it back whenever you like (decline to roll it over!)”
- **The economics of the “credit freeze” is very similar to bank runs!**
- Freeze affected financial institutions living on repeated issues of short term debt
- As liquidity supply declines, everyone wants to get in government-insured assets (reserves, currency and insured deposits): **flight to government promises to currency!**

Recession

- As in the early stages of the Great Depression, this reduces spending, affecting output and prices...
- What to do?
- According to Friedman and Swartz: the Fed needs to act as “lender of last resort”, injecting more reserves into the system fast
- This is exactly what the Fed is doing!
- Increasing reserves will stimulate spending, but the timing is uncertain.
- Bernanke’s speech for Friedman 90th birthday: “...I would like to say to Milton and Anna: Regarding the Great Depression. You're right, we did it. We're very sorry. But thanks to you, we won't do it again.”
- Need for other measures: TARP and Fiscal Stimulus

Lender of Last Resort

	Primary borrowings of depository institutions	Secondary borrowings of depository institutions	Seasonal borrowings of depository institutions	Term auction credit of depository institutions	Primary dealer and other broker-dealer credit	Other credit extensions	Asset-backed Commercial Paper	Money Market Mutual Fund Liquidity Facility
2007-12	3,787		1	30	11,613	NA	NA	
2008-01	1,137		0	6	44,516	NA	NA	
2008-02	155		0	3	60,000	NA	NA	
2008-03	1,617		0	6	75,484	16,168	1,249	NA
2008-04	9,624		0	21	100,000	25,764	0	NA
2008-05	14,076		0	47	127,419	14,238	0	NA
2008-06	14,225		70	75	150,000	6,908	0	NA
2008-07	15,204		107	98	150,000	255	0	NA
2008-08	17,980		1	97	150,000	0	0	NA
2008-09	32,632		35	87	149,814	53,473	0	31,877
2008-10	94,017		38	28	244,778	114,953	0	117,457
2008-11	95,839		117	8	393,088	60,655	0	71,009
2008-12	88,245		52	3	438,327	47,631	0	32,102

millions of US dollars

not seasonally adjusted

source: Federal Reserve Board

The Banking System: An Example

Typical Bank's Pre-crisis balance sheet:

Assets		Liabilities	
Loans and Securities	100	Deposits	70
		Short-term debt	10
		Long-term debt	10
		Equity	10

Banks made bad loans and bought bad securities:

Assets		Liabilities	
Loans and Securities	90	Deposits	70
		Short-term debt	10
		Long-term debt	10
		Equity	0

The bank is still solvent, but has 0 equity. However, if providers of short-term debt and depositors begin to question the solvency of the bank, they stop lending and withdraw deposits.

“Bank run” even if the institution is (or would be) solvent under normal conditions!

Everyone is suspicious of everyone else, because no one knows the real value of the equity. No one will provide short-term debt because they worry they will not get paid.

The Banking System: An Example

If the value of loans declined badly enough:

Assets		Liabilities	
Loans and Securities	80	Deposits	70
		Short-term debt	7
		Long-term debt	3
		Equity	0

The bank is insolvent because cannot pay debt holders.

TARP 2: inject equity in the banks + guarantee short term debtors

Assets		Liabilities	
Loans and Securities	100/90/80	Deposits	70
Cash	5	Short-term debt	10
		Long-term debt	10/10/5
		Equity	10/5/0

It will work if the value of the assets is either 100 or 90, but not if it is 80!

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