The Great Depression

ECON 43370: Financial Crises

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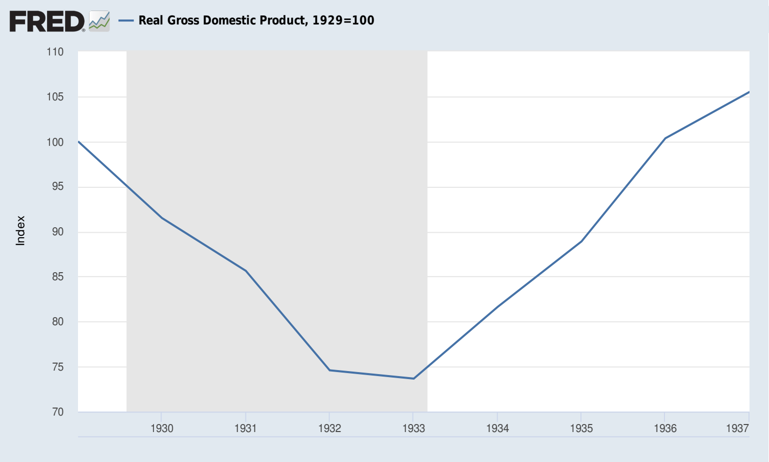
Readings

- Romer (1993)
- Calomiris (1993)
- Other sources:
  - Friedman and Schwartz (1965)
  - Bernanke (2002)

Fast Facts

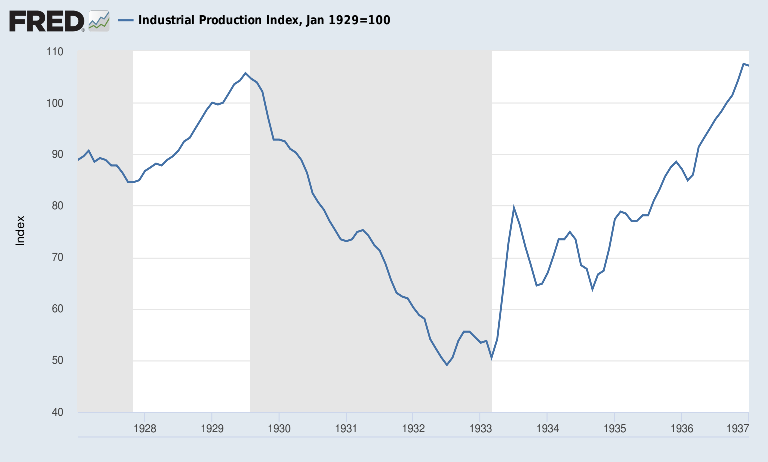
- Generally dated from August 1929 to March of 1933
  - Followed by another recession in 1937-1938
- Far and away the deepest recession in recent US history
  - GDP declined roughly 25 percent peak to trough. This is in absolute terms, not relative to trend!
  - Unemployment rate up to 25 percent
  - Massive deflation

Real GDP



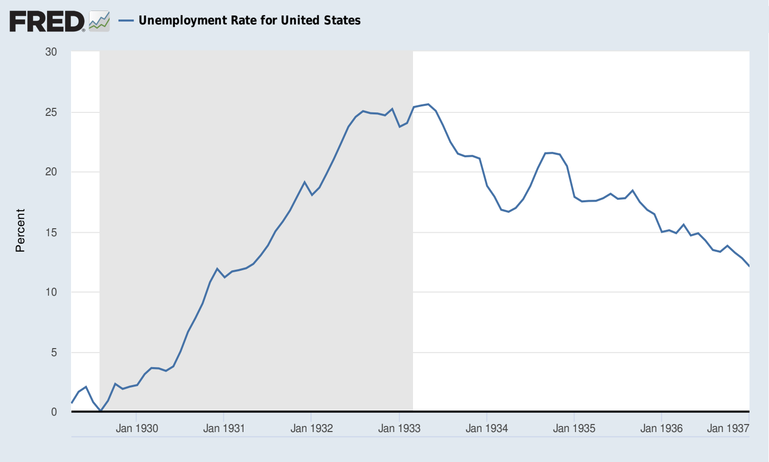
Shaded areas indicate U.S. recessions Source: U.S. Bureau of Economic Analysis myf.red/g/mVK0

Industrial Production



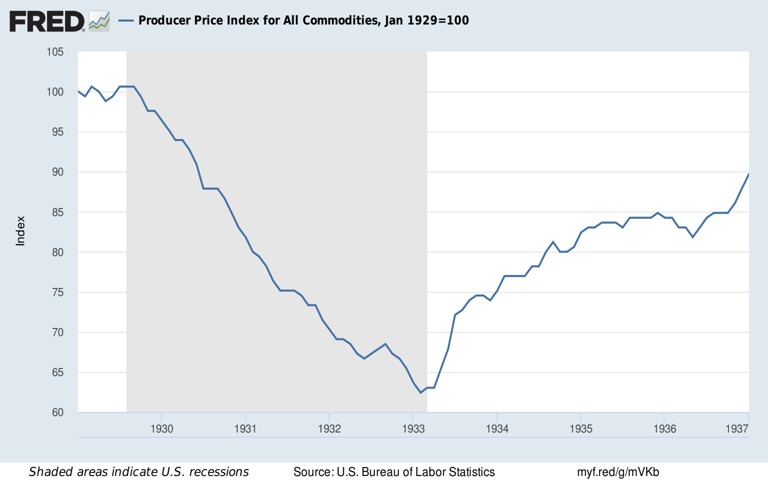
Source: Board of Governors of the Federal Reserve System (US) myf.red/g/mVKf

Unemployment



Shaded areas indicate U.S. recessions Source: National Bureau of Economic Research myf.red/g/mVK8

Prices


FRED
Producer Price Index for All Commodities, Jan 1929=100
Index
105
100
95
90
85
80
75
70
65
60
1930
1931
1932
1933
1934
1935
1936
1937
Shaded areas indicate U.S. recessions
Source: U.S. Bureau of Labor Statistics
myf.red/g/mVKb

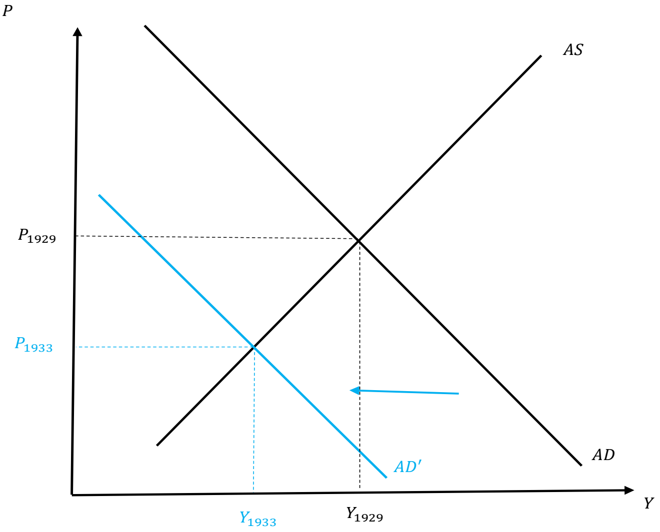
Key Questions

1. What was the initial shock that triggered the Depression?
2. What made it great?
3. What role did policy have?
4. Why did the Depression end?
5. What insights does it give us for the recent financial crisis or financial crises more generally?

Evolution of Thought

- At time, existing economic theories were ill-equipped to make sense of Depression. Economy was supposed to be efficient and self-correcting (classical view)
- Immediate wake of Depression: collapse of aggregate demand (autonomous expenditure) combined with some source of nominal rigidity (i.e. non-vertical aggregate supply) (Keynesian view)
- Friedman and Schwartz (1963): Fed was responsible because it allowed the money supply to decline (Monetarist view)
- Modern view (Mishkin (1978), Bernanke (1983),Calomiris (1993), Romer (1993)): some hybrid of the Keynesian and monetarist views, with some emphasis on importance on financial frictions
- Overarching conclusion: policy mistakes transformed a recession into a Depression

Negative Demand Shock



Three Different Views

- Simple AD-AS model with large decline in aggregate demand matches the empirical facts about output and prices quite well
- Sources of demand shock:
  - Autonomous expenditure: e.g. stock market crash in October 1929 and resulting pessimism ("animal spirits"), international trade linkages
  - Monetary: decline in quantity of money
  - Financial: collapse in technology for credit intermediation, worsening credit spreads and collapse in investment
- All of these likely played a role, and are indeed related (particularly the monetary and financial interpretations)

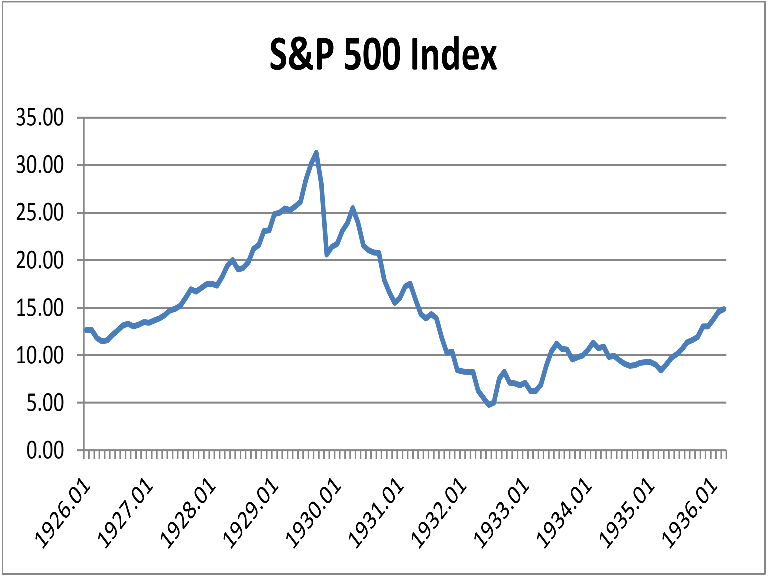
Romer (1993)

- Reviews some facts and puts Depression into international context
- Great Depression was international in scope
- But it was worse in the US than elsewhere and the causes were mostly US-centric (though international gold standard played an important role in tying hands of US policy)
    - Argues that international trade linkages not important in propagation and amplification of Depression

The Start of the Depression

- Federal Reserve tightening in late 1920s
- Short term interest rates (e.g. commercial paper) increased by 150 or more basis points from 1927 to 1928/1929
- Interest sensitive industries were especially hit (e.g. new construction building permits declined 21 percent in 1928-1929)
- Why did policy tighten? Largely over concern about speculation on the stock market (Hamilton (1987))
- International gold standard forced other countries to follow tight US monetary policy, helping to spread Depression from the US to abroad

Stock Market



The International Gold Standard

- Under a gold standard, currency is tradeable for a fixed amount of gold
- Suppose US interest rates are high relative to the rest of the world
- This incentivizes holders of other currencies to convert their currencies to gold, send gold to US, get dollars, and take advantage of high interest rates
- Maintenance of a gold standard requires sufficient gold reserves to redeem paper currency
- If one countries raises interest rates, if others don't follow suit they will lose gold reserves: must reduce paper currency and increase interest rates to not run out of gold
- This is primary mechanism by which recession spread globally – tight policy in US was spread abroad through adherence to gold standard

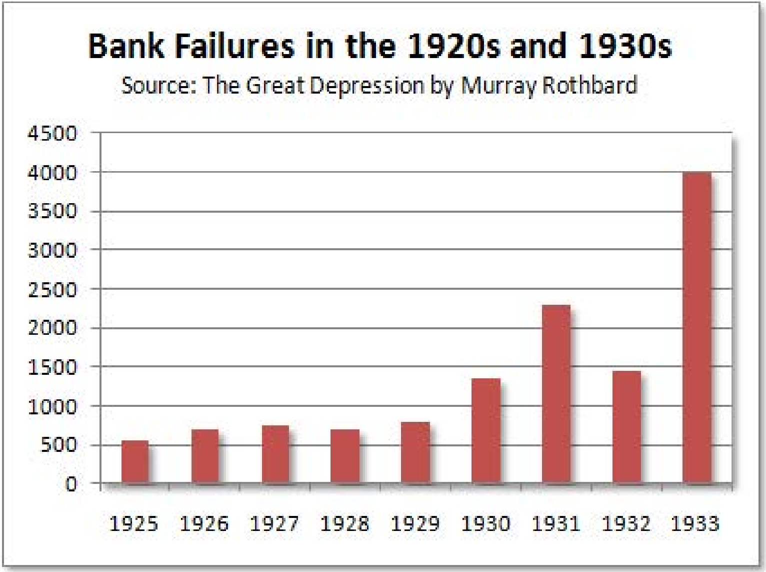
The Early Stages of the Depression: 1929-1930

- The initial impetus for the Depression was likely tight Fed policy
- But the decline in output and production in 1929-1930 was large (37 percent decline in industrial production)
- Hard to make sense of this as a pure response to monetary tightness
- Important feature of initial decline in output: consumption played a big role
- Romer pg. 30: "The most likely course of the precipitous drop in American consumption following the stock market crash in 1929 is the crash itself."
- Reason for consumption decline: uncertainty caused by stock market crash (also negative wealth effects, though non-durable spending did not react as much)

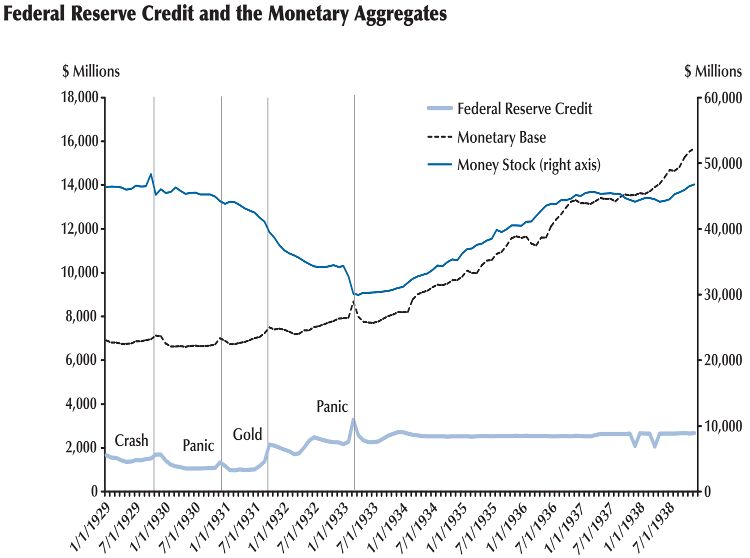
The Worsening of the Depression

- The Depression worsened starting in the Fall of 1930 with a series of banking panics
- Four waves:
  1. Fall of 1930
  2. Spring of 1931
  3. Fall of 1931 (following Britain leaving gold standard)
  4. Winter of 1933
- From 1930-1933, some 9,000 banks suspended operations with deposit losses of $2.5 billion, or 2.4 percent of GDP. Approximately 30 percent of banks in existence in 1929 failed over the period 1930-1933
- Compare these losses to losses from National Banking Era!

Bank Failures



Non-Accommodative Monetary Policy



Fed (In)Actions

- The Fed did not follow accommodative monetary policy at height of Depression
- Panic caused currency-deposit ratio to decline, and money supply to decline precipitously (in contrast Fed kept monetary base fairly constant)
- Monetarist: $MV = PY$ (quantity equation) with assumption that V is stable (stable money demand). Decline in M has direct effect on nominal GDP
- Why non-accommodative policy? Fear and indecision (death of Benjamin Strong, who was JP Morgan's lieutenant in 1907 panic . . . logic of fighting crises had been "lost")
  - Also gold standard. Britain left gold in 1931, raising concerns US would as well. Fed raised interest rates 100 basis points to stem outflow of gold, which resulted in massive decline in money supply and increased bank failures
  - Stigma: Fed misinterpreted lack of demand for discount window lending

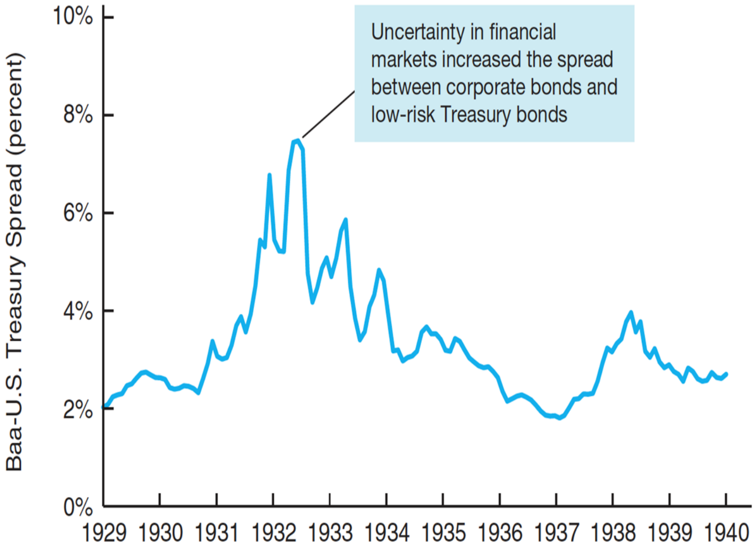
Recovery

- Much of the US recovery was monetary in nature, though not necessarily because of Fed per se
- 1932: Fed followed expansionary open market operations under threat from Congress, but ended when Congress adjourned in July and a vacuum in early 1933 before Roosevelt took office led to even more bank failures
  - You can see the beneficial effects in the monthly IP and price data from earlier figures
- Roosevelt left the gold standard shortly after taking office, effectively devaluing the dollar and allowing domestic prices to rise
- International uncertainty (in lead-up to WWII) led to gold inflows into the US
- Combined effect of which was an increase in monetary base (see earlier figure), lower interest rates, and increased output

Calomiris (1993)

- Summarizes research reflecting a “new” view of the Great Depression that emphasizes explicitly financial factors
- Not a rejection of the role of monetary policy, but a different take on the mechanism
- Monetarist: decline in M *directly* reduces aggregate demand
- “New view”: collapse in banking system exacerbated credit market frictions (i.e. Bernanke (1983))
- Decline in credit supply resulted in *long-lasting* declines in output

Credit Market Distress



Debt-Deflation

- Due to Fisher (1933) but revitalized by Bernanke (1983)
- Falling price levels increase the real burden of debt
- This leads to debtor insolvency and default
- Which in turn reduces the net worth of financial intermediaries
- Which in turn causes them to reduce the supply of credit and be themselves more susceptible to failure
- This become a vicious cycle
- The problem is monetary (deflation) but operates through financial system imperfections
- Countries that left gold standard earlier (and hence avoided deflation) fared *much* better

Policy Implications

- A shock will have bigger effects when overall leverage is high and a poorly diversified banking system
- It is not sufficient to simply keep the money supply from declining
- Open market operations not sufficient – need targeted lending to suffering financial intermediaries to get credit flowing again
- These are important when thinking about and evaluating policy responses in the Great Recession

Current Consensus View

- Depression was ignited by combination of monetary (Fed tightening in late 1920s) and non-monetary shocks (stock market crash and ensuing uncertainty/pessimism)
- But what turned it from a recession into a depression was poor monetary policy
  - Fed did not understand its role as lender of last result
  - Bank failures and losses far exceeded those in panics of National Banking Era
  - Adherence to gold standard led to international transmission and tied hands of domestic policy
  - Large deflation led to high real interest rates and exacerbated financial market tightness, leading to further declines in credit supply
- Ben Bernanke in 2002 to Milton Friedman: "You're right. We did it. But thanks to you, we won't do it again."