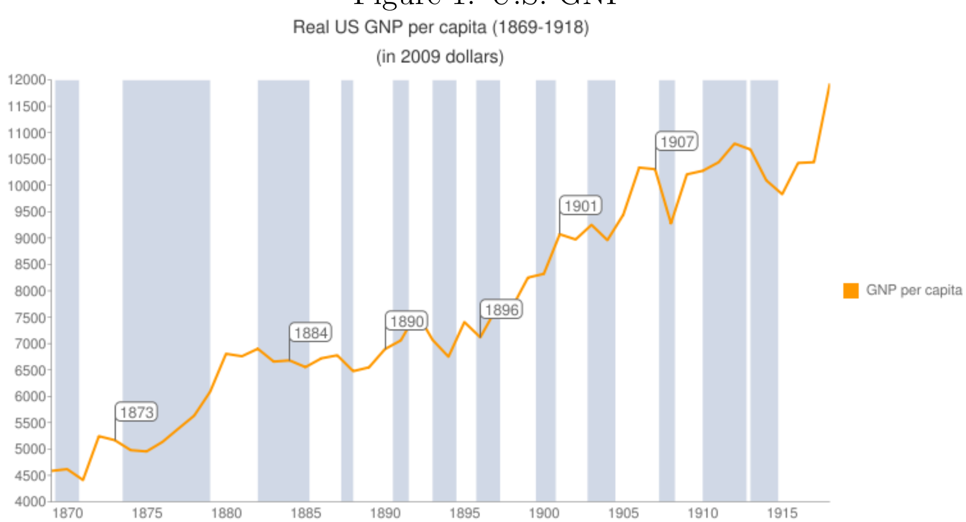
Monetary Wars, Panic, and the Creation of the Federal Reserve[1]

These notes discuss events preceding, and the creation of the Federal Reserve. It is not obvious when to start these. Earlier events, such as the dispute over the Second Bank of the United States in the 1830s are relevant for understanding the country's reluctance to create another Central Bank. In the interests of time, however, I decided to begin with the Coinage Act of 1873. This Act sought to end the Greenback prior and return the United States to a commodity standard.

Before beginning, it is useful to look at some data. The following chart show U.S. GNP through 1918.[2].

Figure 1: U.S. GNP



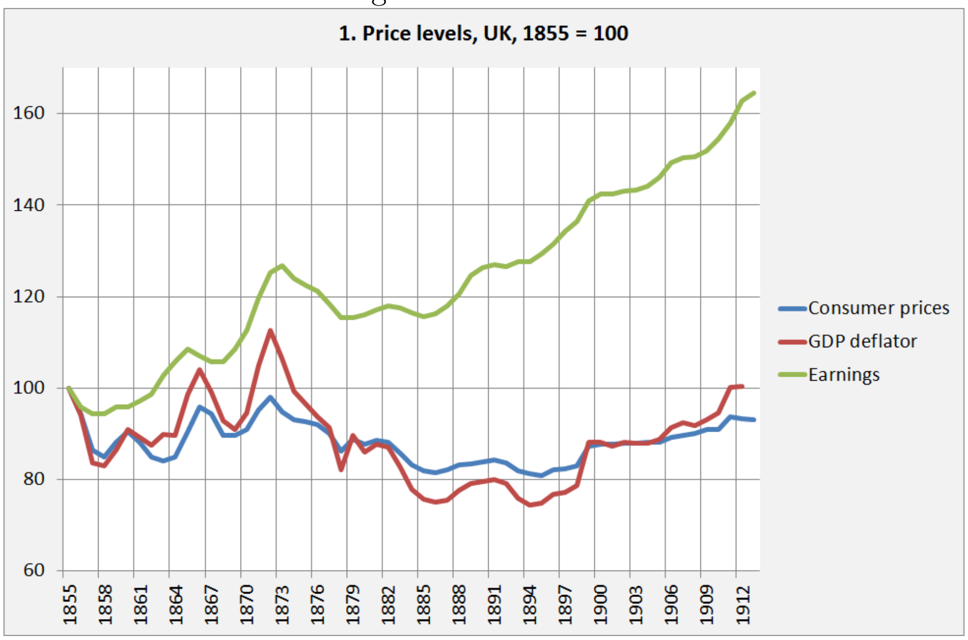
A few features stand out. First, notice that recessions were far more frequent than at present. Macroeconomists believe that some of this reduced volatility is due to improved macroeconomic policy, although there are other potential explanations such as better information. Second, note that the "long depression" (through 1896) is characterized by reduced growth, but it is not a continuous decline in output as suggested by the modern usage of the term "depression." It is likely that deflation reduced growth during this time, although the industrial revolution was sufficient to offset this, and generally cause positive growth.

[1]These are undergraduate lecture notes. They do not represent academic work. Expect typos, sloppy formatting, and occasional (possibly stupefying) errors.

[2]Source: Humbolt State University

The next chart shows U.K. prices (two measures: consumer prices and the GDP deflator), as well as earnings. Note the significant deflation until about 1896.[3] I am using U.K. prices because I couldn't find decent data for the U.S., and because these trends with prices were common across most countries using a Gold Standard.

Figure 2: U.K. Prices



Despite deflation, earnings growth was consistently strong. Again, this illustrates the difference in the use of the term "depression" between the period and today.

The Crime of 1873

We begin the background to the creation of the Federal Reserve with the Coinage Act of 1873, later known by its detractors as 'the crime of 1873." I'll leave it to you to decide if you agree with this description. This act set the Treasury Department on course to resume a gold standard in 1879 and set a rate of $2.67 for one ounce of gold. It was not terribly controversial at the time. There had been widespread support to return the United States to a commodity standard following the Greenback period of the Civil War.

A key feature of the law is that it legislated a gold standard, not bimetallism. Earlier in American history, there had been a bimetal standard where 1 ounce of gold was set to be worth 15 ounces of silver and an agent could exchange either commodity for dollars. The Coinage

[3] Source: "Ugly Deflation in the Nineteenth Centurty – And Now." *Real-World Economics Blog.*

Act allowed for no role for silver. Under bimetallism, only one commodity is actually used for money. If, for example, the market price of gold is more than 15 times greater than that of silver, it makes sense for holders of gold to convert to silver and then dollars. The economy would effectively be on a silver standard. This had had largely been the case prior to 1842 when the U.S. was effectively on a silver standard, Silver discoveries in the American West would have resulted in a low price of silver, again placing the United States on a silver standard after 1873, had bimetallism been restored at the 15:1 ratio of the past.

Two factors combined to make the Coinage Act controversial in the decades after its passage. First, the supply of gold would grow slowly. As discussed earlier, this puts deflationary pressure on an economy. As Friedman writes, the average annual inflation rate was 1.7% from 1879-1896, and for agricultural products, it was closer to 3.0%. This deflationary pressure created (in most countries using the gold standard) the "long depression." Here, "depression" is not used in the modern sense. Aggregate measures of variables such as output growth and unemployment were actually doing well, mostly because the economy was in the most of the industrial revolution. The term depression mostly refers to falling prices themselves. Significant deflation had detrimental effects on many groups:

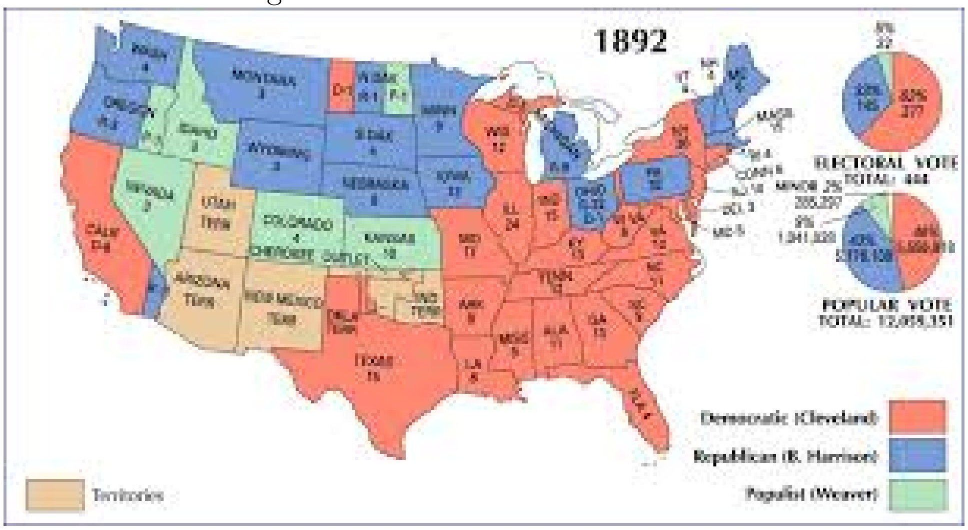
1. Sellers who hold goods fear deflation because their inventories lose value. Deflation is thus generally seen as transferring wealth from sellers (who are often smaller in group, but better organized) to buyers.

2. Deflation is also costly to borrowers whose debt is not indexed to inflation. One such group were farmers who typically borrowed on an annual basis to finance seeds for planting the next year. Falling agricultural prices caused their debts, in real terms, to rise on an annual basis. Farmers were among the most vocal critics of the Coinage Act. In contrast, much of the financial sector that were lenders, benefited.

The second factor that made the Act so controversial was the discovery of silver that meant a return to the silver standard (or bimetallism at the old rate) would have led to inflation. The monetary wars that centered around "free silver" was basically a debate over inflation. Free silver was supported by those who would benefit from inflation, while remaining on the gold standard was favored by those who would have been harmed.

Gold vs. Silver was a major issue in both political parties. The Republicans were generally firmer for gold than the Democrats. Before 1896, neither party had nominated a presidential candidate who supported the coinage of silver. The coinage of silver, however, had become a major issue for third parties, some of which achieved unusual success in Presidential elections. In 1892, the Populist Party (*a.k.a.* the Peoples Party) managed to win several Western States. This party won Nevada, known as the Silver State because of its silver mines, by a massive margin. The following tale shows the success of the Populists.[4]

Figure 3: 1892 Presidential Election



This issue peaked in the 1896 Presidential election. The Democrats nominated William Jennings Bryan of Nebraska as its nominee. This act represented a sort of merger between the Democrats, then the weaker of the two major parties, and the Populists. In his nominating speech, Bryan maintained that the Gold Standard was the most important issue of the era:[5]

> Now, my friends, let me come to the great paramount issue. If they ask us here why it is we say more on the money question than we say upon the tariff question, I reply that if protection has slain its thousands the gold standard has slain its tens of thousands. If they ask us why we did not embody all these things in our platform which we believe, we reply to them that when we have restored the money of the Constitution, all other necessary reforms will be possible, and that until that is done there is no reform that can be accomplished.

Later, he would deliver his famous "cross of gold" quote:

[4]Source: slidego.com

[5]Source: Official Proceedings of the Democratic National Convention Held in Chicago, Illinois, July 7, 8, 9, 10, and 11, 1896, (Logansport, Indiana, 1896), 226234. Reprinted in The Annals of America, Vol. 12, 1895-1904: Populism, Imperialism, and Reform (Chicago: Encyclopedia Britannica, Inc., 1968), 100-105.

> If they dare to come out in the open field and defend the gold standard as a good thing, we shall fight them to the uttermost, having behind us the producing masses of the nation and the world. Having behind us the commercial interests and the laboring interests and all the toiling masses, we shall answer their demands for a gold standard by saying to them, you shall not press down upon the brow of labor this crown of thorns. You shall not crucify mankind upon a cross of gold.

Ironically, by the time that Bryan gave his speech, discoveries of new gold (*e.g.* in South Africa) and improvements in the ability to mine existing gold discoveries had begun to increase gold supplies at a rapid rate. The long deflationary period was at an end and would be replaced with a relatively stable rate of inflation. The gold standard until the creation of the Fed would perform unusually well. The issue of gold vs. silver would thus diminish despite Bryan's fairly narrow defeat in the 1896 election. Gold would remain dominant until 1933.

Figure 4: Puck Cartoon

Friedman (1990) concludes that the Coinage Act was probably a mistake and the country would have been better off with the inflation that would have occurred with bimetallism or a silver standard. The monetary debates of this period did create a gap between gold standard supporters, who were more urban, Eastern, and wealthy, and silver supporters, who were more rural, Western, and poor. This division would worsen in 1907 with a most unusual financial crisis.

The Panic of 1907

The Panic of 1907 ranks among the weirdest economic crises is American history. To understand it, we need some background. Suppose that I want to save via the stock market. I can go *long* which means that I buy and hold shares. I am thus betting that the stock price will rise., Suppose, however, that I think a stock is overprices. I may then *short sell* the stock. The process works as follows:

1. I find a trader who is willing to lend me shares of the stock. I will typically pay interest on the market value of the shares that I borrow. The contract typically gives the lender the right to call in the loan under certain conditions

2. I then sell the shares that I have borrowed.

3. Some time in the future, I will pay the loan back by purchasing shares of the stock and returning them to the lender. If the price of the stock has fallen, then I will profit. It it has risen, then I will suffer a loss.

4. If the price of the stock has risen significantly, then so has my debt. If this triggers a requirement that I pay back my shares, then a *short squeeze* may occur. Here, short sellers must find shares to buy, further pushing up the stock prices. Losses may then mount and in some cases the shorts may default on their debt.

The Panic of 1907 began with a short squeeze. F. Augustus Heinze, a copper baron, decided to try a short squeeze on the stock of United Copper Company, a major producer that he already owned a significant stake in. Heinze and his family suspected that there was a large short position on the firm. They decided to buy as many shares as they could. This would drive up the stock price forcing a short squeeze. If Heinze was able to acquire all of the outstanding shares, shorts would have to buy shares from him at a price of his choosing.

Heinze's scheme failed. He simply didn't have the liquidity to acquire enough of United Copper Company's stock. Short sellers simply bought shares from someone else. After initially rising, the stock price crashed leaving Heinze illiquid. His firms, including banks and brokerages, failed.

The resulting series of events illustrates why the term *panic* came to describe financial crises in this era. The Knickerbocker Trust had previously funded many of Heinze's endeavors. Fears that it had done so again (which wasn't actually the case), led to a bank run. Keep in mind that this was an era without deposit insurance and where information about a bank's finances was relatively hard to come by.[6]

After the Knickerbocker's failure, the crisis spread to other large banks. Customers could not be sure which banks were safe, and which were not. They thus reacted rationally by seeking to withdraw their deposits. This led to another round of bank failures that made the crisis still worse.

There was no Central Bank in 1907 to act as a lender of last resort. Instead, some of the country's wealthiest citizens, including J.P. Morgan and John Rockefeller, committed to acting in a similar role. They deposited wealth into large banks that they judged illiquid (prior to their deposits) but not insolvent, This excluded the Knickerbocker Trust. This did seem to stem the panic. As is usually the case with financial crises, however, the panic did trigger a credit crisis and ensuing recession. The recession was fairly severe with unemployment rising above 8%.

The Creation of the Federal Reserve

The Panic of 1907 spurred serious discussion of monetary reform. The idea of private individuals acting as a backstop for the financial system struck many as dangerous. Likewise, the panic seemed orchestrated by speculation which suggested a greater need for regulation. Congress soon created the National Monetary Commission to suggest ideas for reform. This commission conducted a comparison of the financial systems of the United States versus those of Western Europe. The Commission found the American system, relatively unregulated and lacking a Central Bank, to be far less stable than those in Western Europe.

At this time, there was widespread suspicion of Central Banks in the United States. Previous central banks, such as the Second Bank of the United States in the early nineteenth century, had not ended well. Central Banks were viewed as elitist institutions that represented the interests of a wealthy few at the expense of the median voter (which is not to say that this suspicion is extinct).

The report of the National Monetary Commission, after extensive debate and alterations, became the Federal Reserve Act that created the Federal Reserve in 1913. The Commission had three main concerns:

[6] I assume that the Knickerbocker Trust's general incompetence and poor decision making was the basis for naming the NBA's New York Knicks.

1. “We have no provision for the concentration of the cash reserves of the banks and for their mobilization and use wherever needed in times of trouble. Experience has shown that the scattered cash reserves of our banks are inadequate for purposes of assistance or defense at such times.”

2. “Antiquated Federal and State laws restrict the use of bank reserves and prohibit the lending power of banks at times when, in the presence of unusual demands, reserves should be freely used and credit liberally extended to all deserving customers.”

3. “Our banks also lack adequate means available for use at any time to replenish their reserves or increase their loaning powers when necessary to meet normal or unusual demands.”

Banking reform had become a plank of the Progressive wing of each party, which included the newly elected Democratic President Woodrow Wilson. The Progressives generally preferred a more expert based style of governance and this included allowing for an independent monetary policy that would be insulated against the whims of both the electorate and the business class. To pass the act, mostly over the opposition of conservative Republicans, they were able to bring in the remnants of the Populist Party, William Jennings Bryan was made Secretary of State and supported the act, although he would later regret this. The Populists hoped that the Fed would provide for more stable prices, and reduce economic crises.

The following cartoon illustrates objections to the Federal Reserve (referred to as the National Reserve Association, the name suggested by the National Monetary Commission.) It argues that the Fed would have too much power over private business.

Figure 5: Another Cartoon

We now consider the structure of the Fed in light of the political environment that created it.

1. A regional structure. The Federal Reserve Act legislated between 8 and 12 (12 being the number put into effect) regional Feds. The Act required that all chartered American banks would have to join the Federal Reserve and would purchase non-transferable stock in the regional Fed banks. The regional Feds would enjoy considerable autonomy, maintaining their own Boards which appointed their own regional Presidents. The regional banks would conduct banking supervision and lending within their own districts. The following map shows these districts.[7]

Figure 6: Regional Fed Districts

The President would appoint a seven person Board of Governors located in Washington D.C. The Board of Governors would oversee the system.

This regional structure had a few advantages. First, it allowed supporters to claim that the Fed was really a system of private banks rather than a Central Bank.[8]. At the time, this was seen as a virtue, a centralized European type Central Banks was not politically feasible. Today, however, different political views may have made this a vice. Current observers are more skeptical of the idea of a private group of banks (which the Fed technically is), making public policy decisions.

[7]Source: federalreserveonline.org

[8]The title of this class suggests this didn't work very well.

A second virtue of the regional system is that it was a way to limit the power of New York, long the financial capitol of the country. The regional Feds initially set their own lending rates, and they made their own decisions about extending liquidity. This consideration was especially important after the Panic of 1907 which was seen as having been caused by a relatively small number of New York based speculators.

In 1933, Congress amended the Federal Reserve Act to create the Federal Open Market Committee (FOMC), which continues to conduct much of the Fed's monetary policy. In addition to the Board of Governors, this amendment placed the Regional Fed Presidents on the FOMC. This did, however, transfer some power away from the Regional Feds. The Board of Governors, necessarily holds a majority on the FOMC because most of the Fed Presidents do not vote at any given time. It also afforded special status to the New York Fed by making its President a permanent voting member, unlike any other Regional Fed President, This was done to recognize the importance of the New York Fed which actually conducts the Fed's open market operations.

2. Gold. The country was still not ready to abandon the Gold Standard. The Federal Reserve Act required that the Fed both continue to exchange gold for dollars at the prior rate of $20.67 per ounce. It also required that the Fed hold gold reserves equal to 40% of the currency that it issued.

The relationship between maintaining the Gold Standard and trying to manage monetary policy in order to stabilize prices is complicated. Suppose, for example, that the Fed wishes to raise prices by increasing the money supply. Doing so, however, may increase withdraws of gold, risking that the Fed might fall below its 40% reserve requirement. Note that the Fed did not have the legal authority to unilaterally move the country off of gold.

The Trilemma states that a country cannot simultaneously peg exchange rates and interest rates, while also maintaining the free flow of capital. Because the Gold Standard was a form of fixed exchange rates, the Trilemma makes it seem like the Fed would have had to give up control over the money supply and interest rates. But the Trilemma strictly applies to small open economies, The United States is not such an economy. It may have the ability to do all three, at least for a while. The tension between the gold standard and optimal monetary policy would rear its head during the Great Depression.

3. The preamble to the original bank provided three purposes for the Fed. The first was to provide for an "elastic currency." We can interpret this as a currency that expands of contracts

as needed to prevent significant inflation or deflation. We can view this as a response to the Long Depression, as well as the general fear of inflation that had long existed.

4. The Fed was to provide a "market for commercial paper."' We can view this as representing the Fed's role as a lender of last resort. During prior financial panics, firms were unable to find buyers for their paper, often causing them to fail. The Act would instruct the Fed to make loans in such cases where failures threatened the overall economy and where the borrowers were solvent, but illiquid.

5. Finally, the Fed was instructed to provide banking regulation. This was also a response to past panics, such as the Panic of 1907, where financial institutions were not adequately capitalized.

The original Federal Reserve Act did not conceive of the Fed as a stabilizer of the business cycle. The vision for the Fed was narrower, with it acting to reduce panics and bank runs through its role as a lender of last resort and regulator. It was hoped that the Fed would stabilize the currency. But this was more in the "sound money" sense of stable prices, not in the modern sense of manipulating money in order to affect the business cycle. The current mandate of the Fed would not come into being until 1977 when a Reform Act instructed the Fed to "to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates."

Although the Federal Reserve Act passed by a large margin, there was opposition. much of this focused on too much power being placed into the hands of the Federal Reserve. Charles Lindbergh Sr. argued that The Fed would become "the most gigantic trust on earth." and an "invisible government by the money power."[9]

[9]Source: Lowenstein, R. June 22, 2013. "The Federal Reserve's Framers Would be Shocked." *New York Times*