The United States’ first two central banks were short-lived. The First Bank of the United States founded in 1791, was a source of constant political debate, and its 20-year charter was not renewed. The Second Bank opened in 1816, then lost its charter in 1836 under the antagonistic Andrew Jackson administration. Thus began a period when U.S. banking was significantly less regulated than today.

For a time, government intervention was limited to setting reserve requirements. It was easy for any bank to obtain a state charter, provided it met the $100,000 minimum capital requirement, about $2 million in today’s dollars. Most alien to today’s customs was that 7,000 state banks issued their own currency. Yet the system functioned with surprising efficiency. A financial press listed the prices of all outstanding currencies, giving full information to the market. During the 1850s, the number of state-chartered banks grew by 79 percent, and the availability of financial capital enabled strong economic growth in the antebellum era.

“Those states that promoted financial development the most, either through liberal chartering, free banking, or broad-based branch banking experienced moderate to high rates of growth,” economist Howard Bodenhorn wrote.

Some have labeled this the era of “free banking.” It lasted until the early years of the Civil War. It was not market failure that derailed free banking, but rather President Abraham Lincoln’s war debts.

The National Banking Act

The North spent $3.2 billion to win the Civil War, and Lincoln recognized that existing taxes and tariffs could not cover the entire cost. During the war, the federal government printed U.S. notes — paper money called greenbacks. This fiat currency was expected to be retired after the war. But because the political environment favored an expanded money supply, a limited amount remained in circulation and can still be exchanged for cash today.

However, the greenbacks that remained could not entirely fund the war so Lincoln instituted the National Banking Act in 1863. The act chartered national banks to compete with state banks. Banking at the time was largely local because the economy was not fully integrated. A disproportionate majority of the national banks were concentrated in the Northeast, especially in New York City. Because of the Civil War, the government neglected to charter banks in the South.

Not that the South cared. Southerners generally distrusted the federal banks as government overreach. Had the South not seceded, Southern votes in Congress likely would have prevented the passage of the National Banking Act. After the war, national banks in the South continued to lag the North because the war had gutted Southern infrastructure, and so Northern banks were viewed as more secure. Federal officials also were biased toward granting national charters to already existing banks, thus setting the South at an even bigger competitive disadvantage.

The national bank notes would finance Lincoln’s government because to issue them, banks had to purchase government bonds. In the event that a national bank defaulted,
Customers could redeem the notes for up to 90 percent of value at the Treasury and the government would cancel the banks’ bonds. Lincoln hoped that the security bond-backing provided would cause people to use the notes to the exclusion of state bank notes. Still, state banks, especially the most profitable ones, were reluctant to leave the status quo. They feared the prospect of federal regulation. By mid-1865, 85 percent of American currency remained in state bank notes.

The next year, a 10 percent tax was imposed on state bank notes, which put them at a severe disadvantage and made national bank notes the nation’s primary currency.

Growth of Retail Banking
The predictable consequence of the 10 percent tax was the death of state bank notes. The unintended consequence was innovation in banking services. With the ability to issue currency gone, state banks had to invent new financial services to remain in business.

Checkable deposits, although around before the creation of the bank act, grew in popularity after the tax on bank notes. By 1881, checkable deposits made up 82 percent of banking receipts. Checking became especially popular among farmers who lived in rural areas not widely served by national banks.

In addition to checking, state banks drew upon farmers’ need for credit and issued real estate and commercial loans. Besides their proximity to most farms, state banks derived a competitive advantage in the loan market because they were much less regulated than national banks. Those regulations that did exist were regularly flouted. Laws for commercial lending dictated that loans be short-term, with promise of immediate payment, but banks regularly made loans to farms based on mortgages of cattle. Loans were made for farmers’ long-term fixed investments, as opposed to helping with moving short-term sales. National banks had higher loan limits and were prohibited from making real estate loans. However, they, too, exploited lax enforcement. In fact, roughly half of all national banks were already making real estate loans before the law was changed to allow them to do so.

As the farmers’ demand for credit services grew, so did the demand from wealthy people for banking services. Speculation exploded at this time, and banks fueled it by issuing call loans, which were loans given to investors to purchase stocks. If an investor defaulted, banks could seize his stock portfolio instead. By 1870, one-third of all loans in New York were call loans.

Trusts, which first developed before the Civil War with the chartering of United States Trust Company in 1853, also expanded, and by 1913 there were more than 1,800 trust companies. While trusts traditionally handled only land management for the wealthy, they expanded their services to include investment banking and even checking accounts. They loaned freely and under no government regulation. Pretty soon, trusts became almost indistinguishable from state banks.

The Flaw(s) in the System
While the banking system was partly responsible for the era’s robust economic growth, it was not perfect. Although bank failures for non-national banks were around 17.6 percent (compared with 6.5 for national banks), a government comptroller’s review of the failures between 1865 and 1911 found that most were due to incompetence. The comptroller found that only 13 percent of banks failed due to adverse business conditions while the rest failed due to corruption or mismanagement.

If there was a fundamental flaw in the system it was that banks were vulnerable to runs, which often led to wider panics involving other banks. There were five panics between the passage of the National Banking Act and the Panic of 1907. Four panics resulted in depressions, the lone exception being the Panic of 1890.

Panics generally followed several patterns. Sometimes there would be a well-publicized default at a major bank, often caused by economic downturn or a big-name speculator placing a bad bet on the market. When the public found out, they lost confidence in the banks and scrambled to retrieve their savings. At other times, farmers would rush to get cash from banks to move crops in the fall. Banks had loaned more than they had on reserve so they could not meet all of their requirements. Because there was no central bank or banking system, these panics were confined to specific regions and there was little contagion.

There were many reasons why banks struggled to deal with panics. For example, the large concentration of banks in New York, and the banks’ loose lending of call loans to risk-prone speculators, made defaults more likely. Some economists have argued that the banks adhered too religiously to the reserve requirement (usually around 25 percent) and were too quick to stop making payments. They argued that had banks dipped below the reserve requirement to pay, confidence would never have slipped and panics would have stopped. On the other side of the debate, economists, including Milton Friedman, argued that banks’ closings were necessary and actually reduced panics. He reasoned that had banks stayed open and then failed, it would have forced other banks to close, thereby lengthening panics. Today, economists still debate the extent to which the banks’ behavior exacerbated panics.

What economists agree on is the primary cause of panics: an inflexible currency. (See “Runs Make the Bank” on page 24, where we present an economist’s story about panics as deriving from the funding of illiquid assets with liquid liabilities.) Unable to expand currency to meet demand, banks were handcuffed to a limited amount of currency. Increasing the number of national bank notes in
circulation was too costly because for banks to get notes, they had to buy government bonds. Greenbacks—U.S. notes printed during the Civil War that passed as legal tender—were set at a fixed amount by the government. The government also had legislated steep reserve requirements of about 25 percent on deposits, further constricting the money supply.

The Clearinghouse Solution
After the Panic of 1857, banks devised a market-oriented solution to address panics. They established clearinghouses, or bank-like organizations, whose purpose in part was to serve as central places where banks could hold reserves and borrow and lend to each other. “The existence of the clearinghouse suggests that private agents can creatively respond to market failure,” economist Gary Gorton has written. “In fact, it is almost literally true that the Federal Reserve System was simply the nationalization of the private clearinghouse system.” When banks faced high currency demand, they would withdraw their reserves from clearinghouses. But because clearinghouses were wary of risking collapse by giving out their reserves, they issued certificates worth 75 percent of the value of the amount they held for the banks. In exchange for the certificates, banks would pay back the value of the certificates plus 6 percent interest.

The clearinghouse certificates began in New York City in 1860. After 1860, other cities’ clearinghouses began issuing notes. By 1907, the practice became so widespread that A. Piatt Andrew, an assistant secretary of the Treasury from 1910 to 1912 and assistant to the National Monetary Commission, estimated (with some questions over his accuracy) that among cities with more than 25,000 people, clearinghouses issued a cumulative total of $330 million in clearinghouse notes.

Over time, the practice evolved. In 1873, clearinghouses began pooling, or putting all banks’ assets and liabilities on a single balance sheet. The practice added confidence to the banking system because, by lumping all banks together, it made failing banks seem more stable. Also, clearinghouse checks were issued. Although not backed by anything, these checks served as currency until they were withdrawn, though they had to be cashed at an official clearinghouse.

Clearinghouses later began issuing loan certificates in substantially smaller denominations. Originally, certificates had been in $5,000 and $10,000 denominations. However, as the certificates began to be used in the buying and selling of regular goods, the clearinghouse system in Atlanta, for example, began issuing $10 certificates. Pretty soon, it was even possible to get 25 cent certificates. Such small denominations were necessary because when sellers made change, the currency detracted from bank reserves, so naturally clearinghouses wanted sellers to use certificates instead.

Although it did not completely prevent economy-wide panics, the clearinghouse system greatly improved the banks’ ability to meet currency demands. Well-timed issues of clearinghouse certificates are credited with preventing large-scale spreading of the panics in 1884 and 1890. Interestingly enough, the default rate on clearinghouse notes was low. In 1890, Spring Garden National Bank defaulted on $170,000 worth of clearinghouse loans from the Philadelphia Clearinghouse Association, which represented the only recorded default of the era.

“The most extraordinary fact associated with the several clearinghouse episodes between 1857 and 1907,” wrote economist Richard Timberlake, “is that the losses from all the various note issues, spurious and otherwise, were negligible!”

However, the clearinghouses were not without problems. At the time, it was illegal for state banks to issue private money, which included certificates. Even if they were legal, the certificates would be subject to the 10 percent tax on state bank notes. However, like so many other regulations, banking officials overlooked the obvious illegality of clearinghouse notes because of the clear benefits they provided to the economy.

Clearinghouses also posed moral hazard and conflict-of-interest problems. With clearinghouse certificates largely available, banks might be prone to profligate lending and ignore their reserve requirements, knowing that clearinghouses might bail them out. In fact, as Gorton notes, “In general, banks were not allowed to fail during the period of suspension of convertibility, but were expelled from clearinghouse membership after the period of suspension had ended.” In addition to the delayed suspensions, the clearinghouses set reserve requirements and conducted their own audits. The efforts could not completely prevent loose lending, a moral hazard problem that still exists today with the Federal Reserve.

Panic of 1907
The biggest weakness of the clearinghouse system was that it did not do anything to make more currency available when the economy needed it. For banks to acquire national bank notes, they needed to buy bonds. However, in 1900, the United States returned to the gold standard, meaning the supply of government bonds was tied to the supply of gold. The government couldn’t buy bonds if it didn’t have the gold to back it.

At first, the system worked well, as the return to the gold standard coincided with new gold discoveries. The new gold meant that the government had money to put into the economy, and in 1904 and 1907, Treasury Secretary Lyman Gage used the excess gold to inject money into the economy by buying up bonds. He timed the purchases so that the money entered the economy around the time farmers began demanding...
currency to move crops to market. However, the country's banks still remained handcuffed. Gage himself advocated a "large central bank with branches," a harbinger of the Fed, and the Panic of 1907 highlighted the ill effects of an (essentially) fixed currency.

The panic, easily the most damaging up to this time, began when F.W. Heinze, famed speculator and president of Mercantile National Bank, lost a huge bet on United Copper Co. In less than 24 hours, he lost $50 million as the stock plunged from $62 to $15.

At first, the clearinghouse system held up and Heinze's banks were able to clean up their balance sheets and remain in business. However, some of Heinze's associates were not so lucky. When it was reported that Heinze was in financial trouble, the public suspected his friends were in similar straits and promptly rushed those banks. Knickerbocker Trust, whose president was an associate of Heinze, paid more than $8 million in just three hours as part of the run. Because Knickerbocker was a trust and not literally a bank, it could not be bailed out by the clearinghouse.

The collapse of Knickerbocker inspired a run on other banks. The panic was quelled by the bailouts of J.P. Morgan, who also enlisted the support of other financiers like John Rockefeller and Secretary of the Treasury George Cortelyou. To help stem the run on Knickerbocker Trust, Cortelyou pumped $23 million of taxpayer money into New York national banks. Meanwhile, Morgan managed to raise $25 million from various financiers in 15 minutes after a run on the Trust Company of America. He would later finance another $25 million to help the brokerage firm Moore and Schley. The bailouts re-instilled Americans' confidence in the banking system, and the panic itself lasted about a month and a half.

**Federal Reserve Act**

Although the panic was brief, it had lasting effects on legislators and they decided to reform the banking system. The first attempt was the Aldrich-Vreeland Act in 1908, which deviated little from the clearinghouse system. The act authorized the Treasury Department to print out a new series of notes that would be lent to banks, like clearinghouse certificates, during times of crisis. The only difference was that, unlike clearinghouse notes, these new notes were subject to taxes. The new system successfully averted its first panic in 1913, when, at the start of World War I, Britain and Germany left the gold standard, which caused a bank run in the United States.

The act was intended to be just a temporary solution, and its most influential provision was the creation of the National Monetary Commission, made up of a number of congressmen, including Sens. Aldrich and Vreeland and Special Assistant Treasury Secretary A. Piatt Andrew. The commission went on a secret trip to Jekyll Island, Ga., emerging with a proposal to create the National Reserve Association, which would consist of a group of reserve associations with the power to issue currency in exchange for reserves as well as assets such as payments for services.

Though setting the groundwork for the Federal Reserve, the association was never approved by Congress. Vreeland was a Republican, and in 1912 Democrat Woodrow Wilson won the presidency. For the Democrats, it marked a change from 52 years of Republican rule interrupted only by the Cleveland administrations. They were not going to spoil it by voting for a Republican-sponsored banking act. Appealing to their rural and populist base, the Democrats denounced it as a giveaway to wealthy Northeast banks.

The Democrats responded by passing the Federal Reserve Act in 1913 instead. It established up to 12 district banks that worked with a seven-member committee in Washington, D.C., to coordinate and regulate banking in the United States. The Federal Reserve banks issued notes backed by gold to increase the money supply. The banks also served as a lender of last resort by lending money to banks to meet currency demands.

The Federal Reserve Act patched up some problems of the clearinghouse system. It eliminated distortions caused by different states' regulations and enforced laws. Having the various districts meant there would no longer be a piling up of reserves in New York banks. Most important, it addressed the issue of currency elasticity. By issuing new currency and lending to banks, the Fed would be more effective in meeting demand for currency.

**Readings:**


