

Debt, Debasement, and Inflation: The Political Economy of Money in US History

Tyler Watts

Miller College of Business
Ball State University
2000 W. University Ave.
Muncie, IN 47306

tylerwatts53@gmail.com

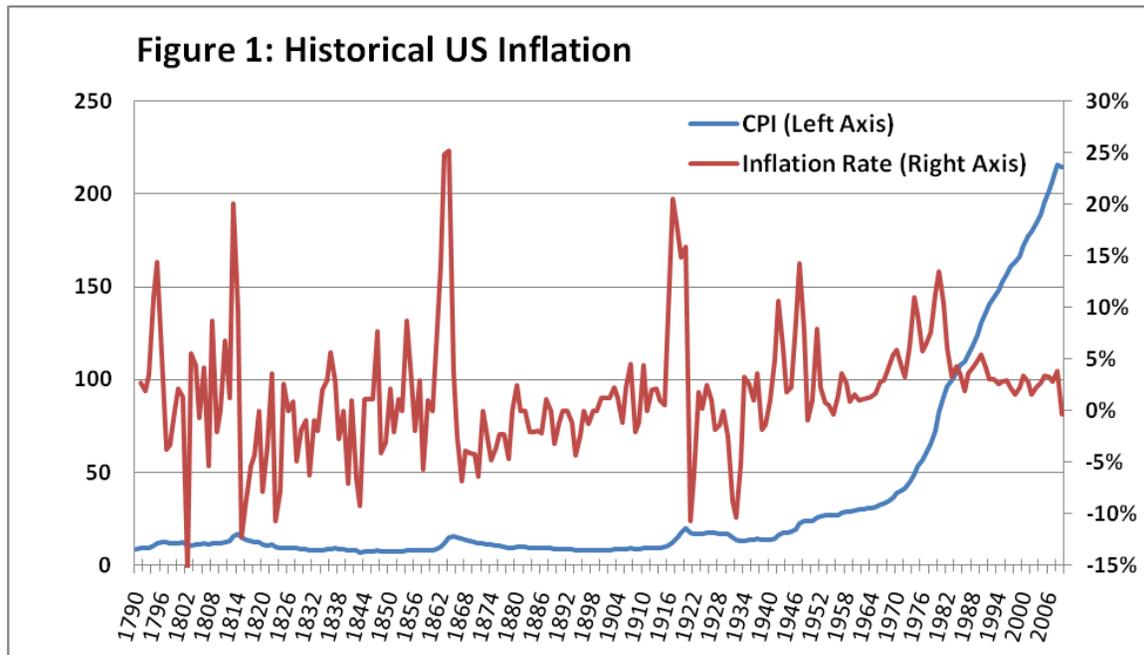
Abstract

Wide experience with various monetary institutions makes US history a veritable laboratory on the economic impact of a nation's monetary system. Despite the conciliatory rhetoric of many economists and politicians, this history clearly reveals a negative reoccurring theme: powerful centralized banking regimes enable the accumulation of government *debt*. This debt build-up leads to *debasement* of the currency, which begets economically harmful *inflation*. This paper traces out the monetary history of the US from a political economy perspective, focusing on the economic implications of this debt, debasement, inflation process. Given the burdensome, potentially catastrophic economic effects of the inflation that governmental involvement in money has repeatedly brought about, the paper concludes by exploring how an alternative system of sound money would function to safeguard the economy and the citizenry from the problems inherent in the debt, debasement, inflation process. While the US has gone far down the road of monetary decay, there is hope for concerned citizens. Both US history and recent advances in monetary and banking theory indicate clearly that sound money and monetary institutions are vital for economic stability. A close study of this history and theory points the way toward a restoration of sound money and a sound economy.

Irredeemable paper money has almost invariably proved a curse to the country employing it.
 -Irving Fisher, quoted in Friedman (1994, 15-16)

I. Introduction: “Normal is Broke”

2009 brought an occurrence not seen in the US in 50 years—price deflation.¹ Many economists and pundits responded with panic, implying that deflation is, among all economic evils, that most greatly to be feared. The sheer rarity of falling prices indicates that persistent inflation has been the rule for the US for as long as anyone can remember. Figure 1, which shows price inflation according to the Consumer Price Index for the last 235 years, is a striking indicator—the evidence is clear that, over a significant period, inflation has been severe in the US.



Source: www.measuringworth.com

The persistent inflation in the US economy for the last 70 years raises the questions: Why the inflationary bias, and what are its implications for America’s economic health? After all, it hasn’t always been this way. Through the 1800s and into the early 1900s, the overall price level remained relatively flat or actually trended downwards as the economy experienced gradual deflation, with one major exception involving the Civil War. These periods of deflation, moreover, were periods of robust economic expansion. Clearly, inflation is not necessary for strong economic growth.

Inflation is, however, strongly correlated with government growth. As seen in Figure 1, periods of the greatest inflation have been periods of massive government spending, from the War of 1812 to the Civil War, First and Second World Wars, Vietnam, the “Great Society,” and so on. The obvious, intuitive explanation for these inflationary periods—government simply

¹ According to the US Bureau of Labor Statistics, the annual average of the Consumer Price Index stood at 214.537 in 2009, vs. 215.303 in 2008, representing a .4% decrease in the average annual CPI. Source: <http://www.bls.gov/cpi/cpid09av.pdf>

printing large quantities of money to cover its increased budget—is essentially correct, though it takes various forms. Over a long period, though, the following general pattern emerges:

1. Increased government spending is initially financed by an increase in government debt
2. The currency is systematically debased (i.e. reduced in purchasing power) by the government in order to raise revenue
3. Monetary inflation is institutionalized, as currencies are ultimately debased to the status of “fiat money” and money printing (either directly or surreptitiously in the form of debt monetization) is increasingly relied upon to finance the burden of big government

As Figure 1 shows, until about 1940 inflationary episodes were temporary and usually followed by a deflation. Since then, an ever-increasing price level has become the new normal for the US economy. Yet as the astute personal finance guru Dave Ramsey frequently notes about the financial situation of Americans, “normal is broke.” Indeed. Inflationary episodes are the hallmark of a broke, overspending government. As in times past, massive spending across the board is saddling the government with record deficits and a rapidly rising debt burden. US government finances are becoming so strained that many ordinary Americans are starting to perceive a looming fiscal crisis. Americans who are concerned about this, and seek to turn the tide of inflation, must understand the underlying economics and politics if ever they hope to reverse it.

Thus the time is ripe to revisit and reassess the big-picture economic implications of the debt- debasement-inflation process, the role of the monetary system in fiscal and economic crises, and alternatives for inflation-proof, economically stable sound money. The aim of this essay is to trace out, in the context of US monetary history, the pernicious consequences of debt, debasement and inflation. The rich historical experience with both market and state-based monetary regimes provides ample instruction to the modern student. The contrast between these regimes, with respect to their economic impact, could not be any clearer, recalling the words of Milton Friedman that “money is too important to be left to the central bankers” (Friedman 1994, 261).

II. The Economics of Inflation

The economic problems of inflation can be summarized under two general categories:

1. The Inflation Tax

Because inflation erodes the purchasing power of each monetary unit, and transfers it to the first users of newly-printed money, inflation is essentially a tax on people’s savings. While economically astute individuals can take some measures to protect themselves from it, any inflation that is not perfectly anticipated will systematically reduce *real* wages, *real* savings, and the average standard of living. Moreover, inflation alters the value of contractual obligations, especially long-term debt, benefiting borrowers at the expense of lenders. Extremely high and varying inflation hinders economic calculation by destabilizing the price nexus that entrepreneurs and ordinary citizens rely on in their day-to-day economic lives. Finally, an economic environment of persistent inflation, with its specious “wealth effects,” alters people’s time horizon and financial mores, encouraging debt and immediate gratification at the expense of savings and thrift.

The particular structure of the inflation tax in the modern economy bears special attention. The central bank supplies the currency and bank reserves that comprise the “monetary

base.” Central banks do not just give away newly printed money, but instead lend it or use it to purchase securities—most typically government bonds. For any US bonds that the Fed holds onto, it passes on the principal and interest payments right back to the US Treasury, effectively nullifying the debt. Through this “debt monetization” process, central banks greatly enable deficit spending and hence the growth of government. Central bank control of the money supply is thus the lynchpin of deficit spending and the accumulation of burdensome government debt.

2. The Boom-Bust Cycle

In a financially advanced economy, new money typically enters in the form of bank credit—i.e. new bank loans. When the banking system expands credit too much, it can actually overstimulate business investment with too-low interest rates and create an imbalance in the capital structure of the economy (Garrison 2001). The low interest rates and easy credit are initially welcomed by entrepreneurs, who find it easier to expand their operations. As the flow of new funds through the economy begins to raise prices, entrepreneurs may perceive it as an increased demand for goods across the board, which further intensifies business investment, hiring, and output—the hallmarks of an economic boom. But increased business activity that is built strictly upon an over-expansion of bank credit is not financed by an increase in actual *savings*. In the long run, much of this investment activity turns out to be not economically justified, and a shakeout can occur when credit is finally tightened. Interest rates rise either as a consequence of or preventive measure against price inflation. The economic boom turns to bust and recession, as bank credit winds down, and the land, labor, and capital that was misdirected by the easy credit into certain lines of production becomes unemployed. Thus inflation is frequently a symptom concomitant with a credit-induced business cycle.

III. A Brief History of Money in the US

1. Roots of the US Dollar

Carl Menger showed that money must begin as a physical good. The most “saleable” goods become money-goods, and market competition leads to goods with superior monetary qualities—historically, gold and silver—dominating in commerce (2007 [1871], 257 ff.). Ludwig von Mises (1981 [1912], 129-131), building on Menger, demonstrated that all modern monies, even if divorced from the precious metals, must ultimately trace their lineage back to some commodity money. Thus the US dollar was initially just an Americanized version of the Spanish dollar, a large silver coin, originally established in the late 15th century and changed very little thereafter. As specified in the Coinage Act of 1792, the dollar was identical in composition to the Spanish dollar,² with a pure silver content of 371.25 grains.

Attempting to expand the official money supply in a land where “scarcity of money” was a constant complaint, Congress superimposed a gold standard on top of the silver standard by creating the gold dollar of 24.75 grains, giving a “mint ratio” between silver and gold of 15:1. As students of monetary theory know well, attempts to legally establish this “bimetallism” are prone to failure. Gresham’s Law³ ensures that one metal will “chase” the other out of circulation

² The precise weight of the Dollar was fixed on the basis of the average weight of a sample of circulating Spanish Dollars (Nussbaum 1957, 53).

³ A good definition is supplied by Mises (1998 [1949], 447): “Bad money, says Gresham’s Law, drives good money out of the country. It would be more correct to say that the money which the government’s decree has undervalued disappears from the market and the money which the decree has overvalued remains.”

whenever their market prices deviate from the mint ratio. Such was the case in the US, which alternated between gold and silver until the 1850s,⁴ when the California gold rush brought down the price of gold and cemented its role as the money of choice.

2. America's First Central Banks

Bimetallism turned out to be the least of the young republic's monetary woes. Alexander Hamilton and his Federalist allies favored a strong central government that would attempt to stimulate the economy through activist monetary policy. As first Treasury Secretary of the US, Hamilton wasted no time implementing a "financial revolution" aimed at strengthening the finances of the central government and spurring industrial development. Hamilton's program involved the new US government's funding of all wartime debts, the establishment of a mint, and a system of industrial subsidies. Arguably of greatest immediate economic impact, though, was Hamilton's most ambitious project: the creation of a national bank to both shore up government debt and expand the money supply. The Bank of the United States (BUS) opened its doors in late 1791 as a Federally chartered enterprise that could open branches nationwide and whose banknotes were given the privileged status of being acceptable in payment of federal taxes. The BUS was, moreover, gigantic, with a capital of \$10 million, compared to under \$3 million for all other banks in 1791. Hamilton arranged that 75% of the bank's capital could be collected, not in the "standard unit" silver or gold dollar, but in the new US government bonds—conveniently helping the new government by increasing the demand for its debt.

The BUS wasted no time in generating loans on top of its initial deposits and capital and funneling hundreds of thousands of new dollars—in the form of banknotes and deposit credits—into the US economy. The result was, initially, an economic boom, as businessmen and entrepreneurs found much readier access to credit from the BUS and the host of new banks that sprang up in its wake.

Economic booms built on *excessive* credit expansion don't last, however. While the flow of new money at first seemed to enable entrepreneurial activity like never before, it became evident that the BUS had created too much money as inflation became severe throughout the economy. David Hume explained what would happen in this situation 50 years earlier (Hume 1987[1742]): as domestic prices rise on the wave of bank credit expansion, imported goods, now relatively cheaper, become more attractive. Foreign producers do not want inflated US banknotes in payment, but the underlying gold or silver, which remains at a stable value. Hence an increase in imports requires a drain of gold and silver out of the country. As merchants withdraw gold from US banks to pay for their larger import orders, banks find themselves in a quandary: a continuation of the drain will mean bankruptcy, as they won't be able to honor any of their outstanding banknotes or deposit credits with "specie"—i.e. gold or silver. Banks must protect their dwindling specie by contracting credit, and credit contraction brings on an economic downturn.

America's first boom-bust business cycle was thus a direct result of its first experience with a powerful national bank. When the bank's charter came up for renewal in 1811, the

⁴ The 15:1 mint ratio turned out to be slightly too low, ensuring that silver was legally overvalued and gold was thereby exported to countries that officially recognized its market value. Congress finally got around to adjusting the mint ratio to 16:1, which was accomplished by a 6.3% debasement of the gold weight of the dollar, to 23.22 grains, in 1834 (Duckenfield 2004, 164-165). This restored a dual circulation for a while, but alas also set an unfortunate precedent of reducing metal content of the undervalued coin, rather than increasing the metal content of the overvalued one, to "fix" the mint ratio.

Jeffersonians, who had always been BUS skeptics, repealed it. The US then found itself at war with Great Britain, and without a national bank to help finance it, the government resorted to printing money. The US Treasury issued \$36 million in Treasury Notes during the war years, with \$15 million outstanding as of 1815 (Timberlake 1993, 15). Because Treasury Notes were accorded legal tender status, no one could refuse them, including banks. Indeed, banks found these notes a convenient substitute for gold and silver, and their presence led to a renewed banking boom as banks could absorb the Treasury Notes in lieu of gold and lend out their own notes on top of them, frequently to the government. Most banks suspended payment of specie on their notes and deposits, as Gresham's Law kicked in, removing gold from commerce. Naturally, this large increase in the money supply led to inflation. The end of the war meant the end of the fiscal crisis and Treasury Notes. Normally, a deflation would be in order, as the government paper money would be retired, and commerce and banking could return to a specie basis. But deflation would be bad news both for the banks and people who had contracted debts during the war.

If only this deflation could be avoided! Thus the Second Bank of the United States (2nd BUS) was approved by Congress in 1816. The features of this bank were very similar to those of the 1st BUS, only on a larger scale. Of its initial capital of \$35 million, 75% was payable in government bonds, helping shore up government credit. Again its banknotes were quasi-legal tender and it was the only bank able to open branches. Attempting to forestall any economic disruption, the 2nd BUS began by massively expanding credit and pumping money into the economy. The overall money supply increased by an estimated 40.7% from 1816 to 1818, almost solely due to BUS activity (Rothbard 2005, 87). Credit expansion by the 2nd BUS thus continued the wartime inflation into peacetime. While the 2nd BUS was in a unique position to expedite a return to pre-war monetary conditions by demanding specie redemption from the state banks (which would have halted their inflationary tendencies), it instead treated state banks with “forbearance” (Timberlake 1993, 23-24), allowing bank credit expansion to go unchecked, and the inflation to prevail for some time.

By 1818 the jig was up for the over-exuberant 2nd BUS. The Treasury had retired all of the wartime Treasury Notes, thus reducing banks' reserve assets and ability to extend credit. It was now evident that the nearly the entire US banking system, with the BUS at the helm, was overextended and undercapitalized. Langdon Cheves, appointed as new BUS president to steer straight the scandal-ridden, near-bankrupt institution, took desperate measures to save the bank. Cheves managed to reduce the bank's loans from \$21.9 million in 1818 to \$11.5 million in 1819. This massive credit contraction again brought recession—the Panic of 1819, featuring a wave of bank failures, commercial and personal bankruptcies, and deflation (Rothbard 2005, 89).

Once again, a government bank, this time instituted to help ward off fiscal problems and prevent deflation, was at the heart of an economic depression. While the proximate cause of the business downturn was *credit contraction* throughout the banking system—a now recurrent theme—the underlying cause involved a massive previous *credit expansion* by a powerful, legally privileged national bank.

3. The “Free Banking” Era

By the late 1820s many Americans were soured on their experience with government-sponsored national banking regimes with their boom-bust effects. The BUS had become much more conservative under Cheeves and his successor Nicholas Biddle, refraining from issuing too much credit, and actively demanding banknote redemption. Andrew Jackson brought a “hard

money” mentality into government in 1829; deeply suspicious of banking in general, Jackson held that the federal government should by no means subsidize banks or provide support to massive, potentially destabilizing institutions like the BUS.⁵ Although the 2nd BUS had exhibited relatively good behavior during his term, Jackson took it as his constitutional duty to abolish it, vetoing its recharter in 1832. The decline of the 2nd BUS signaled the start of a new era of decentralized monetary institutions in the US. Peaking in the 1850s, the “free banking” era would prove a remarkably stable and innovative period of US monetary history—all without *any* national or central bank.

“Free banking” law was first implemented in New York in 1837 and had spread throughout most of the US by the early 1850s (Sechrest 2008, 97). In contrast to the previous “charter” era, free banking laws opened up competition by allowing any person or group to start up a bank, subject mainly to a minimum capital requirement and a few uniform regulations. There were two main benefits to free banking laws. First was to reduce legal barriers to entry in the banking industry, thereby allowing entrepreneurs to set up banking services where they were most needed in the economy. Second was to increase competition, ensuring that all banks were subject to a market discipline whereby only “sound” banks—i.e. banks whose services were justified by local economic conditions—would succeed and endure, and unsound banks would fail and disappear.

During the free banking era, each bank issued its own banknotes as transferable claims to some stated amount of standard (gold or silver) money. Free banking laws typically required the bank to post collateral in the form of state bonds as extra security against the banknotes, in case it should not be able to redeem them in standard money. Occasionally a bank would fail for one of two reasons: 1) Illiquidity, which means the bank does not have enough specie to redeem its banknotes and/or deposit accounts in specie, even though its assets—its loans—are fundamentally sound. 2) Insolvency, which means the bank has made too many bad loans, such that the value of its assets falls below its liabilities, and it is unable to meet its contractual obligations to note and deposit holders. Upon such a failure, the security collateral for the bank’s banknotes would be liquidated by the state’s bank commissioners, and the noteholders reimbursed accordingly.⁶ Investors—both equity (stockholders) and debt (depositors)—in the bank would suffer the losses.

The genius of free banking arose from the enlarged role of competition in the banking industry, which brought the development of a monetary system that was both flexible and dynamic. Free banking allowed individual banks to locally expand and contract the supply of money (in the form of banknotes and deposit credits) as local supply and demand conditions warranted. But free banking was nonetheless macroeconomically stable, exhibiting little tendency towards massive over-expansion of credit and subsequent credit contraction and economic bust. George Selgin eloquently explains the mechanics of a competitive banking system in his pathbreaking *Theory of Free Banking*⁷ (1988). The gist of Selgin’s argument: we need not fear free banks, either individually or in concert, injecting too much or too little credit and money into

⁵ Andrew Jackson’s presidency was marked by the signal achievement of paying off the national debt in its entirety, the only US President to bear this distinction. It is no coincidence that Jackson was also America’s most “hard money” president.

⁶ This mechanism was designed to promote confidence in banknotes in general, allowing the monetary system to economize on the specie base.

⁷ I should note here that Selgin’s use of the term “free banking” is not equal to its meaning in the “free banking” era. Selgin develops a theory wherein banks are truly free from regulations such as state bond collateral requirements for banknote issuance and the prohibition on branch banking, both of which actually hinder the competitive process.

the economy. Banks offering too little credit will find themselves with stockpiles of idle gold and silver in their vaults, and will hence lose out on potential profits they could earn by using that specie as a reserve upon which to increase their lending. But if banks provide too much credit, and flood the local economy with their banknotes (or their customers' checks), they will experience a flood of individuals and banks demanding payment of these claims in standard money, to the extent that their specie reserves are drawn down to a dangerously low level, risking illiquidity. To stay in operation, such a bank must contract its own credit and thus reduce the volume of its own note and deposit circulation. This "principle of adverse clearings" is the touchstone of free banking—an immediate, localized version of Hume's specie-flow mechanism.

The stable, self-regulatory nature of free banking came to full fruition in the Suffolk System in Boston, a sophisticated note clearing institution (clearinghouse) which, although a strictly profit-driven, private-enterprise affair, effectively "regulated" the note issuance (and hence credit policy) of most New England banks for over 30 years. The Suffolk simply took upon itself the role of enforcing the principle of adverse clearings. It required all member banks throughout New England to keep on deposit a sum of specie sufficient to cover periodic redemption demands. By only paying out net clearing balances between banks, rather than total redemption claims, the Suffolk allowed for an economization of the transportation and handling of the region's specie supply. Thus the Suffolk System kept other banks in check and enforced the gold standard at minimal costs.

What of the macroeconomic results of the free banking era? Larry Sechrest (2008, 109 ff.) compared the stability of several key economic variables in the free banking era (1850s) against all other US banking regimes back to 1835. Two key findings were: 1) prices (in terms of the *relative variability* of the inflation rate) were most stable throughout the economy in the free banking era; 2) the money supply was more volatile in the short run, but less volatile in the long run, under free banking, indicating that free banking indeed provided for a truly "elastic" currency that would properly adjust to changing economic conditions.

The free banking era did witness one episode of economic instability—the Panic of 1857. This financial crisis was not tied to national or central bank credit expansion, but rather a "perfect storm" of several small shocks that led to a run on New York banks. Compared to other 19th century financial crises, the free banking system weathered this one relatively well; New York banks did suspend specie payments, but only briefly. Despite a sharp drop in the money supply following the panic, there seemed to be no significant economic consequences in terms of lower GDP or widespread business failures.

One final aspect of the free banking era that should not go unnoted is the flourishing of private mints. In addition to free banks providing the "circulating medium" of banknotes, free mints provided much of the underlying gold coin. From about 1830 until 1864, private mints in North Carolina, California, and Colorado made a significant contribution to the nation's money supply. As with all other industries in a free market, competition was the only real "regulator" of these mints. While some private coinage was known to be of lesser purity than the legal standard (and hence traded at an appropriate discount), several private mints had excellent reputations for consistently providing a coinage at or above the legal standard, ensuring their coins would circulate long after the government sadly put an end to the industry during the Civil War.

4. Centralization: Civil War finance and the National Banking System

The Civil War brought an ignominious end to the free banking era. The tremendous costs of the war soon had both sides printing money hand over fist. The US government unleashed a fiat money on its economy—i.e. a paper money never intended to be redeemable in gold. By 1864 there were \$415 million of US Treasury-issued United States Notes, or “greenbacks,” in circulation (Rothbard 2005, 123-124). The resulting inflation was severe, in the 25% range for 2 years. As with all modern fiat currencies, greenbacks were “forced” into circulation through legal tender laws, which required that creditors accept greenbacks for all debts. Naturally Gresham’s Law kicked in; as the gold price of a greenback fell, at its nadir, to 40 cents (Rothbard 2005, 125), people hoarded gold, silver, and even copper-based coins, and spent only greenbacks.⁸ When the legality of forcing creditors to accept devalued paper in place of stable gold was challenged in the courts, the Supreme Court eventually caved in to political expediency and validated the fiat money in the infamous Legal Tender Cases (Rothbard 2005, 152-153).

The most economically remarkable aspect of the greenback inflation was that it was totally reversed—perhaps history’s only example of anti-debasement of a currency—when Congress finally made greenbacks redeemable in gold in 1879 and restored the gold standard. The inflationary monster of fiat money had been laid to rest after a long, painful deflation. Yet lasting harm would result from the federal government’s other war-finance measures, namely the extreme makeover of America’s banks.

While greenback issuance was staggering—at least 60% of the total 1860 money supply⁹—the federal government financed the vast majority of the war effort by borrowing \$2.2 billion (Rothbard 2005, 131). To facilitate these war bonds, Congress overhauled the entire banking industry, creating a new type of national bank, with its own government-secured currency. The National Banking system that was established during the war combined some of the worst aspects of both the BUS era the free banking era—the bond capital and bond collateral requirements—and imposed them on the new national banks. National banks were similar to state free banks in that any group who raised a certain amount of capital (\$50,000) could start one. The catch was that, for a national bank to issue currency, it had to deposit an equivalent sum of US bonds with the federal government (Dowd 1989, 59). The rationale is obvious: what better way to fund the national debt than to require banks purchase government debt in order to carry out one of their main functions? To ice this fiscally-expedient cake, Congress placed a 10% tax on all state banknotes, making it utterly unprofitable for state banks to continue in the currency issuance business.

This formula worked well for its intended fiscal purpose, but disastrous unintended consequences later ensued, creating episodes of economic turmoil amid a period of otherwise very strong economic growth. The financial panics of the “gilded age” are direct offshoots of the National Bank System’s bond collateral requirement. Because the supply of government bonds was limited—indeed, shrinking as the national debt was paid down after the war—the ability of national banks to issue notes was limited. This was problematic in a largely agricultural 19th century economy, when an increased quantity of cash was required during the fall harvest season every year to pay the harvest workers, railroad freight, etc., for the massive effort of bringing the

⁸ The disappearance of coin during the war years led to government issues of fractional currency notes with a face value of less than \$1, and the expedients of postage stamp currency and private-issue “store card” bronze tokens as cheap stand-ins for small change. See Rothbard (2005, 123-132) for a discussion of the greenback episode.

⁹ Rothbard (2005, 130) gives a total money supply for 1860, including gold and silver coin, and state banknotes and deposits, of \$745.4 million. Timberlake (1993, 90) reports an 1860 figure of \$538 million.

crops to market. The limited ability of the national banking system to expand the supply of banknotes meant that at times, banks found themselves dipping deep into their gold reserves to meet customers' cash demands. As we have seen, a significant drain of specie from the banks' vaults requires a contraction of credit, and a contraction can lead to a financial panic and recession. Thus the Panics of 1873, 1884, 1893, and 1907—the only significant economic crises of the gilded age—are all attributable to these, and other, failings in the bank regulatory structure that impaired banks' money-issuance capabilities (Dowd 1989, 60-62; Selgin and White, 1994). These failings owe directly to the manipulation of banking laws for fiscal purposes, and not to any defects in the competitive development of the banking industry, which was sadly cut short as of the Civil War.

5. Monopoly: The Federal Reserve

The Panic of 1907 tipped the scales in a debate that had been brewing regarding America's monetary system. The US economy clearly suffered from an “inelastic currency;” banks couldn't issue enough notes when and where needed. A return to a free-banking style setup might have seemed the obvious reform; banks would again have the freedom to issue currency and the principle of adverse clearings, enforced by ever-innovative and sophisticated clearinghouse systems, would provide adequate market-based regulation of the entire industry. Meanwhile the full-bodied gold standard would guard against inflation. But alas, the growing progressive ethos of the era held sway, favoring the construction of a governmental institution that could supply extra currency to the banking system and, to sweeten the deal for the banks, stand in the breach as a surefire provider of liquidity (i.e. bailout funds) during times of financial panic. Thus little thought was given to free banking, and the industry lobbied hard for a European-style central bank. As many Americans were still affected with a fundamental skepticism of centralized institutions, the new US central bank was given the veneer of a decentralized structure. The Federal Reserve System was born in 1913 as a network of 12 regional banks, each beholden to its local constituency and allegedly autonomous in its actions (Timberlake 2008).

The original role of the Federal Reserve was strictly to centralize reserves in the banking system and act as a “lender of last resort” to the banking industry. Federal Reserve Banks were granted the power to issue their own brand of banknotes—the now ubiquitous Federal Reserve Note (FRN)¹⁰—in order to provide for the changing seasonal demands for cash relative to deposits. Commercial banks in each region could choose to become stockholding members of their local Fed branch, and were then eligible for “discount loans” from the Fed if and when another liquidity crisis should crop up. The Fed was not initially charged with what we would now call monetary policy, i.e. actively manipulating the supply of money and credit in an attempt to ensure economic stability or even promote economic growth.

Federal Reserve banks had barely opened their doors when war broke out in Europe, a war in which President Wilson, despite his 1916 campaign promise, would find it necessary for the US to become involved. World War I, like previous wars, brought a large fiscal burden for the US government. But unlike previous wars, the US now had a full-fledged central bank in place to assist with war finance. In the words of Friedman and Schwartz:

¹⁰ Initially, Federal Reserve Banks were legally held to a 40% gold reserve requirement on all outstanding Federal Reserve Notes, meaning that each bank could issue a maximum of \$2.50 in notes for every dollar (23.2 grains) of gold it held. The fiscal exigencies of WWII drove this gold ratio down to 25% in 1945, even as the Fed was awash in gold that had flowed out of war-torn Europe and after the infamous debasement of 1934 increased the Fed's nominal gold holdings by 69%.

The large federal government deficits, totaling in all some \$23 billion... were financed by explicit borrowing and by money creation... Although no ‘greenbacks’ were printed, the same result was achieved by more indirect methods using Federal Reserve notes and Federal Reserve deposits (1963, 216)

With so much bank credit being issued to fund such a large expansion of government debt, inflation was bound to ensue, with double-digit CPI inflation rates from 1917 through 1920. To stem the rising tide of inflation, the Fed had to launch a credit contraction, which set off the deflationary recession of 1920-1921. Once again, the US economy experienced an economic boom-bust cycle as a direct result of inflationary policies made possible by a government bank, this one with an ever-expanding grip on the nation’s monetary institutions.

Surveying the wreckage of the 1920-1921 recession, the Fed wandered beyond the terms of its original, chartered role of lender of last resort for troubled banks, and started to dabble in activist monetary policy aimed at stabilizing and managing the entire economy (Timberlake 1993, 261; Friedman and Friedman 1979, 70). The Federal Reserve Bank of New York began its now well-known open market operations in the early 1920s, whereby it would inject or withdraw bank reserves by either purchasing or selling government bonds in the “open market.” The goal at the time was price stability, or preventing fluctuations in the Consumer Price Index. Prominent economists like Irving Fisher, enthralled by the progressive-era notions of “scientific” social and economic planning by experts, held that by keeping prices stable, the Fed could play a positive, proactive role in promoting prosperity.

6. Debasement: FDR and the Abandonment of Sound Money

The Roaring Twenties were indeed prosperous, as marked by the stock market boom. There is some debate as to the Fed’s role in promoting the heady speculative environment that led to this stock market bubble in the late 1920s. There is little doubt, however, that the bursting of this bubble in the second half of 1929 was a direct consequence of contractionary policy by the Fed (Friedman and Schwartz 1963). But the stock market crash is really just a side show to the monetary chaos that followed. The Federal Reserve’s utter mishandling of monetary affairs during the banking panics of the early 1930’s is well-known among economists. The Fed presided over a monetary “great contraction” in which 4,000 banks failed and the supply of money declined by one-third. As is typical, this massive credit contraction, along with other notable macroeconomic shocks, set the stage for the Great Depression (Friedman and Friedman 1979, 62-81; Timberlake 1993, 266-274). Ironically enough, it was the Fed’s failure to perform its primary function—i.e. providing banks with liquidity during financial crises—that contributed to the banking crises. While the Fed was centralizing control over an *increasing* gold stock, banks suffered liquidity crises left and right. In its first emergency room scenario, the Fed let its patient bleed out (Timberlake 1993, 266).

The Great Depression, in addition to a roughly one-third decline in GDP by 1934 and a decade of double-digit unemployment, featured a steep decline in commodity prices throughout the economy. Befuddled by years of monetary-policy ineptitude, and the seeming failure of the drastic New Deal fiscal measures to really stimulate economic activity, the Roosevelt administration turned to the treacherous financial alchemy of monetary debasement in a desperate attempt to “reflate” the economy. Thus in March, 1933, FDR ended specie redemption of banknotes forever and began the confiscation of citizens’ monetary gold. This was followed up by an eventual debasement of the gold content of the dollar by 41%, to 13.71 grains in early 1934 (Duckenfield 2004, 356-386). The debasement resulted in a massive revenue windfall for the

Federal Government, as every 23.2 grains (\$1 as of 1834) of gold on the Treasury's books instantly became \$1.69. Overall, the government gained \$2.8 billion in one fell swoop via the debasement (Timberlake 1993, 279)—a welcome result for the big-spending New Deal bureaucrats of the FDR administration.

The make-work programs of the New Deal dragged on for years with little impact on unemployment. The onset of WWII did not “end the depression,” contrary to some popular misconceptions (Higgs 1997, 2008). But it did “cure” the unemployment problem as millions of young men, like it or not, found jobs in the military. The monetary impact of WWII was similar to that of WWI, but on a much larger scale. The Fed again did its part by expanding credit in order to keep Uncle Sam's borrowing costs low, and absorbing much of the government debt onto its own books (Timberlake 1993, 300-310). Again all the new money brought inflation; although somewhat repressed during the war years due to price controls and simply a lack of consumer goods on account of rationing, inflation exploded after the war, when price controls were lifted and industry switched back to a peacetime, more free-market oriented basis

7. Inflation: Nixon and the Closing of the Gold Window

Gold coin naturally disappeared from commerce after 1934. National bank notes and even United States Notes (the original greenbacks) were phased out, leaving FRNs as America's only relevant currency. Yet the dollar retained for some years a tenuous link to its former gold basis. With the US Treasury holding all monetary gold, and the Fed still required to provide 25% gold “backing” for FRNs, monetary authorities could still claim a “gold reserve standard” for the US dollar. Yet with citizens unable to redeem their currency in hard money—the most righteous check on paper money inflation—what was to prevent a return to excessive credit expansion, renewed debasement, and further inflation?

The Bretton Woods international monetary system served as a rearguard effort in preventing a fiat money fiasco. Established by the Allied Powers in 1944 with the aim of stabilizing the exchange rates of these nations' currencies after the chaotic episodes of depression-era debasement and devaluation and wartime inflation, the agreement allowed foreign central banks to redeem their holdings of dollars for gold at the 1934 rate of \$35 per ounce. As the only currency linked to gold in this way, the dollar became the world's reserve currency, and a conduit to the gold-exchange standard for many other prominent currencies. Although there was an implicit “gentlemen's agreement” that foreign governments would not drain the US gold stockpile, they were free to pull the trigger and demand gold should they suspect the US—specifically the Fed—of printing too many dollars, whether in a Keynesian attempt to juice the US economy or to assist the Federal Government in financing its deficits (Cohen 2001).

The system appeared to work for a time. The roaring inflation of the 1940s was tamed in the 1950s and the US debt burden accumulated during the war was diminished in the post war years. But the system was fragile; it only took a return of war to put pressure on the tenuous dollar-gold link by instigating new money printing. This time the war was on two-fronts: the escalating military excursions into Southeast Asia, and LBJ's “war on poverty,” both of which put the Federal budget, deficit, and debt again on an upward trajectory.

Domestic price inflation was practically inevitable, and it began in earnest in the late 1960s. Increasingly wary of the devaluation of the dollar, nervous foreign monetary authorities started redeeming their dollars for gold. The international nerv on the dollar faced US monetary and political leadership with a crisis. To preserve Bretton Woods, serious monetary stringency

was in order. The US would have to achieve “tight” money and higher interest rates, which would reduce the domestic inflation rate. It would likely take several years of low inflation and tight money to achieve credibility and quell the run on gold. But the easy spending ways of Congress demanded easy money, not tight. Absent Congress and the Fed “getting religion” and converting back to fiscal restraint and sound money, an eventual total gold drain was almost inevitable. The authorities spent a few years skirting the issue, using moral suasion, great oaths of coming prudence, etc., to convince the French, Spanish, and others that the dollar was safe, and inflation a temporary anomaly. But the handwriting was on the wall. First, the nominal 25% gold backing for FRNs was done away with in 1968. Finally, on August 15, 1971, Nixon took the easy way out:

I have directed [Treasury] Secretary Connally to suspend temporarily the convertibility of the dollar into gold or other reserve assets...
Now, what is this action--which is very technical--what does it mean for you?
Let me lay to rest the bugaboo of what is called devaluation. ...
The effect of this action, in other words, will be to stabilize the dollar. (Nixon 1971)

Despite Nixon’s transparent attempt to disclaim what was actually happening, this “closing of the gold window” would turn out to be permanent, and would set the stage for inflation rates that would make the 1960’s dollar look, indeed, golden.

8. *The Fiat Currency “Experiment”: 1971-????*

The consequences of abandoning a gold standard in favor of fiat money should by now be obvious: with the “golden fetters” removed, there is no theoretical limit on the central bank’s ability to print money, whether the purpose is “economic stimulus” or financing government deficits. The dramatic run-up in US inflation rates in the 1970s is therefore not surprising. What has been surprising in recent US economic experience is the apparent conquest of high inflation from the early 1980s on—the so-called “great moderation.” When Fed Chairman Paul Volker embarked on the tight money policies that were required for this accomplishment, he was arguably the most unpopular man in the country. After all, monetary contraction, as we have seen, initiates recession. And the 1980-1982 recession was severe, with double-digit unemployment and inflation rates and extremely high interest rates. But Volker stuck to his tight-money guns; buoyed by the Reagan revolution, which continued the “deregulation” of key industries and unleashed pro-growth supply side fiscal policies, an amazing economic recovery ensued, as well as a return to a much lower inflation rate.

Over the next several decades, inflation stayed low and monetary matters receded from public attention. Matters were helped by the end of the Cold War and the “peace dividend” which reduced the fiscal burden of military spending. Even more remarkable was the return to a balanced Federal budget in the late 1990s under President Clinton and the Republican Congress. Moreover, “Maestro” Alan Greenspan, the Fed Chairman who presided over this apparently sound and stable monetary era, came to be trusted more and more as just the right technocrat for the difficult job of managing the finances of the world’s largest economy. Greenspan’s Fed seemed to be proving that, not only could a central bank accomplish low inflation and robust growth, but could safely engage in proactive monetary intervention, as the Fed increasingly did

by orchestrating bailouts large and small¹¹ as well as the famous liquidity injections that undergirded shaky markets after the dot-com bust and 9-11.

When Greenspan finally retired, replaced by the well-respected academic and monetary policy expert Ben Bernanke, the Fed presided over the best of all possible worlds. The economy was humming along, led by a strong housing market. President Bush and Congress had cut taxes again, a known formula for amping up economic growth. Even with the increasing fiscal burden of the “global war on terror” and the long-in-coming increases in baby-boomer Federal entitlement (i.e. Social Security & Medicare) spending, the economy and the monetary system seemed to be on an even keel.

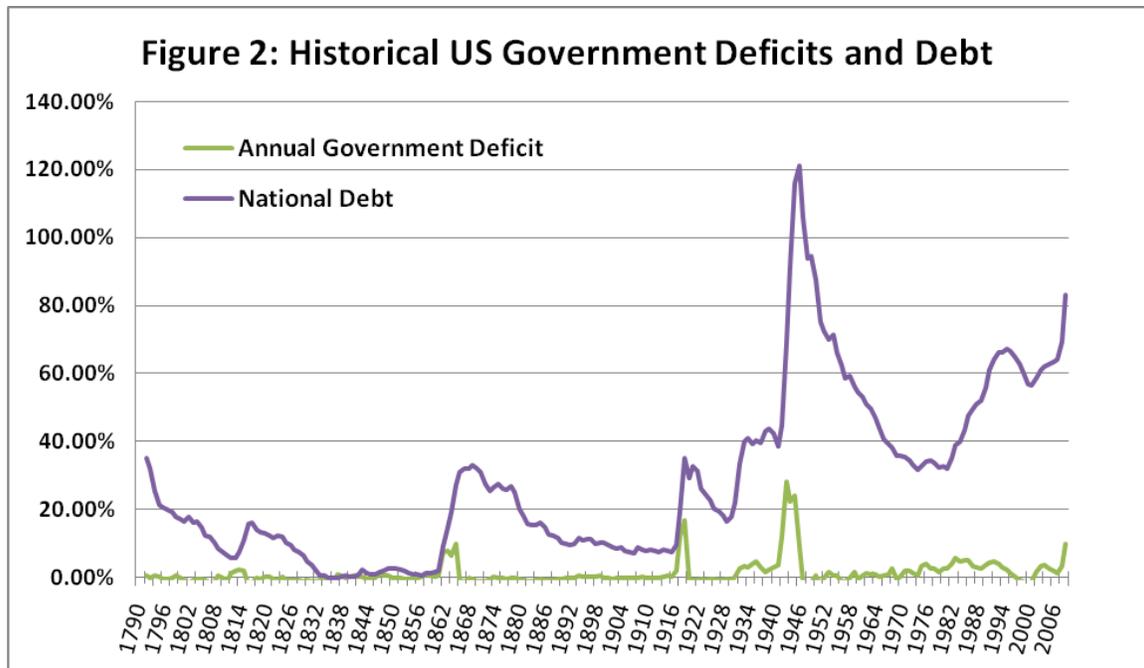
But indeed all was not well during the 2000s. Those who have followed the news in the past 3 years are familiar with “the rest of the story”: The housing boom was unsustainable, aided largely by a stiff dose of credit expansion from the Fed (Taylor 2009), and actually contributed to a huge imbalance in the capital structure of the economy (Horwitz and Boettke 2009). Regardless of where one casts the blame—with the Fed, with insufficient regulations, etc.—it is clear that the credit insanity of the subprime mortgage market brought on a financial crisis, essentially a run on banks and investment firms that were most heavily engaged in subprime financing. The Fed’s unprecedented rescue efforts, particularly Bernanke’s on-again, off-again targeted bailouts, have stabilized particular companies, but arguably contributed to economic uncertainty. The main thrust of Fed policy has been to print money, in the form of bank reserves, like never before, in order to prevent the collapse of particular institutions. When unemployment remained high after the financial panic subsided, Bernanke pulled out all the stops, engaging in a dramatic binge of money printing—euphemistically given the technocratic moniker of “Quantitative Easing”—to try to stimulate the economy.

In addition to the housing mess, the deficit and debt problem was never fully cured in the 2000s. As shown in Figure 2, Deficits exploded as President Bush prosecuted wars abroad and sought to appease key constituencies with new entitlement spending at home. President Obama and Congress have extended and expanded this new fiscal overindulgence, making “trillion dollar deficits” part of the current political vocabulary. Thus recent events have swiftly brought America back to the monetary brink. Fiscal and monetary attempts to “stimulate” the economy have left us with a doubled money supply, a tripled deficit, and a national debt rising at an alarming rate.

As has been the case in US history, the massive new wave of money printing promises a return of economic instability, as the debasement—inflation process enters its next round. It’s already happening through the huge increases in bank reserves¹² of 2008-2009, whereby the Fed “saved the banks.” It continues with debt monetization, as the Fed has begun a new \$600 billion round of US bond purchases—Quantitative Easing II—aimed explicitly at raising the inflation rate. As such monetary madness continues, we risk an economic crisis that will make 2007-2008 look like a toothache.

¹¹ Examples of Greenspan-era bailouts include the US guarantee of bailout loans to Mexico in 1994 and the Fed-orchestrated rescue of the hedge fund Long Term Capital Management in 1998.

¹² Although this new money still mostly sits idle as “excess” reserves, its inflationary potential is like water behind a dam. The dam actually consists of a poor business environment, as banks lack many lending prospects. Robust economic recovery will ironically weaken the dam by encouraging banks to loan out their reserves and put upward pressure on all prices.



Note: Figures are as a percentage of GDP.

Source: www.usgovernmentdebt.us

IV. Conclusion- The paths to monetary freedom

As I hope our brief tour of US monetary history has shown, government involvement in the monetary system tends to create inflation and economic instability. It matters not whether politicians pursue money-printing for revenue reasons, or under the guise of “economic stimulus;” when government takes the reins of our monetary institutions, bad things happen. Yet there are bright spots in US history, times when, despite imperfect regulations, sound money made a comeback, forestalling the debt-debasement-inflation process and nurturing genuine economic growth. Most notably, the stark contrast between the free banking era and the modern Fed indicates what sound monetary institutions do, and do not, look like.

The Fed era has clearly shown us what not to do if we desire sound money: don’t debase the commodity content of the dollar; don’t sever the redeemability of paper money; don’t use the central bank to “stimulate” the economy or to monetize government debt.

The free banking era points to reforms we could begin to make, even in our age of fiat money and total central bank dominance. The key element of free banking is real, radical competition in money production, from the private production of basic monies like gold and silver coin, to private issuance of currency in the form of competitive banknotes. An immediate step that could be taken in this regard would be the repeal of legal tender laws. Even this small dose of monetary freedom will have immediate beneficial effects, primarily by placing the Fed into open, formal, competition with alternative monies, and forcing it to think twice about continually inflating its own currency, lest it cease to be the people’s money of choice.

Further reforms that would move to restore a free banking regime involve the step by step elimination of the Fed’s major roles. After all, the Fed’s lender (“bailouter”) of last resort function merely institutionalizes moral hazard and excessive risk taking in the cartelized banking

industry, and almost guarantees a cycle in which every financial crisis will be worse than the last. Furthermore monetary policy is really just monetary central planning. The Fed's best guess as to what interest rates and the money supply should be is just that- a guess. As F. A. Hayek proved, central planning, even by wise and munificent bureaucrats, cannot hope to replicate the order that emerges through competitive, decentralized markets (Hayek 1960[1948]). Finally, removing the Fed's ability to print money willy-nilly would eliminate the fiscal "easy way out" of debt monetization, forcing Congress to get religion and tackle the deficit and debt crisis in a meaningful way.

Are these proposals radical? Yes. The greatest lesson of Economics, from Adam Smith to F.A. Hayek to Milton Friedman, is that competition is key to the successful functioning of markets. Although money is, as a means of exchange, the essential lifeblood of a market economy, it is no less a market phenomenon itself, subject to the laws of demand and supply. A monopoly on money and credit—the essence of a government-supplied, central bank-managed fiat money—almost ensures continual non-equilibrium economic outcomes (i.e. economic instability). Add to this politically-created monopoly on the lifeblood of commerce the extreme political temptations, under the welfare state, to use it as a source of easy financing, and the result is almost inevitably bad: taxation through inflation that upsets the natural economic order.

Sound money is an effective prophylactic against these calamities. It is up to Economists to educate the people, and up to the people to demand sound money. In an age of inflation and global financial crises, there's no time like the present to take up these tasks. Sound money is a radical idea whose time has come.

References

- Cohen, Benjamin J. 2001. "Bretton Woods System" in *Routledge Encyclopedia of Political Economy*. New York: Routledge.
- Dowd, Kevin. 1989. *The State and the Monetary System*. Palgrave MacMillan.
- Duckenfield, Mark, ed. 2004. *The Monetary History of Gold: A Documentary History, 1660-1999*. London: Pickering and Chatto.
- Friedman, Milton. 1994. *Money Mischief: Episodes in Monetary History*. New York: Harcourt Brace.
- Friedman, Milton and Rose D. Friedman. 1979. *Free to Choose: A Personal Statement*. New York: Avon.
- Friedman, Milton and Anna Jacobson Schwartz. 1963. *A Monetary History of the United States, 1867-1960*. Princeton University Press/ National Bureau of Economic Research.
- Garrison, Roger W. 2001 *Time and Money: The Economics of Capital Structure*. New York: Routledge.
- Hayek, F. A. (1960 [1948]). *Individualism and Economic Order*. Chicago: University of Chicago Press.
- Higgs, Robert. 1997. "Regime Uncertainty: Why the Great Depression Lasted So Long and Why Prosperity Resumed after the War." *Independent Review* 1,4; 561-590.
- Higgs, Robert. 2008. "The Great Escape from the Great Depression." *The Freeman* 58,8.
- Horwitz, Steven and Peter Boettke. 2009. "The House that Uncle Sam Built: The Untold Story of the Recession of 2008." Irvington, New York: Foundation for Economic Education.
- Hume, David. 1987 [1742]. *Essays Moral, Political, and Literary*. Indianapolis: Liberty Fund.
- Menger, Carl. 2007 [1871]. *Principles of Economics*. Auburn, Alabama: Ludwig von Mises Institute.
- Mises, Ludwig von. 1981 [1912]. *The Theory of Money and Credit*. Indianapolis: Liberty Fund.
- Mises, Ludwig von. 1998 [1949]. *Human Action*. Auburn, AL: Ludwig von Mises Institute.
- Nixon, Richard M. 1974. "Address to the Nation Outlining a New Economic Policy: "The Challenge of Peace." In Woolley, John T. and Gerhard Peters, *The American Presidency Project* [online]. Santa Barbara, CA. Retrieved from <http://www.presidency.ucsb.edu/ws/index.php?pid=3115&st=&st1=>
- Nussbaum, Arthur. 1957. *A History of the Dollar*. New York: Columbia University Press.

- Rothbard, Murray N. 2005. *A History of Money and Banking in the United States: The Colonial Era to World War II*. Auburn, AL: Ludwig von Mises Institute.
- Sechrest, Larry J. 2008. *Free Banking: Theory, History, and a Laissez-Faire Model*. Auburn, AL: Ludwig von Mises Institute.
- Taylor, John B. 2009. *Getting Off Track: How Government Actions and Interventions Caused, Prolonged, and Worsened the Financial Crisis*. Stanford: Hoover Institution Press.
- Selgin, George A. 1988. *The Theory of Free Banking: Money Supply Under Competitive Note Issue*. Totowa, NJ: Rowman and Littlefield.
- Selgin, George A. and Lawrence H. White. 1994. "Monetary Reform and the Redemption of National Bank Notes, 1863-1913." *Business History Review* 68; 205-243.
- Timberlake, Richard H. 1993. *Monetary Policy in the United States: An Intellectual and Institutional History*. Chicago: University of Chicago Press.
- Timberlake, Richard H. 2008. "Federal Reserve System" in *The Concise Encyclopedia of Economics*. Indianapolis: Liberty Fund.