



The Gold Standard: the Foundation of Our Economy's Greatness

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In these stubbornly recessionary times, Americans have gotten wistful about the way their economy used to be. People turn a nostalgic eye to the Ronald Reagan years of the 1980s, and certainly to the Bill Clinton 1990s, when growth was booming and virtually everyone could get a job, enjoy some creature comforts, and even think a little big about the future. Economists, for their part, have dubbed the run of the 1980s and 1990s the “Great Moderation”—a time of steady, plump GDP growth and fading harms such as inflation, unemployment, and nosebleed interest rates.

But just prior to that Great Moderation, there had been another bout of nostalgia. In the “stagflation” era of the 1970s, as the economy got clocked by three double-dip recessions, a consumer price index that averaged an 8% jump per year, unemployment at its highest levels since the Great Depression, and tax bills going up and up in the face of increasing federal budget deficits, we had *Happy Days* on television and *Grease* in the theatres, as if in the 1950s everything had been peaches and cream.

Indeed, the most cherished era of all of American economic history remains “postwar prosperity,” the run in the decades after World War II, which screeched to a halt in the '70s, in which jobs were plentiful, the suburbs bloomed, and the next generation was nurtured in abundance to a fault. The economic numbers bear it all out. The U.S. economy grew yearly at nearly double our current pace

of 1.9% for a quarter century after 1945, with unemployment trending to 4% and inflation lower than that.

But wait—prior to “postwar prosperity,” there had been nostalgia yet again—during the Great Depression which hung over the economy for the entire decade of the 1930s, when unemployment hit the unfathomable number of ten million individuals, output went down by a quarter, stocks went essentially to zero, and starvation got reported not only in John Steinbeck’s *Grapes of Wrath* (1939) but in the New York City school system. In 1931, one of the nation’s bestsellers was that classic entry in the nostalgia genre, Frederick Lewis Allen’s *Only Yesterday*, about the Roaring 1920s. Remember them, Allen asked, the jobs and opportunities galore, the disposable income, the gadgets, the bull market?

And you can even find nostalgia for old prosperous ways right before those Roaring ’20s got going. F. Scott Fitzgerald’s *This Side of Paradise* (1920) tracks the class that entered Princeton in 1913, a point when wealth was flowing like crazy and reunions hauled in successful alumni by the scads. When that class got home from war six years later in 1919, however, there were no jobs or prospects, even for Ivy League men. In one of Fitzgerald’s short stories from the period, a broke Yale shoots himself instead of pretending he can get by in this country anymore. All of this reflected reality. The United States was stuck in an extended recession from 1913 to 1920 as the cumulative inflation rate somehow reached 100%; the CPI more than doubled from 1913 to 1920.

Booms, busts, and subpar growth: the specialties of fiat money

Perhaps the most famous of all charges against the gold standard—the great warhorse argument against it—is that it leads to booms and busts in the economy. But this is a claim that must be investigated empirically because the century spanning the basic era of fiat money, 1913 to the present, has put down a most impressive record in exactly this regard.

The other main charge against the gold standard, charge 1-A next to the argument that it causes booms and busts, is that it is not “modern.” An economy does not have room to grow under a gold standard as under “flexible,” inconvertible currency, the logic goes. Modern countries that have aspirations for across-the-board prosperity (and relief from occasional economic crises) have to do away with illusions about the adaptability of gold to their purposes. In rawest form, this argument has it that gold is a “barbarous relic,” in the famous John Maynard Keynes phrase of 1923.

Yet what a strange relationship this charge also has to actual history. From the first full year that the Constitution’s outline of the gold standard took effect, 1790, until 1913, the year the Federal Reserve came into existence and the serial dismantling of the gold standard began, the United States economy increased in size, in real terms, by just about 150-fold. This record of growth, which amounted to 4.0% year in and year out, was so large, so unprecedented, and so long-lasting, that not only did the United States roar by all other countries in terms of overall output over the course of this extended period, the U.S. economy was over twice as large as its closest rival, Germany, when the great unraveling began in 1913.¹

Since 1913, our economy has grown by 22-fold, and at a rate about a point lower, 3.1% per year, than had always prevailed. This lost near point of growth implies that had this country continued along the 1790-1913 path all the way to today, our economy now would be astoundingly larger—about three-and-a-half times larger—than it currently is.

Population grew more slowly in the post-1913 period (itself probably due to the decline in absolute economic growth), meaning that on per capita terms, economic growth has actually been a shade higher since 1913 than in the period before. Yet it was only in discrete periods over the last 99 years that the American economy actually grew at an appreciable rate. And these eras—the 1920s, the 1960s, and the 1980s and 1990s—were when this nation most closely approximated the function, if not the form of the gold standard. Even in the century past, in which the United States departed from an

express gold standard, it was the extent of the shadow of the gold standard that correlated to the extent of economic growth.

Today, as our nation struggles to get out of a five-year cycle of recession and pseudo-recovery, and as Keynesian remedies make their last, desperate play for relevance and legitimacy, the question of gold has naturally arisen in many quarters. It has emerged in presidential campaigns and state and Congressional legislation, and in any number of deliberations in town halls, on the airwaves, and at kitchen tables across our body politic. The Republican Party at its recent convention adopted a platform calling for a commission to consider the gold standard. The moment for gold seems to be arriving—and none too soon.

And yet questions remain, in particular from the grandees of the economics establishment. Gold is passé, a proven failure, a crank doctrine, one hears from the titled professors. The curious thing about the objections to calls for a restoration of the gold standard, calls which are welling up from the populace in a most democratic fashion these days, is that virtually all of them are, of necessity, based on historical reasoning. Gold jinxed us in the past, and it must not be permitted to do so in the future, the argument goes.

The point of the following pages is to show that this argument about the gold standard and American economic history is manifestly inaccurate. For the gold standard has actually been the secret ballast of the greatest success in the annals of the industrial revolution, truly of all of economic history—the American economy in its usual mode of operation of steady and all-encompassing growth.

The macroeconomic standard

In the canons of macroeconomics, that sub-discipline of economics which arose in the middle years of the twentieth century to talk of big, aggregate things in the economy, there are four basic goals, four basic standards of judgment about what economies are to do if they are to be deemed well-

managed. These four things are as follows: economic growth must be strong; economic growth must be steady (the cycle of boom and bust smoothed out as much as possible); economies must deal with crisis in an orderly fashion; and economic “disamenities” such as inflation and unemployment must be kept to a minimum.

Macroeconomics came into being approximately seventy years ago on the assumption that it itself was necessary for economies to perform in such optimal fashion. Without managers of the economy, in government and related oversight, the presumption went, you could forget about strong, smooth economic growth, a facility for dealing with crisis, and the minimization of harms such as inflation and unemployment. It was a curious position to hold. Though Great Depression was not far in the rearview, the sense hung around macroeconomics that in eras like the nineteenth century—in which there was a notable paucity of macroeconomic institutions—macroeconomic goals were *not* achieved.

Let us then embark on a study of American economic history relative to the gold standard—that great un-macroeconomic institution—and see how it fares against the vaunted, high criteria of macroeconomic management. We shall see that on the criteria of the most modern economics, it is precisely the era of the gold standard and its closest approximations, throughout our more than two centuries of economic history, in which we have seen the strongest growth, the smoothest business cycles, the greatest ease in dealing with crisis, and the most inopportune environment for unpleasant side-effects.

Gold: the secret of the Constitutional era

As every junior scholar of American history knows, one of the chief reasons the United States had a Constitutional Convention in 1787 was the abject worthlessness of the paper money that the states had been trying to get by on since 1776. Whatever the nobility of the American Revolution of the

decade prior, it was clear in the latter 1780s that governments and banks that print money with no backing will preside over an economy stuck in barter and autarky, if not destitution.

This intolerable possibility made itself felt in the monetary clauses of the Constitution of 1787, above all Article 2, Section 8, Clause 5: “The Congress shall have Power To...coin Money, regulate the Value thereof, and of foreign Coin, and fix the Standard of Weights and Measures...” Other relevant parts include the same Article, Section 10, Clause 1, prohibiting states from any effort to “coin Money; emit Bills of Credit; make any Thing but gold and silver Coin a Tender in Payment of Debts...”

Subsequent legislation provided that the United States would coin money in gold at about a rate of \$19 per ounce, and in silver at fifteen times that level per ounce. With the emergence of the Bank of the United States in the 1790s and 1800s, there also arose currency notes that were convertible in gold at that \$19 rate. Thus were the operational foundations of a gold standard set in place. Money would be either gold itself, coined at the fixed rate to the dollar, or currency denominated in dollars that would be redeemable by the issuer at the same rate. It was a bimetallic system in that silver (and copper) was used for smaller denominations of coins, and after a while to back notes, but the fixity of the silver rate to gold (15:1) made the system practically, if with minor variances, a gold standard.

Thus the limitation put on the monetary system at the outset of the Constitutional era was that the United States could not produce money unless it had gold in reserve either to be struck in mints or to back notes; or unless the government could readily obtain gold for coins, or as was more likely to back notes, on the market at a \$19 per ounce price. A balance was hit upon. If the private economy demanded more notes, which is to say currency, for its real economic purposes, the United States could supply this currency without fear of inflation, in that the market price of gold would not go up if the demand was for currency as opposed to gold itself.²

Here is an aspect of the gold standard that often gets lost in the shuffle. Under a well-run gold standard, it is not necessary for the demands on a government’s own gold stocks to increase along with

a rising demand for money. This is because the demand for currency for real, entrepreneurial purposes in the economy can make the demand for gold go down, or stay low. Paper notes have advantages over physical gold as an actual medium of exchange. If agents in the economy are keen to make exchanges with each other—the sign of a robust economy—they will not likely be inclined to redeem notes in gold. If anything, they will seek to redeem gold in notes for their liquidity value.

To the extent that there are currency-holders who wish to redeem in the environment of a robust, opportunity-rich economy, and the currency issuer has little or no gold reserves, the issuer can buy gold on the open market at to cover its redemption obligations. There are examples throughout history of countries going on a gold standard without accumulating reserves first, the trick being to make sure that the economy is free to run on account of a diminished and properly focused governmental sector. As Nathan Lewis has written, an example is Germany after the hyper-inflation of the early 1920s³.

And yet it is important to remember that the price of gold on the open market, in whatever currency, is prone to gyrate, and perhaps wildly, if in particular the major nation has not made its currency convertible to gold. It was Britain's monetary stability and adherence to the gold standard in the latter 18th century that enabled the United States to ease into a gold standard at that time. Today, the huge run-up in the dollar price of gold in the face of the American monetary binges of recent years makes gold quite expensive on the open market. Major country leadership is an important prerequisite for monetary reform in the direction of gold.

Once there is a commitment to gold, it is only when a currency issuer takes advantage of a situation and tries to make superfluous issuance of notes—"printing money"—that the system falls out of whack.

In the face of such a development, one way out for the issuer is to devalue currency outstanding—to make each unit redeemable in less gold. Alternatively, the issuer could strive to re-establish its currency's legitimacy with respect to the original price of gold.

All of this was understood in the banking systems of the world from ancient and medieval times on. And it made running a convertible-note gold standard easy. If the market price of gold is staying put at a low level, print currency freely on demand; if gold is sinking in price, print currency to an even greater degree, indeed to the degree that gold rises in price back to the exchange-rate par, for the economy is suffering from a paucity of money for real purposes; and if gold is rising in price above the par, curtail issuance to reestablish the currency's credibility as well as that rate par. Very simple: "a monkey could run a gold standard," as Robert A. Mundell said as he accepted the Nobel Prize in economics in 1999.⁴

At any rate, the economic results that flowed from the United States' effective establishment of the gold standard in the Constitution were nothing short of phenomenal. In the back-cast and unofficial, but good statistics of the most contemporary economics, economic output (or GDP) of the United States increased every single year of the first two decades under the new gold standard, from 1790 to 1810, and the average per annum real rate of economic growth was no less than a stunning 4.85% over this twenty-year run. Prices, again in the recreations of modern economics, went up at the consumer level about 1.5% per year.

One-and-a-half percent per year is below the official best targets of central bankers today, who try to shoot for 2% inflation in the name of price stability. Still, it is curious that prices increased at all over this period, given the U.S. commitment to a gold standard. The problem, such as it was, probably originated in nod to bimetallism given in these years. By fixing a ratio of silver to gold (instead of only specifying the dollar as a weight of gold) the United States attached a rider to the gold standard: silver or gold was money. True to form, people in early America preferred to use silver in transactions and to

hoard gold. The cumulative increase in consumer prices of 34% over these first two decades of the hard-money U.S. economy probably reflected a general, if mild, hedge against the prospect of the fledgling nation's pulling off a truly sound, wholly gold monetary policy.

Interestingly, the New York market price of gold did not budge from the U.S. official price of \$19.39 at this time. This meant that as the years wore on, consumer prices were liable to stabilize, if not fall with product innovation, as more and more people came to believe that the United States would respect the operations of the gold standard in the name of real economic growth—growth which for these first two decades was doing no less than nearing the major threshold of 5% per year.

Fiddling with gold: comes a bust

It should be pointed out that GDP numbers from this era reflect almost entirely the private sector. Government spending is a portion of GDP—pushing 40% in the U.S. today—and at this time it was infinitesimal. In the long peacetime eras of the 1790-1913 run, the federal average was about 2%. That 4.85% per annum growth from 1790 to 1810 was essentially all in the real economy.⁵

The War of 1812 brought the first great stress to the system. Federal expenditures suddenly leapt by 50%, and the government found that there was little market for the bonds that it tried to float to pay for the war. Therefore, the U.S. opted to issue notes in large denominations that for a period would *not* be convertible to gold but would pay interest of over 5%. Private banks gobbled up these notes (the interest-bearing reserves of their day), and began to issue their own currency on the basis of its theoretical convertibility to the federal note, and curtailed convertibility in “specie,” gold and silver.

Real GDP met its first decline since the pre-Constitution days in the years 1815-1816, though it was statistically insignificant. Moreover, inflation totaled 43%, or 9% per year, from 1810 to 1814, a much greater jump than the entire sum of the two prior decades. And the private price of gold inched

up, past \$21 an ounce, as the markets wondered if the strange little war would ruin the reputation for currency solidity that the nation had so painstakingly constructed since 1789.

When the war ended in 1815, the government made clear that it would return the nation to the boon economic environment of the prewar period. A lesson had been learned. Sound, gold-convertible money leads to great things in the economy.

The basis, once again, would be a fully convertible currency made possible by a thriving private sector. The first signal that the government was serious in this regard was that over the next six years, government spending fell well below the level that had prevailed as the war began. In addition, the Treasury (and the new Bank of the United States) urged private banks to trade the old inconvertible federal notes for new deposits of federal revenues based on real receipts, from tariffs and such, so that a “resumption” of gold and silver payments for any currency presented by the public to the private banks could be achieved.

Thus a crucial and historic pattern was established in the aftermath of the War of 1812. It would be reprised any number of times until 1913 (and indeed after), whenever the United States decided, for whatever reason, and to whatever extent, to depart from the gold standard for a little while.

The pattern was as follows. As the U.S. wavered in terms of its commitment to gold, there would be an increase in the rate of inflation, and in the market price of gold. As in turn the U.S. reconsidered, and committed once again to gold convertibility at the original exchange rate (resumption), the price level along with gold would go down to the old par. Sometimes there would be “panics” associated with all this, as speculators who had bought and hoarded gold saw the value of their investment go first up, then down, perhaps making them go “bust” if they had bought high or on margin; and as regular debts became difficult to finance on account of deflation.

And yet how tame these panics seem by modern standards. Indeed, they were mainly phenomena of a relatively small and circumscribed circle of speculators and certain debtors bereft of

cash-flow—as opposed to the economy at large. For example, as prices fell from their 1814 average back down to the 1810 par by 1820, down some 33%, there was the famous panic of 1819. And yet real GDP increased every year from 1816 through 1820, at the perfectly respectable rate of 2.9% per annum. This is completely contrary to our contemporary experience of the coupling of crisis with recessions—at times quite deep and extended ones—as the engines of fiat money are gunned throughout the whole experience.

A cure that really worked

If resumption after the war of 1812 caused a little panic that failed to show up even in the GDP statistics, the ultimate point of the re-institution of the gold standard was to get the economy on sure footing once again. And by any account, this happened most beautifully. In the fifteen years after 1820, U.S. economic output went up 4.5% per annum. This amounts to one of the greatest runs in all American history. The historic booms of the twentieth century, those of the Roaring '20s, the “Go-Go” 1960s, and the Ronald Reagan 1980s, can match the 4.5% growth rate, but not the duration. Twentieth-century booms of this caliber lasted about half the time, seven years each.

As for prices, 1820-1835 saw a deflation of about 1.9% per year, a cumulative 24% from both 1820 and the high level which had prevailed before the war of 1812. The inflation premium that consumers had been putting on the nation's goods and services as the United States strove to prove itself as a good, gold-standard currency issuer had at last vanished.

In 1834, the United States raised the gold/silver ratio so that gold might be used as a transactional currency, as silver had long been. The ratio went up from 15 to 16 to 1. This represented a 6.5% increase in the official redemption price of gold, such that afterwards that price was no longer \$19.39 per ounce of gold but \$20.67. Following the mild de-monetization of silver, there was another famous panic of the nineteenth-century variety, that of 1837.

The characteristics of the 1819 panic repeated themselves. Overall output never went down through the years of the crisis, and from the peak of 1835 through the last of the sluggishness, 1840, GDP went up by an average of 2.1% per year. Inflation in consumer goods bucked up by 8.5% from 1835 to 1837, reflecting the increase in the gold price, but then settled back to just below the 1835 par by 1840.

It was the second panic in a row of the gold-standard era in American history in which GDP failed to decline year-over-year—indeed GDP increased at a rate higher than in our current recovery—and in which prices settled within percentage points of their long-term level. The pattern was getting regular. Gold underlay fantastic booms in the economy, and any rough patches that came would by twentieth-century standards be regarded as eras of moderate growth.

It was also the second panic in a row whose resolution would result in truly breathtaking growth for the long term. After the economy digested the new gold price, and had its spate of “sluggishness” (again, moderate growth by modern standards) from 1835 to 1840, the economy took off over the next sixteen years at no less than a per annum real rate of growth of 5.2%. Throughout this incredible run, the price level dipped a little, and stood 2% lower, cumulatively, in 1856, compared to where it had been in 1840.

In contrast, the twentieth century and its regimes of macroeconomic management have nothing as impressive as this stellar streak. You can cherry-pick periods like 1933-1944 or 1933-1947 where growth was technically higher. But these periods take as a beginning point a trough produced by years of massive GDP declines, as opposed to the steady increase that led to 1840, and include huge government spending shares of GDP at the terminal point. If you want a real-sector boom that lasts for years on end, you have to look at the evidence of the nineteenth century, supervised as it was by the gold standard, whatever pretensions our own modern times have about its ability to engineer macroeconomic excellence.

Fiat money emerges – and is shuffled off

Another brief panic occurred in 1857, with the same characteristics as the earlier episodes. There were no yearly GDP declines. In fact, that number went up at a clip perfectly acceptable by modern norms, 2.9% per year from the 1856 peak through the first year of the Civil War (1861 still saw next to nil in government expenditures). Prices continued their gentle, under 1%-per year move downward, reflecting the innovation that was happening in the economy. Goods and services were getting cheaper every year thanks to productivity advances that came with the economy growing at a solid pace. In turn, the price of gold stayed stable and low as the appetite for currency maintained itself. Americans were bent on getting involved in the opportunity-laden private sector.

But of course the war that came in 1861 would be a very big one, dwarfing that of 1812 a half-century earlier. The Union employed stratagems in financing its considerable operations in the Civil War, above all issuing “greenback” currency and forcing people to accept it as settlement of obligations in the notorious “legal tender” arrangement later rejected then approved by the Supreme Court.

Greenbacks were fiat currency, and the price level promptly went up by 100%, as did the market price of gold. Real GDP rose by a quarter over the course of the war, but this was in the context of federal expenditures (a component of GDP) increasing about ten-fold from 1861 to 1865.

After the Union victory in 1865, the United States faced the same choice it had in previous bouts of overprinting and devaluation, if on a larger scale. Should it continue with the fiat regime, or work towards a resumption of the gold standard?

The crucial development here is that the federal government did not take its wartime levels of spending as a new platform from which to build, higher and higher, and outward and outward, the structure of the state. After 1865, federal expenditures quickly fell by some 70%, and to 3.3% of GDP.

This level was still above what had prevailed before the war. But the precedent was set that the government was keen on reducing its imprint on the economy.

GDP, for its part, and inflated as it had been in 1865 on account of well over a billion dollars in government expenditures, technically fell in 1866 as the economy shifted into real production. Still, the 1866 mark was 20% higher than that of 1861, and another big run was in the offing. The United States had not yet altogether guaranteed it, but was making it clear enough that in due course at a point not too far off in the future the country would supervise a general resumption of gold payments for currency. From 1866 to 1873, as government-sector spending cascaded downward, real GDP increased by more than a third, or some 4.6% per annum. Prices in turn made their way down toward the pre-Civil War par, as did gold on the private markets, erasing about half of the wartime run-up.

But nothing outright was done on the gold front. There were some issues to face. If the United States simply resumed redemption payments at the old rate, \$20.67, it stood to be flooded with requests from holders of so many greenbacks outstanding, especially since the market price of gold remained above the old redemption price. Moreover, there was a considerable political constituency in favor of continuing the fiat-money experiment indefinitely into the future.

This uncertainty without question kept consumer prices as well as gold at their premium above the 1861 par. If the United States was going to continue to delay resumption and entertain ideas about fiat money, it made sense for individuals to own commodities (like gold) which would go up in price should the country conduct an unduly loose monetary and currency policy.

Conceivably, the United States could have raised the official redemption price of gold in dollars commensurate with the market price in one resounding move shortly after 1865. This would have scuttled any further speculation in goods or gold. The new consumer price level would be that which had prevailed at the time of the dollar devaluation, and deflation would be reduced to being a mild consequence of productivity advances and measure 1% a year or less as in the past.

As was basically apparent, the United States was serious about resumption at the pre-war par. But this meant that the country would have to wait until the price level bounded all the way down by another third, erasing the entire 100% gain made during the war. This was because of a key price, *the* key price in this state of affairs: that of gold relative to the prices of goods and services.

If the United States, say in the late 1860s, suddenly announced resumption at \$20.67, and the price level (of goods and services) was still some 50% above the 1861 par, the private price of gold would have stayed where it needed to be in order for one unit of gold to have the same purchasing power as it had in 1861—in other words some 50% above its 1861 price. This would cause immense redemption requests once resumption occurred and would overload the system.

All this was not merely a crucial issue at the time (as the economy proceeded to grow at a very nice pace). It would serve as the closest, if ignored, precedent for an almost exactly identical situation at the outset of America's gravest economic challenge sixty years later—the Great Depression.

At last another panic forced the issue. In 1873, the United States had been pursuing policies for several years that had reduced the money supply (and hence future gold liabilities after resumption). Elements of the banking system began to break. The economic results were fairly dire, with layoffs and asset-price plunges reaching considerable levels. The United States supplied liquidity by tapping its Civil-War bond repayment fund, and the crisis passed.

Much ink has been spilled over the 1873 crisis, one of the more severe of the gold-standard era, and we shall never know if it could have been avoided by an accommodation beforehand on the part of the United States to a higher price of gold and of goods and services, i.e., a one-time increase in the gold-conversion price of the dollar prior to 1873. The economic statistics show nil GDP growth from 1873-1875 and at least one down year.

At any rate, Congress did rally to take action. With the Resumption Act of 1875 (which was in the air throughout 1874), a time limit was put on the re-institution of gold convertibility: it would take

place on January 1, 1879. To agents in the economy, this action meant in practice that the price level, as well as gold, would continue to fall to near its pre-war par. This amounted to predictability, even if the deflation would be hard on debtors. What followed was a decent growth run: 3% in real terms from the trough of 1875 through 1878.

What happened upon resumption in 1879, however, is the true stunner. For this is where the American economy simply entered its greatest period of expansion ever, its true halcyon stretch. In 1879, the year the nation slipped into resumption, back to gold convertibility at \$20.67 per ounce, the economy grew by 12% in real terms. In the fourteen-year span from 1878 to 1892, real GDP well more than doubled, proceeding at a 5.4% per annum rate. The 1840-1856 run which had followed the stabilization of the gold standard, so impressive at 5.2% per year, got relegated to runner-up status. Another extended period also set in motion by a recommitment to gold recorded growth a few points higher.

There simply is nothing like the 1880s—and indeed the 1870s—in American economic history. In the 1880s (which is to say, 1880 to 1890), the economy of the United States grew by an astonishing 66% in real terms. In the 1870s, including the famous 1873 panic but thanks to the great resumption year of 1879 which pushed it over the top, the economy grew by 70%. These are the greatest decades of economic growth in American history. And one followed the other.

The only competition is the asterisk-laden 1940s. The economy technically grew by a shade more than 70% in the 1940s, but much on account of a governmental sector and the low base represented by the 1930s—one of the worst decades of economic growth in American history. In the 1880s, not only was the base point high—the 1870s saw massive growth—but the real sector captured all the gains. By 1888, federal spending was back below 2% of GDP.

Really good decades of economic growth in the macroeconomic era, the latter twentieth century, see 40% or 50% growth, as in the 1950s, 1980s, and 1990s, and the 1960s, respectively. Then

again, we also see duds like the bewildering 1929-1938 span (1%) and the 2000s (17%) that have no precedent in the gold-standard era.

When it comes to prices, goods and services drifted down a half a point a year, a change not totaling 10%, from 1879 to 1892, as the prodigious productivity of the economy in its greatest era of innovation made everything cost less every year. We need not bother with a comparison to twentieth-century norms, where four times this level in yearly price changes (2%) became the rarely attained Holy Grail of central banking. It was only fitting that at some point in this great era, probably around 1885, the United States became the largest economy in the world.

Getting bored with success

Not everybody was pleased with the extraordinary development of the American economy in the 1880s. The incredible innovation was, for example, making farm labor less and less necessary. Many farmers continued to stick it out on the land, however, and they felt the pang of the mild deflation on their debts and on the prices of their commodities more than the sweetness of the prodigious economic growth. Even though the economy overall was running the highest growth levels it had ever seen over a sustained period—true even in international comparisons—the argument welled up from the farms and the metal-producing states of the West that there was not enough money in the system.

At last Congress balked. Dating back to the 1870s, Congress had authorized the minting of a certain modest amount of silver every month. But with the Sherman Silver Purchase Act of 1890, sponsored by a Republican in Congress and signed into law by a Republican president (Benjamin Harrison), the United States upped this amount significantly. There would be much more money in the system, a good portion of it now not gold-backed.

For a year or two, money swelled into the economy, but the main development was a move into gold by savvy investors (and thus out of currency) who realized that a superfluous introduction of silver money would cause inflation, speculation, and all the rest. Hence came the panic of 1893. Again, the panic came on the heels of a move by the federal government to *expand* the money supply in cheap and unnecessary fashion—shades of the 2000s.

In the election of 1892, Democrats swept into power, taking both houses of Congress as well as the presidency for the first time since antebellum days. In the 1870s and 1880s, many influential Democrats had endorsed and supported the gold standard; in 1892, their victorious candidate for president, Grover Cleveland, was an uncompromising advocate of gold. The 1890 Sherman Act at the root of the bubble that prompted the Democratic victory of 1892 was essentially a Republican measure. The election had been a referendum on gold, and the Democrats won as the party of gold.

And yet even the Democrats were leaning hard at this time in the direction of loose money in the form of the “Free Silver” campaign. It soon became apparent that despite Cleveland, the 1890 lark would be continued, indeed magnified into the future. Cleveland would spend his four years striving to convince his party in power that Democrats should maintain their traditional advocacy of gold, only to see his ideas repudiated at the Democratic National Convention of 1896.

The unnecessary swelling of what we today would call the monetary base, occasioned by the silver actions of the early 1890s, and coupled by the isolation of Cleveland within his own party after 1892, caused such a rush on gold that it not only dried up U.S. reserves (J.P. Morgan had to provide a gold loan), but generally caused a real monetary *contraction* that occasioned a

recession. The greatest period of American economic growth—which was coupled by price stability!—1878-1892, had come to an end for no better reason than that the government buckled to calls for loose, non-gold money. It remains one of the most pathetic tragedies in American economic history—superseded, of course, by the greater fare offered up in the twentieth and twenty-first centuries.

The sad GDP tale is as follows. Aggregate output plunged by 10.3% from 1892 to 1894, then bucked back up to the 1892 level in 1895, only to fall another percentage point and some during the election year of 1896. The price level, which actually had been flat in the four years before 1893, went down 9% points through 1897. And this was not because of innovation in the economy—GDP was gyrating, and trending downward—but because of the paucity of good exchangeable money, with everyone scrambling into gold to get out of currency.

1896 proved to be a referendum year. The Democrats in their wisdom turned to the notorious free-silverite, William Jennings Bryan, who in the course of the campaign mugged to audiences with his “Cross of Gold” speech and such. The Republican challenger William McKinley was indisputably a gold-standard man. A line was drawn. McKinley won, and the U.S. was clearly going to re-establish its currency as a gold-backed one.

The details in law were worked out over the next few years, culminating in the Currency Act of 1900 (known as the Gold Standard Act), but all this was effectively a *fait accompli* given the Republican victory in November 1896. And sure enough, the same old macroeconomic trends asserted themselves. In the eleven years following 1896, the economy sloughed off the sluggishness accompanying the silver monetization of the mid-1890s and grew by two-thirds, 4.6% per annum. Prices recovered to where they had been before the silver experiment—in other words, no movement in the price level in the context of this latest boom supervised by gold.

There was a panic in 1907, about the order of the initial 1893 episode, and accompanied by a 10% drop in GDP. But once reserves were deployed to stop the snap, the recovery was sharp and clear, with 1908 providing a floor for 3.9% per annum growth through 1913 and the creation of the Federal Reserve. Prices also ticked up to where they had been in the early 1880s, and stood about 8% higher than just before the silver disturbance of a quarter century prior.

Little did the nation know it, but that year, 1913, would mark the end of a truly incredible, a magnificent era. Here is the roster of events. 1790-1810: boom near 5% per annum; 1820-1835: boom over 5%; 1840-1856: boom over 5%; 1866-1892: 26 years at 4.7%; 1894-1913: boom at 3.6%. This was 90-plus years out of 123 of not just growth, but awe-inspiring, long-term mega-growth under the gold standard. The nation emerged at the end of it all as the economic powerhouse of the world.

The canons of macroeconomic excellence had not yet been devised by the professionals, but the precedent was all there. Since 1789 and the United States' first commitment to the gold standard, a century and a quarter of permitting gold to predominate in the country's monetary system had resulted in levels of growth so high that extended runs at 5%, with vast stretches bereft of GDP declines, were the norm rather than the exception. And such panics as there were either reflected a departure from gold conventions or were barreled through at such considerable rates of growth that today we would call them decent expansions. And all the while, the only sustained movement in the price level was gently downward on account of innovation in the economy. The long golden era formed a history that made possible not only great fortunes, but the vast middle class that this nation has come to assume as its birthright. It is a history from which we must draw today.

Managing the currency

The founding of the Federal Reserve in 1913 was perhaps in itself not destined to be a momentous event. But coupled with the greatest international crisis in monetary affairs in centuries that came the next year, with the start of World I in 1914, it evolved that way.

The United States was neutral for the greater part of World War I, from August 1914 until April 1917, with the war lasting until November 1918. During its two and two-thirds years of neutrality, the United States exported a considerable amount of goods to the belligerents, and got in return for a time gold-convertible currency. After 1915, when those nations roundly went off gold, the U.S. got inconvertible currency for its shipments of materiel overseas.

This monetary inflow to the United States, both the gold and the foreign cash, found a counterpart in tremendous new issuance of government debt once the United States entered the war in 1917. All this monetary stuff (particularly the government debt) was traditionally the kind of thing that when made as deposits, banks used as a basis for issuing loans. It was enough for the Federal Reserve (and its close co-operator the Treasury) to supervise a 100% increase in the money stock of the United States.

What did not increase was economic output. With trading partners denuded, the worldwide investment climate darkened by war, and currency everywhere, GDP in the United States struggled after 1913 into two years of drops and managed only a 2.4% yearly increase through the next peak, 1919. Meanwhile, consumer prices fully doubled from 1913 to 1920. This roughly reflected the increase in the money stock over and above the increase in production.

Meanwhile, GDP started to include a bloated government sector—the real economy was getting displaced. Government expenditures went from less than 2% in 1913 to 24% of GDP in 1919, making the real-sector change over that period not a 2.4% per annum increase but a cumulative 11% decrease. The value of holding currency declined stunningly as there were no real opportunities for it. The United

States responded by limiting the holding of gold, prohibiting its export for twenty-one months following September 1917. This move effectively suspended the gold standard.

The United States had learned before how to deal with the problem of resumption given a period of crisis and a sharp run-up in prices and the government sector. Arguably, this time was somewhat different, in that much of the developed world was involved in the problem too. The basic choice was between the two time-honored alternatives. Either the country could aim to resume gold payments at the old rate (\$20.67 per ounce), with the price level returning to the old par in tandem, which is to say with considerable deflation (the same amount, 50%, as required after 1815 and after 1865) entailed. Or the United States could accept the current inflated price level as the new par and accordingly raise the redemption price of gold, preferably in one fell swoop.

Ultimately, the United States pursued a combination of the two options under no real guiding principles. From 1919 to 1921, the United States experimented with the former option, raising interest rates and so that the price level fell from the 1920 peak of double the 1913 mark by 15% in one year. Meanwhile, gold payments at the old rate, \$20.67 per ounce, were re-instituted even though the price level was still way above the 1913 par. Moreover, the governmental sector remained large, especially on the tax side. Income taxes, which were basically a footnote to the tax code when they started in 1913, now snared everyone making \$20,000 (in today's dollars) after a few petty exemptions, and at rates running all the way up to 77%.

The recession that necessarily came was a notably unpleasant one, by some accounts one of the worst in American history to date. Real GDP ground down for two years, from 1919 to 1921, by 3.2%, and unemployment—only christened a word in the 1890s and now subject to rudimentary measurement—hit somewhere between 12% and 15%. And all this occurred in the face of massively moving prices, in the downward direction. In the macroeconomic canons soon to be developed, this was a poor performance all around.

There was a switch in policy in 1921. The Fed committed to maintaining the current price level (now 70% above the 1913 par) as taxes got cut very considerably, with the top rate slated to go down by two-thirds. Hence came the Roaring '20s, the legendary expansion from 1921 to 1929 when the economy increased by 45%, 4.7% per annum (actually a little more if one accounts just for real-sector growth). And prices moved ever so gently downward, by 4-5% over the span.

This Roaring '20s were akin to what had been seen the last time the United States had emerged from a major war (the Civil War) and the country decided to whisk away the wartime state in favor of the real sector, in tandem with tipping off its intention to re-establish the currency's credibility in gold. The increased demand for currency in pursuit of the real opportunities, following the diminution of government spending, kept a lid on demand for gold.

And yet there was one major difference in the way in which policy was conducted in the 1920s compared to the resumption episodes of the past. The United States immediately (in 1919) committed itself to the pre-inflation gold-redemption rate (of 1913), \$20.67, even though the general price level remained far above the 1913 mark. Recall that in the periods after 1815 and 1865, the United States suspended convertibility until there was deflation to the old price level, a process that took a number of years.

Thus in the 1920s, gold remained undervalued (each ounce could procure less in terms of goods and services than it could in 1913), with the markets likely to bid up gold until it was made whole against prices. But this is not how things were done in the 1920s, indeed worldwide, or would be done in the quasi/pseudo-gold-standard years that followed. There was an agreement, if informal at times, on the part of governments, to see to it that the private price of gold did not go above the redemption price.

In the American case, this meant that gold traded in the private markets at \$20.67, again even though this would make gold undervalued with respect to goods and services. The question that hung over the world economy, and most certainly the American economy was: could this strange

arrangement persist, or must there not be an official increase in the redemption price of gold, as well as a loosening of the private markets, such that gold would be made whole against goods and services?

It was, effectively, a Sword of Damocles that hung over the 1920s economy. This sword never crashed over the economy during the long roaring period of the 1920s because there were other asset classes (stocks for example) that provided greater prospects for increase, in the case of the Dow industrials by an order of 280% from 1925 to 1929. But if those other asset classes stopped increasing in value (perhaps because of government intrusion into the economy), it stood to reason that there would be speculation in gold in expectation of a devaluation of the dollar.

The 1873 crisis was reprised in the stock market crash of October 1929. The markets wanted some clarity on what was going on with the currency. Was \$20.67 the price going forward or not? In the immediate aftermath of 1873, of course, the United States took clear steps to assure economic agents that the old price was the price, and that the government would continue to steer clear of private economic activity in order to maintain a robust demand for currency, and would provide liquidity via the Civil War bond repayment fund.

In the aftermath of 1929, something different happened. As America had done in the wake of 1873, governments around the world insisted that the prewar parities were the ones they were sticking to, which meant there had to be still further deflation for gold-holders to be made whole. But also, and in a violation of the precedent of 1873 (and 1819) governments took steps—very considerable ones—that indicated that they would make further intrusions upon the economy in the face of the call for clarity.

In the United States, the big three of federal expansions of this period were the Smoot-Hawley tariff of 1930, the Revenue Act of 1932 which upped the marginal rate of the income tax by two and a half times, and the increase in federal spending from 1929 to 1932 by 86% in real terms.

Naturally, all this occasioned a major withdrawal of capital from the economy. The real demand for currency, for currency desired for making investments and other plays in the economy, went down. Merely holding currency became profitable as another deflation on the order of 20% emerged. The capital strike brought unemployment to 25%, banks failed by the thousands, and GDP fell by a quarter through 1933. Macroeconomic horror.

The deflation of the early 1930s proved to be a sufficient impetus for holders of gold who were expecting a spike in the U.S. redemption price to quit their speculation and exchange their metal for currency. So the Fed and the Treasury began to collect gold—in major amounts. Here these institutions did something passing strange, to the great detriment of the economy.

The Fed in particular took steps to hoard gold. At every opportunity the Fed got to obtain gold in exchange for currency in the early '30s, the Fed then “sterilized” that gold (in the monetary parlance), which means not use it as a basis for new currency. Official U.S. gold went all the way up to some 6,000 tons from 1929 to 1933. The Fed did nothing to print new currency on this gold’s basis—in violation of all norms of a central bank operating in a crisis.

It was fully possible for, indeed required of, the Fed—were it operating under ordinary gold-standard conventions—to provide credit to banks on the basis of all this gold. Much of this gold in any case was free and clear of the legal minimum the Fed needed to provide cover for the currency. However, according to the Federal Reserve Act of 1913, and in line with years of banking practice, in the event of crisis, the Fed was called on to use *all* its gold to issue new money to support the banks. None of this happened, and the Fed emerged on the other side of the Great Contraction in 1933 with a mother lode of gold.

One of the greatest verities of contemporary professional economics vis-à-vis the gold standard is that gold played a major role in causing the Great Depression, in touching it off and in guaranteeing its savage depth and length. The fashionable argument in economics is that gold “fettered” the economy at

the outset of the Great Depression by compelling monetary authorities the world over to restrict their assistance to banks.⁶

It should now be apparent that all this is hopelessly far from the mark. The United States (let alone the world) knew what it had to do after World War I, based on ample historical precedent, to get back on gold, to re-institute “the gold standard.” It had to wait to resume gold payments until after a deflation, when gold regained its pre-war purchasing power; or it had to raise the redemption price to be respectful of the new price level; and in either case it had to shrink the state in order to restore robust real demand for currency. None of these choices was made, except the latter for the 1921-1929 period, which is why we got the boom of that time.

Moreover, as in, say, 1893, when the United States freely monetized its gold in the face of crisis, indeed even to the extent of raking in J.P. Morgan’s gold to continue the operation, in the early 1930s, the new central bank, the Fed, collected gold beyond all sense and defied its responsibility to monetize it—as the banking system was collapsing. These were the ways of the gold standard?

Economist Richard H. Timberlake and others have asked whether we should even refer to the Great Contraction/Great Depression episode as one that operated under the gold standard. Likewise, French monetary economist Jacques Rueff argued that the replacement of gold with reserve currencies in foreign central bank vaults put the international payments system in disarray. Gold was bandied about as a word and as a talisman then, but the operations of the gold standard, as the lengthy successful history of the nineteenth century had shown, were barely hued to, if at all. As Timberlake has written, gold in this period was a “façade,” a “rubric,” a “football” (he might have added, a “scapegoat”), something that people mentioned and pointed to while a new thing was on the scene as the prime mover. This was big government, in its taxing and spending and soon regulatory authority, and in the form of an unprecedentedly parsimonious and convention-defying central bank. Say what you will about

the Great Depression, but no gold standard in history has ever had it that during a crisis the lender of last resort was to fail to mobilize its gold.⁷

Gold gets back in the game

Gold kept flowing into the United States throughout the 1930s, even as the economy stayed in the tank. In the latter portion of the decade, as war clouds gathered, Europeans were looking for a place to put their money. They would exchange their currency for gold, and get dollars for it, leaving the U.S. authorities adding to their original big gold stockpile, such that at the end of it all, in 1945, it amounted to probably 85% of the world total.

In response to all this, European issuers began making their currencies convertible at fixed rates not to gold (which was flowing out-of-country to the U.S.), but to the dollar. The idea was that if the local currency was not convertible to gold outright, it was by extension, in that the note into which it was convertible (the dollar) was itself convertible to gold.

In 1934, the United States made a strange move. After all the deflation of the early 1930s, which had brought the domestic price level within hailing distance of that of 1913, the U.S. actually raised the official redemption price of gold. The U.S. took the rate up to \$35 per ounce—a roughly 70% increase from \$20.67, which would have made gold exactly level to prices at their Roaring '20s mark.

We shall never know if this action, had it been taken say in 1928, would have perpetuated the boom into the future and made the Great Depression an impossibility, but this is a perfectly reasonable conjecture. At any rate, the price level in the 1930s was well below the 1920s mark, making gold overvalued at \$35 an ounce. No matter, the United States reasoned. There would be no speculation in gold, up, down, or whatever. The U.S. outlawed the possession of gold on the part of American citizens in 1933.

Thus an international system had developed, if informally, of fixed exchange rates of paper currencies the world over to the dollar, with the dollar redeemable (to foreigners) at \$35 per ounce of gold. It was a monetary order that had emerged during World War I as developed countries substituted national currencies (mainly the British pound) for gold reserves and was later codified at the Genoa Conference of 1922. Now it had become dollar-centric. The new status quo was formalized at the famous “Bretton Woods” meetings of the summer of 1944, as World War II was nearing its end, and that maintained itself for a total of some three and a half decades (after the mid-’30s), the latter two-thirds of which saw remarkable growth and price stability for those who adhered to its discipline.

The story of the post-World War II economy is essentially the story of how well countries made it a point to stick to the fixed exchange rate, gold-convertible system. Britain tried to opt out of the system at once, and its growth rate was less than 3% for years until Margaret Thatcher came along. Japan and Germany, in contrast, strove not to overprint their currencies such that the private markets would bid them down vis-à-vis the dollar. Indeed, their currencies were sometimes “revalued” such that they were worth more per dollar. By the 1960s, these defeated belligerents of World War II had taken their place as the second and third-largest economies in the world, respectively, having grown at rates upwards of 10% per year after 1945. The effective linkage of these countries’ currencies to gold was strong; and in came extraordinary economic growth.

In the United States, the government took advantage of the “gold overhang”—the overpricing of gold relative to the price level coupled with the enormous stocks in U.S. vaults—and engineered an inflation that fed into un-indexed tax brackets in order to swell government receipts. By the late 1940s, \$35 an ounce made gold equal to the price level again, though the question was somewhat moot since the government had disallowed a domestic gold market.

There still were foreign markets, however, and any time the Fed might print too much money now, the price of gold might go up past \$35—in London for example—making for an arbitrage

opportunity. Thus there was a constraint on the United States, transmitted by gold, to keep monetary creation to real economic purposes, and to keep the private economy (and hence real dollar demand) viable.

The Fed in the age of President Eisenhower in the 1950s basically kept money tight in cognizance of these realities. But the government's focus on debt retirement kept the marginal rate of the income tax all the way up at 91%. Hence there were quite a few redemption requests on the part of foreigners for dollars and then gold. By the end of his term in 1960, Eisenhower was depicted as a hockey goalie trying to "save" the U.S. gold supply from a barrage of foreign requests. A major issue in the election of that year was whether the United States was going to devalue the dollar, that is, raise its redemption price yet again, beyond \$35. We do well to remember that economic growth in the eight Eisenhower years was all of 2.4% per annum, and the period included three recessions.

In 1961, John F. Kennedy came into office and chased larks for a year. For example, under his auspices, the London "gold pool" was set up. This was a stockpile of U.S. and British gold that governments would sell into any strength in the private gold market, preventing the price from going over \$35 an ounce.

This was an maneuver rather than a solution, and obviously in defiance of any legitimate operation of a "gold-exchange standard" (let alone a gold standard), as the Bretton Woods system was often referred to. In time JFK hit on more serious measures. Beginning in 1962, the Federal Reserve began to raise interest rates to defend the dollar, while taxes were cut to ensure more real demand for the U.S. currency.

This "policy mix" of monetary tightening and fiscal stimulus as it would later be called by the advocates of supply-side economics, worked wonderfully. Growth left the sluggish Eisenhower norms in the dust. The economy grew by 47% 1961-1969, a real rate of 4.8% per year. At least through 1965, prices settled into a 1% per annum inflation (the best a gold-exchange standard could do), stocks rose,

and unemployment and government spending fell, as did the foreign demand for gold. Everything was working as it was supposed to.

What should have happened as Bretton Woods matured, and once the U.S. understood the posture it should take in the system, was that each country should have claimed a portion of the U.S. gold stock according to its buying power, left the system, and linked directly to gold. Indeed, in the articles of agreement of the International Monetary Fund, set up at Bretton Woods, this was a stated option. If countries after an extended period of growth and newfound respectability for their currencies, beginning with Japan and Germany, had done this, by 1980 or so we would have been back to the pre-1914 status quo in terms of the international monetary system. A gold standard all around. And that was the monetary policy that had delivered the greatest economic growth and leaps in living standards—it was the era of the “second industrial revolution”—that the globe had ever known.

The fiat regime wins

Japan and Germany probably would have been ready to make this move, but the United States, of all places, was not encouraging. Indeed, the U.S. kept going on in the late 1960s, as it boomed—and as it experimented with overprinting for no good reason—about the need for a new international monetary order, and not the one just outlined. The federal government forced the issue in 1969 by responding to a recession with loose money and a tax increase. Now nobody wanted the dollar.

Here is where President Richard Nixon, in August 1971, suspended all payments in gold to foreigners for the dollar. The era of fiat money officially began. But it should be noted that the fiat money era really began in 1913. Consider the sequence of events. After 1915 or so, the Fed made sure money was available to finance war debt, irrespective of the gold-price effects, and gold payments were suspended anyway during the war and for a time afterward. During the putative period of resumption, the United States defied all precedent and tried to have an old gold price and a new price level. During

the Great Contraction, the Fed collected gold like a hobbyist instead of deploying it to stem a crisis, as of course is the purpose of gold in a central bank during a crisis. And after 1933, it was illegal to hold gold, so no gold-standard mechanism was allowed to operate.

Bretton Woods was the closest thing to the real gold standard, in that foreign markets in dollar-denominated gold could “vote” on U.S. monetary policy, but even these came to be compromised by an overreaching state. Fiat, fiat, fiat, in other words, with the caveat that Bretton Woods gave the world the opportunity for a return to the classical gold standard, but that opportunity was muffed by confused politicians in 1971.

To detail the travails of the American, let alone the world economy since 1971 is to do something very different than canvass nineteenth-century economic history, based on gold as it was, what with its massive yearly growth and the tiny little oscillations of the price level. The world actually tried to keep the fixed-exchange rate regime together without the dollar anchored in gold after 1971, but this was laughed out of existence by 1973. Of course governments were going to print like crazy, now that they could. So came the system—not the *mot juste*—of flexible exchange rates which we have been living with to this day.

The double-dip recession of 1969-1970 which prompted Nixon to bail on gold only got things going in the United States. Two more double-dip recessions came nice and quick, in 1973-1975 and 1980-1982. Growth from 1973 to 1982 was at a 1.8% per annum rate. Unemployment kept rising, from 4% to 6% in the first recessionary cycle, from 6% to 9% in the second, and then all the way to near 11% in the last. But the real action was on the price side. The price level—that bastion of stability of the nineteenth century—went up three-fold from 1966 to 1982.

Even the greatest feats of warfare in the past had not prompted that kind of inflation—it was a doubling, not a tripling, of the price level that the “greenback” era had set off in the 1860s, that the

1812 bond floats had occasioned, that Fed overprinting had spawned during the world wars. All proven to be chicken feed by the long 1970s.

Now of course gold, on the private markets in foreign countries, was zooming up in the face of these developments. And here even the government had to make some concessions. In 1974, the U.S. once again permitted its citizens to hold gold. It was not too late to make an investment. Gold was trading at \$175 per ounce in 1974—five times the still recent official parity price—and by 1980 would top off over \$800 an ounce. In other words, the world felt that the United States was producing far too much money and inducing too little real demand for its currency.

At last somebody got the message. President Ronald Reagan started to hack down the tax and regulatory code in 1981, making for real demand for the dollar. The Fed chairman, Paul Volcker, in turn, who had been desperately trying to tighten money to no effect since his appointment in 1979, soon found that he could supply money that people actually wanted. Gold tumbled down to about \$350 and stayed there for two decades. The 1980s and 1990s saw great runs of economic growth, on the order of the Roaring '20s and the 1960s, over 4% per year for long stretches.

Prices settled into to the new normal of 3% inflation a year (again, not near the gentle price-change standard of 19th-century booms of around 0.5%), and unemployment kept drifting down, getting below 4% by 2000. Here finally, after the brutal stagflation episode ushered in by a dispensing of gold, was macroeconomic performance which the leading nation of the world could be proud of.

It remains another great missed opportunity that the United States, in the 1980s and 1990s, did not take advantage of the stable and (comparatively) low price of gold of the time and make a formal reform of the monetary system. Say what you will about “revolutions” on the tax, regulatory, and even spending sides of the fiscal authority in these years, nothing was done in monetary policy except to continue to entrust Fed leadership with discretion.

What could have happened is the United States could have made its currency redeemable in gold again, at the par price of \$350 per ounce. This would have done nothing to disturb the booms at the time, in that these booms occurred under the auspices of gold trading on the markets at that approximate price anyway.

What would have changed is that the unnecessarily loose money of the early 2000s—the root of the housing bubble—would have been stymied, because gold started its march to its current \$1700 per ounce price in 2002. There is ample reason to believe that had a simple reform of the monetary system in the direction of gold been made at some point in the salad days of the 1980s and 1990s, those days would be continuing in all their resplendence today.

The historical record

There is one conclusion that we are prepared to draw after two long experiences under different monetary regimes that make up this nation's history. This is that the era of superior macroeconomic performance was that of the gold standard. The runs of growth were larger, more consistent, and accompanied by greater price stability if not gentle deflations proper to an economy making major productivity advances.

Moreover, the variation in economic performance was tamer and more rational. When panics came, invariably they arose on account of an attempt to get around the gold standard, and they were solved by recommitments to gold and a retreat of the state sector that makes that possible. In contrast, the panics, the “recessions” (as they came to be known) of the fiat-money era could come on at any time, would aside from their regularity often be characterized by extraordinary length if not depth, and even carry in tow entirely unintelligible things like massive jumps in the price level.

The numbers bear it all out. Whereas in the gold era, extra-long booms at 5% growth were common, indeed the norm, the post-1913 years had to sneak in 4% runs for half as long where possible,

with negative-growth splotches everywhere. And the fiat-money era booms, those of the 1920s, 1960s, 1980s, and 1990s, occurred exactly when the United States was aping the processes of resumption and the gold standard.

As for the inflation-rate comparison, it is just ugly. The purchasing power of the dollar, that rock of the nineteenth century, has gone down 95% since the breakdown of the gold standard began in 1913.

Growth, stability, suppleness through crises, and few negative side effects: these were the criteria invented in the twentieth century to grade economic performance. The results are in. Gold fulfilled these criteria with flying colors in the long era prior. And as our fiat-money Great Recession lingers after five years, we are correct to judge the entire era of the non-gold American economy to have failed to live up not only to the best standards of economics, but to this great nation's proven potential.

Notes

¹ Louis Johnston and Samuel H. Williamson, "What Was the U.S. GDP Then?" MeasuringWorth, 2011, <http://www.measuringworth.org/usgdp/>; Angus Maddison, "Statistics on World Population, GDP and Per Capita GDP, 1-2008 AD," <http://www.ggd.net/MADDISON/oriindex.htm>. Hereafter, U.S. growth statistics from the pre-1929 era are from the Johnston and Williamson set, and after 1929 from "Current-dollar and 'real' GDP," <http://bea.gov/national/index.htm#gdp>. As for Christina Romer's noted argument that conventional GDP reckonings from before official statistics are dated (1929) overstate economic volatility (and perhaps understate growth), the pre-1929 data set used here is potentially a conservative estimate of the economic performance of the high period of the gold standard. See Romer, "New Estimates of Prewar Gross National Product and Unemployment," *The Journal of Economic History* 46, no. 2 (June 1986), 341-352. Price data comes from Johnston and Williamson, <http://www.measuringworth.com/usdpi/>, and for after 1913 from the Bureau of Labor Statistics table, <ftp://ftp.bls.gov/pub/special.requests/cpi/cpiiai.txt>. Gold price data comes from Johnston and Williamson, <http://www.measuringworth.com/gold/>, and <http://www.kitco.com/charts/historicalgold.html>.

² It should be observed that throughout most of this and the subsequent period, the U.S. issued notes in large denominations that were then used as reserves by banks for issuance of their own currency.

³ Nathan Lewis, "In Hyperinflation's Aftermath, How Germany Went Back to Gold," <http://www.forbes.com/2011/06/09/germany-gold-standard.html>. In the case of the German Rentenmark of 1923 and later Reichsmark, these currencies were not convertible by the issuer into gold, but its managers made sure (in a non-manipulative manner) that their value against gold would stay at par on the market.

⁴ Prize Lecture by Robert A. Mundell, Dec. 8, 1999, <http://www.nobelprize.org/mediaplayer/index.php?id=1347>, time mark 10:12.

⁵ Federal expenditure statistics come from "Outlays of the Federal Government: 1780 to 1970," Bureau of the Census, *Historical Statistics of the United States: Colonial Times to 1970* (Washington: U.S. Government Printing Office, 1975).

⁶ *Golden Fetters: The Gold Standard and the Great Depression*, by Barry Eichengreen (New York: Oxford, 1992), is the name of the standard establishmentarian study accusing the gold standard of causing and exacerbating the Great Depression. See Richard H. Timberlake's critique of this and similar works in "Gold Standards and the Real Bills Doctrine in U.S. Monetary Policy," *The Independent Review* XI, no. 3 (Winter 2007), 325-345.

⁷ Timberlake, "Gold Standards and the Real Bills Doctrine in U.S. Monetary Policy," and Timberlake, *Monetary Policy in the United States: An Intellectual and Institutional History* (Chicago: University of Chicago Press, 1993); Jacques Rueff, *The Monetary Sin of the West*, trans. Roger Glémet (New York: Macmillan, 1972), <http://library.mises.org/books/Jacques%20Rueff/The%20Monetary%20Sin%20of%20the%20West.pdf>.