

Inflation and Debt, reported by Stewart Coffin in 2022, revised 2023-2026

Leading up to the recent bi-election, one of the major issues seized upon by those seeking office was the so-called burden of rampant inflation, especially of gasoline. As a former electrical engineer with no background in economics, nevertheless I became interested in this subject while doing some research on related matters discussed in Reflections, the last chapter of my new website. My only formal education on the subject was a freshman college class in Introduction to Economics in which I probably received a barely passing grade. Yet you never know - some of the basics of that course may still be stashed away somewhere in my head. My plan here is to compile published data, much of it statistical in nature, and let others draw their own conclusions.

First, we deal with the misinformation regarding the "skyrocketing" (their much overused term, not mine) cost of gasoline. The cost of gas at \$4 or \$5 per gallon is less per mile now than it was when I got my driver's license in 1949. Cars now get nearly twice the miles per gallon. Then factor in decline of the dollar, as discussed in this report, and we actually come out ahead now. Furthermore, gas is still cheaper here than almost anywhere else in the world. Nevertheless, the recent sudden price increase makes a handy issue for glib politicians to loudly campaign on.

Being curious, I decided to check with the presumed experts. A search for the **causes of inflation** on the Internet turns up many articles on the subject listing about a dozen different "causes." Several of them use the exact same wording, "*demand pull, cost push,*" suggesting that one is simply being copied by all the others, but who knows which one first came up with that catchy slogan. Among the other causes named are growth in money supply, organized labor, too low Federal Reserve interest rate, war in Ukraine, consumer expectations, less oil production, supply chain disruption, price gouging, climate change, and COVID-19. Some of them stretch one's imagination. The Washington Post blames the COVID **vaccine** because it put more people back in the mood of shopping. Forbes Advisor states that "inflation is caused by increases in the price of goods and services;" i.e. inflation is caused by inflation. Fox News predictably blames too much government welfare. Also predictable, Sen. Elizabeth Warren blaming corporate greed. According to Robert Reich, the *real* reason is monopolistic lack of competition. And as usual, Republicans blame Democrats and vice-versa.

In evaluating some of these presumed causes, I find it useful to plot an easily measurable one, the Federal Reserve interest rate, and compare it with the *reported* inflation rate over the same period. The average price of things has been fluctuating ever since records were kept starting in the 1700s, nearly neutral for a long time and then mostly upward for the past 100 years. As for the comparison (Figure 1, top), if there is any cause and effect, positive or negative, I would call it slight. Yet several sources state that the rate of inflation is "controlled" by the Federal Reserve in their setting of prime interest rate. One has to wonder how much control is achieved. It would appear to show not much, with the attempted controls often initiated too late rather than when most needed, and in some cases perhaps even the cause of. Furthermore, when considering the overall historic record of inflation, the Federal Reserve evidently has little if any long term control.

The conclusion I gleaned from all of this is that there must be many causes of the monthly fluctuations in the *reported* rate of inflation, some not well understood, and that no one is able to identify them accurately, or more importantly, predict the future trends, not even the presumed experts on the Federal Reserve Board or in the Treasury Department. And, incidentally, a lot of the information found on the Internet when seeking answers to questions like mine is opinion of very questionable reliability. So after that discouraging finding I then turned my attention to studying the *long term* trend, which most of the "causes" listed above completely fail to account for.

First of all, my intention was to concentrate on the overall long-term strength of the U.S. dollar, but this is not so easy. Most accessible is the Consumer Price Index, based on a collection of consumer items. But it does not take into account, for example, average wages, the value of the dollar against foreign currencies or precious metals, or the cost of borrowing. The Bureau of Labor Statistics has been measuring and reporting the CPI since 1914, based on the costs of various items that come and go, or change, thus subject to much inaccuracy. Further back, inflation is for the same reason impossible to gauge accurately. My figures come from a graph put out by the BLS, according to which "inflation" has been fairly neutral from 1800 to 1915, and for the past 50 years increasing between 3% and 5% per year, (Figure 2). For whatever reason, the BLS graph stops in 2015. If it had been continued into the present (2022), it might show about 4%. Several sources state that a 2% rate is desirable but do not explain why, or how that exact number was determined. Nor does it account for how our country managed well for 115 years with essentially no inflation, and now double that "desirable" rate. I am dismayed by finding so many faulty graphs on the Internet showing greatly distorted depiction of *cumulative* data such as inflation or debt, especially by Statista. This sort of data needs to be plotted on semi-log paper to make any sense.

The Federal Reserve Board began a policy of trying to control inflation in 1978, but the often mentioned "desirable" 2% rate was not adopted until 2012. As noted above and in Figure 2, the *reported* inflation has averaged well over 3% since 1930, with or without the Fed tinkering with it, so what can be the reason?

I wondered if discontinuing our gold standard had anything to do with inflation. The gold (or silver) standard has a long and complicated history, on and off for over a thousand years throughout the world. One of the many problems with it was that the value of gold and silver, like everything else, fluctuates with supply and demand. Plus, of course, shipping of gold bullion has no place in this modern era of instantaneous electronic international exchange. In recent times, after the Bretton Woods agreement in 1944, the U.S. dollar "pegged to gold" has been the standard of exchange worldwide. All ties to gold ended in the U.S. in 1971. Conclusion: probably not much effect.

A few of the internet sources mentioned above suggest that excess government spending might have some effect on inflation, while others think not. I have always wondered. Accordingly, I have plotted federal debt since 1800 (page 6). The debt is here plotted on 7-cycle semi-log paper, which is the only way that makes any sense. I placed dots at one-year intervals and connected them all by a crooked line. Some detail may be missing, but

I was more interested in the overall trend. A useful feature of such graphs is that cumulative constant percent changes appear as diagonal straight lines, with the tangent of the slope angle being proportional to the percentage change.

Next I compared debt *per capita* with *reported* cumulative "inflation" (page 7) over the same period. The correlation is striking, with the rate of inflation being about half that of debt. The obvious explanation is that debt causes inflation, and certainly not the other way around. But correlation does not necessarily indicate cause and effect. It might not be quite that simple. In engineering it is called positive feedback, and is often used to advantage, such as in the steering and braking mechanism of cars. Evidently they both affect each other in some complicated way. In extreme cases this could lead and probably has led to hyperinflation.

In an earlier version of this report, I plotted debt adjusted for "inflation" and then also for population. I am now deleting them, as we have no accurate historical data for inflation. In the long run, our average *reported* rate of inflation over the last 80 years of about 4% appears to be connected at least partly to a steady increase in national debt. Furthermore, if correct, and if our debt continues to increase at the present accelerating rate, inflation can be expected to do likewise unless some drastic changes are made in the federal budget. I have been asked why I did not plot debt as a fraction of GDP. But many others have already done this, and the Internet is littered with such graphs. Furthermore, the GDP is difficult enough just to define, much less measure accurately.

Which brings up some thoughts on the national debt. At the present rate of increase of about 8% per year, by extrapolation it could reach 100 trillion around 2030. The interest on that debt can't just be ignored; it must be paid. At 3% interest rate, that would be 3 trillion. Now, just to put that into perspective, imagine that payment being taken off the top equally from everybody's annual income tax payment. That would be \$8,000 before funding anything else. (But see a more detailed estimate on page 8.) That is not likely to happen. More likely it will be financed by ever more borrowing.

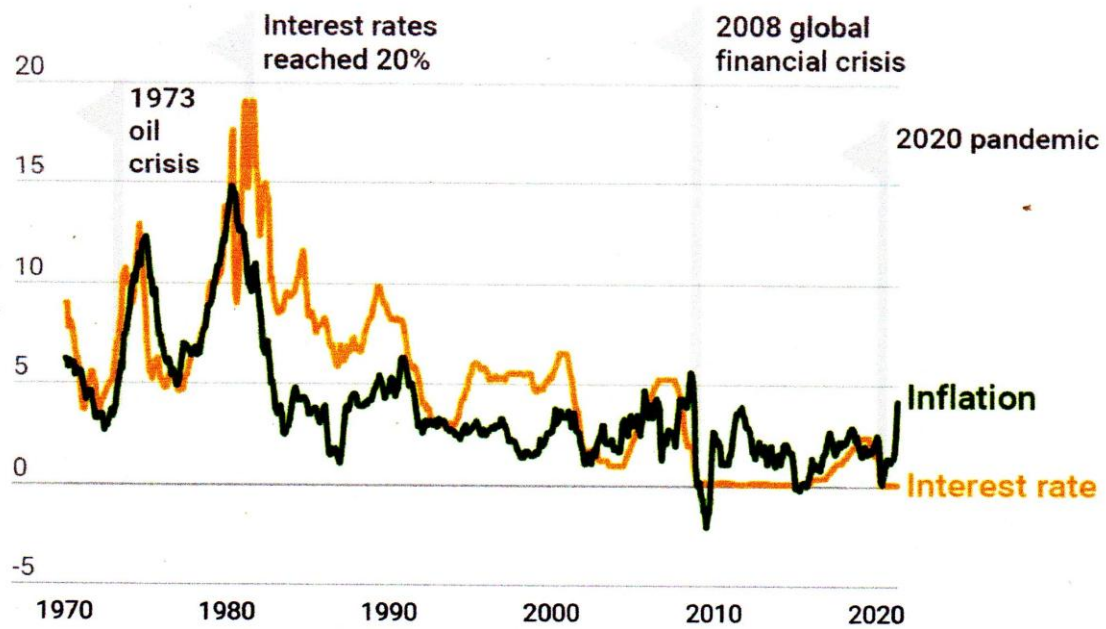
Getting back to the issue of inflation and its cause, we seem to have encountered two problems. First of all, if we are dealing with the strength of our good old U.S. dollar, how can it jump wildly up and down from year to year, month to month, or even day to day as shown on the Fed's Nowcasting website? And even if it could, how could that jumping be caused by monopolies or any of the other "causes" listed on page 1, put forth mostly by those with a political bias? I would ignore most of them as simply the usual politics.

So, these are just some thoughts and statistics by a non-expert with time to spare and a curiosity about all things. One final thought on the debt. Suppose Congress were to continue going blithely about enacting big spending bills, especially those that benefit their supporters and home district, and pay for them simply by borrowing or creating more and more money. There would be no need to raise taxes, or even have any at all. Something must be wrong, and now I realize this does indeed go back to that college course in basic common sense economics some 73 years ago, thanks to Professor S.

And now for some graphs:

Figure 1

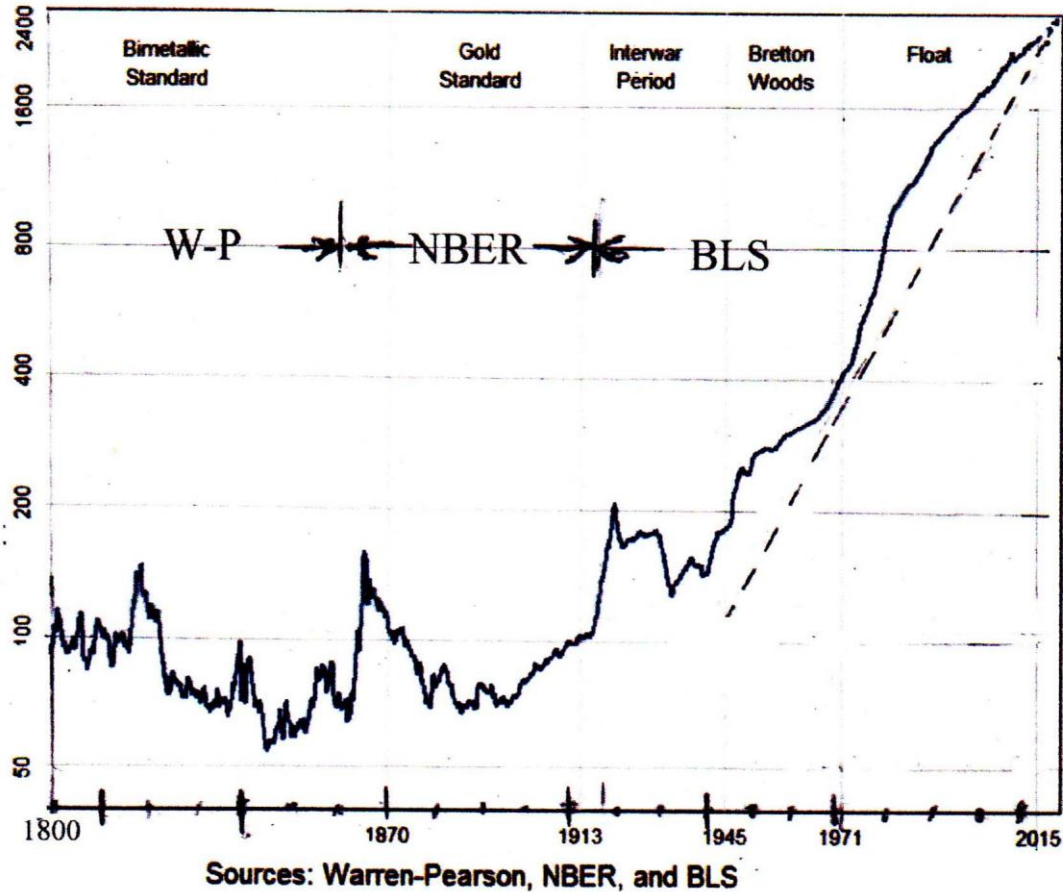
US monthly inflation (year-on-year % change) vs Fed funds interest rates since 1970



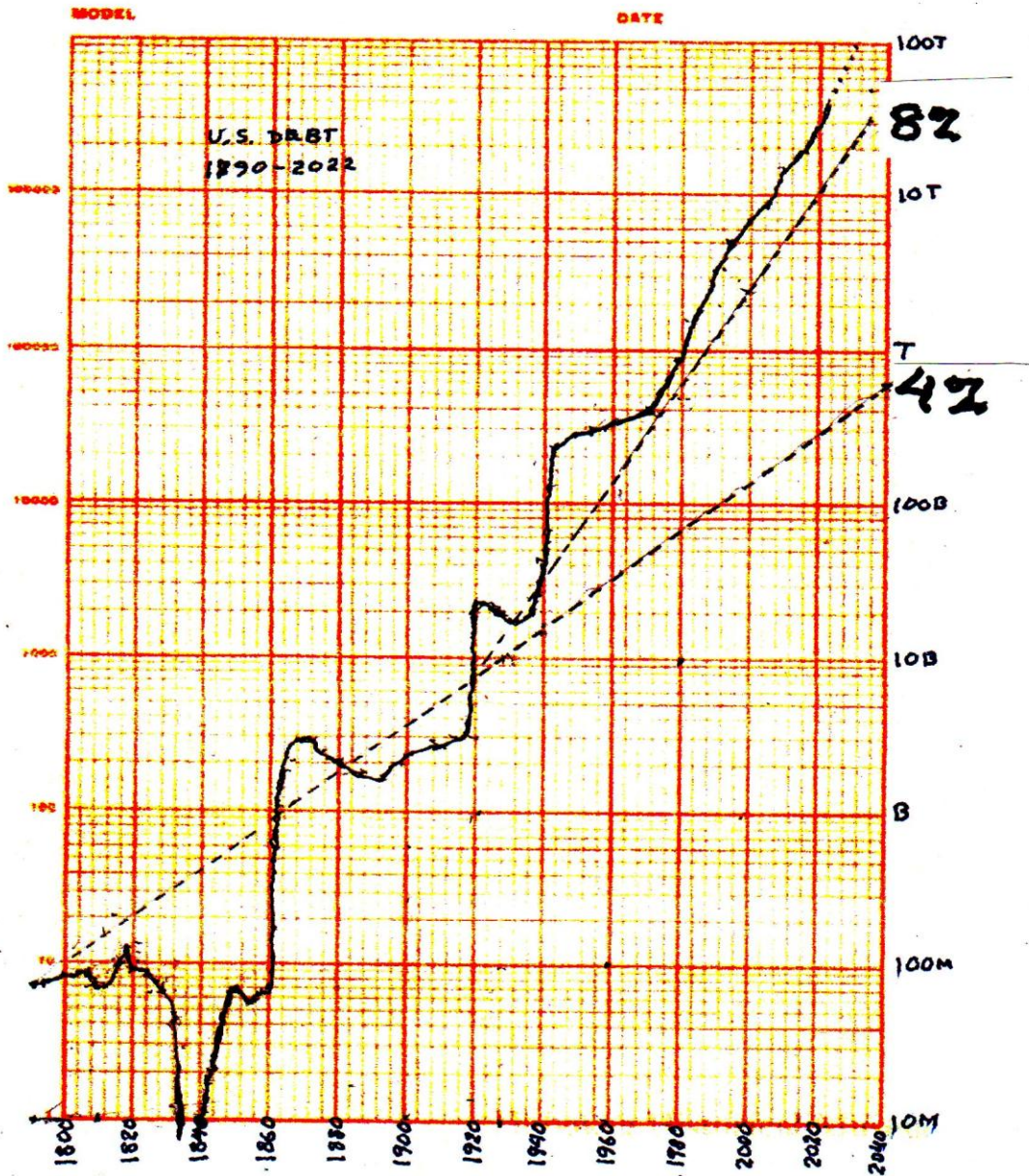
Sources: US Bureau of Labor Statistics, Federal Reserve

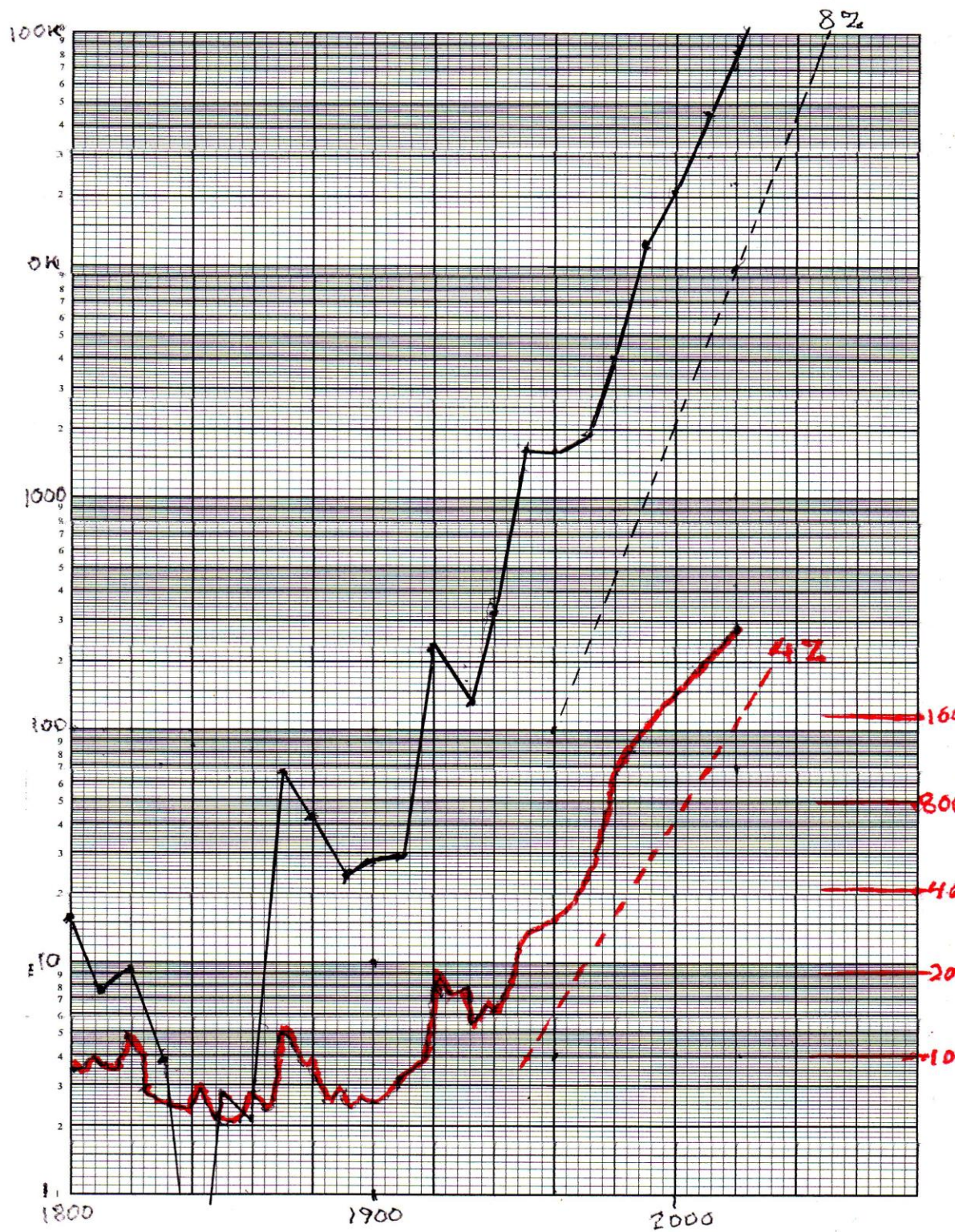
Figure 2, Historic graph of "Inflation"

Supposedly what is needed to buy what one dollar would buy in 1800



Sources: Warren-Pearson to 1860, NBER to 1917, and BLS to 2015. Evidently our trusty U.S. dollar is supposed to have had wild jumping fits in the early years before settling down to just climbing. These sources are of doubtful accuracy, especially the early ones. The broken line is 4%.



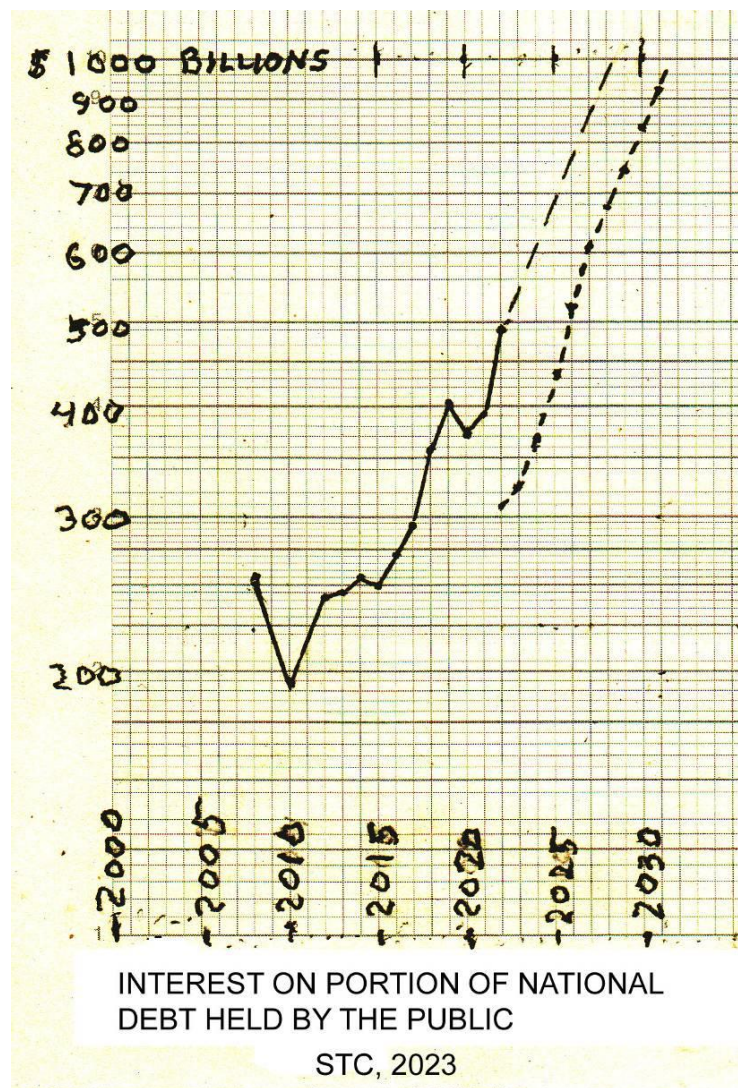


Black line is debt per capita, and red line is BLS version of "inflation" (CPI) on a slightly different log scale, showing the definite positive correlation between the two.

Added note, February 2023

As already explained, I do not claim to be in any way an expert on economics. Nevertheless I do have some knowledge of graphic analysis of statistical information which I can put to good use, and which I find lacking in much of what is found on the Internet, even including official sources. This plot of interest on the portion of the national debt held by the public from 2008 to the present is taken from CBO government sources. I have extrapolated it by dashed line into the future, which shows it reaching one trillion dollars around 2028. The other broken line is an estimate provided by the CBO that instead shows it reaching a trillion in 2032, and I unable to explain this serious discrepancy. The slope of both lines is about 12% per year. Where does all this lead? When and how does it end?

Here is another interesting statistic. My graph on page 6 shows the national debt steadily increasing at just over 8% per year since 1970. The CBO has this rate of increase now mysteriously decreasing abruptly to only 5% per year into 2034, but with no explanation of how this amazing reduction is to be achieved.



Added note, March 2023

Back on page 1 is a discussion of the Federal Reserve trying to control inflation by adjusting federal interest rate. I take an interest in this for a special reason. In my Reflections, found elsewhere in my website, is a description of my work with regulated power supplies at MIT. I had considered editing that out as being of little interest to most readers, but now I am glad I left it in. Stability or instability of closed loop systems is a subject that has broad ramifications. In general, regulation of such systems can be improved by increasing the "gain" of the system, but only up to some limit. Too much regulation, *or too late in applying*, can even be counterproductive, often causing unwanted overshoot or even instability and oscillation. Examine the graphs in Figure 1 and also what is taking place right now. This may or may not be the case with the actions by the Federal Reserve in their at best only partially successful attempts to control inflation, but one must wonder how much technical expertise goes into making these important decisions, or can it be more like guesswork? In the same vein, how did they ever arrive at the "optimum" 2% inflation rate? Please show us the science in that.

I would not want to try carrying this analogy too far. The electrical parameters of my power supplies were measurable and the resulting performance was possible to calculate. But, according to some experts, when it comes to inflation, the mysterious psychology of saving and spending must also be taken into account. At least based on my experience with the Introduction to Psychology way back in college days, psychology was and probably still is anything but a science.

Added note, June 2023

At the beginning I mentioned some of the various "causes of inflation" found on the Internet and put forth by presumed experts. Our town library has about 30 books shelved under the classification 300 - Economics, and recently I have been going through them one-by-one looking for more insight on inflation and debt. What I find, first of all, are various schools of thought on the subject, with catchy names like Kahneman & Tversky theory, neo-Keynesian, new Minsky theory, neoclassical macroeconomics, monetarist model, large-scale econometric model, optimizing model, disequilibrium, asymmetrism, and so on. Most of these theories (for want of a better word) tend to disagree with each other, and some of the adherents take exception to parts of even their own doctrines.

I am dismayed to find so much of the commentary on inflation by the presumed experts reduced to jargon, starting with that silly *demand pull*, *cost push*. Of what use is that? Then there is *soft landing*, now used or misused repeatedly these days. If things are not going the way the Feds are aiming, it is just a *bump in the road*, or inflation misbehaving by being *sticky*. Trends in the wrong direction are described as *transitory*, often just wishful thinking. And then the news reporters pick these up and repeat them incessantly, instead of some serious intelligent factual in-depth reporting.

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One of the most common topics of discussion I find in all this is our recurrent and never ending economic cycles of growth and contraction, and how these presumed experts would prevent or at least control them. Some authors, such as Magnuson, say that these cycles are an inherent feature of a capitalistic economy. In my reading, special attention is given to the causes of recession and all the mistakes that are said to have been made by those in charge, including Congress and the Administration. The Federal Reserve Board comes under the most severe criticism for not only failing to control recessions but often making them worse or sometimes even causing them. As I have said, I am not expert on any of this and am merely reporting what I find. What I find disturbing is that important decisions are now being made that determine the very economic future of our country, and made apparently based at least in part on guesswork and amidst much disagreement by the presumed experts and those in charge. One final thought on the subject of economic growth and all the benefits to Wall Street. Families behind on rent and facing eviction do not much care about the stock market or GNP. I sometimes wonder if perhaps we might be placing too much emphasis on the wrong things. Instead, what about the growth of national happiness?

Added note, July 2023

Many of the reports I have been reading recently are written by authors with a political bias, liberal or conservative, Democrat or non-Democratic, such as Greenspan, Friedman, Forbes, or Krugman. Likewise the news - Fox vs New York Times. (Note: I hesitate to use the word Republican here because the good old Republican Party that so many of us supported years ago no longer exists. Perhaps a better term would be anti-Democratic.) Beyond that, one finds a bewildering assortment of conflicting theories or "schools of thought," very much like religion (see page 9). Many authors tend to align themselves with one of these faiths, but then with their own special slant of course, as otherwise what would be the point of teaching or publishing? It all makes one wonder how much science goes into making important decisions affecting our national economy.

The one thing we can know for certain is that they can't all be right, and one might just as well ignore much of the theory and instead simply resort to common sense. But what I do find useful is some of the presumably more reliable statistical data such as federal debt and interest rate. I have suddenly come to realize that from the start I have been making a careless mistake in my use of the term "inflation." It can have several different meanings that many presumed experts, including our Federal Reserve Board and Treasury Department, fail to distinguish between, leading to much needless confusion.

In classic economics, at least as we were taught 73 years ago, inflation refers simply to the decline over time in the purchasing power of currency, in our case the dollar. For a different meaning, our Bureau of Labor Statistics keeps records called Consumer Price Index, updated monthly, of the cost of over 90,000 different consumer items in many different cities throughout the country. I wonder if a few dozen carefully selected items might do just as well. After all, it can be at best only a rough guide, since everyone's needs are different. How many of us buy cigars or pet grooming? I suppose some such statistic could be useful, now that so many households are reported to be struggling more

than ever to just barely cover their daily needs. So why then does that list include such luxury items as sports tickets, alcohol, jewelry, and even chewing gum? To add to the confusion, the BLS now has several different categories for all this, such as CPI-U, Core CPI, Headline CPI, PCE, Core PCE, Trimmed Mean PPI, and others, all included under their casual and misleading meaning of "inflation." Obviously they can't all be an accurate measure of inflation, and likely none of them are. Adding even more to the confusion, I could have shown other graphs, even from the BLS, all labeled (or mislabeled) "inflation." In my attempt to reduce the confusion, in this report I will use the term *inflation* to mean just that, the decline of the dollar. For various other uses and misuses of the term "inflation" I will now put it in quotes.

Scattered throughout all the many hundreds of graphs and economic statistics now found on the Internet are those reported as "adjusted for inflation." I made a mistake when using that expression in the two graphs that I have now deleted. I had hoped that the BLS published figures I used were fairly reliable, but now I realize they may not be, so I would treat with skepticism any graphs that state "adjusted for inflation" when they actually mean "adjusted for CPI" or perhaps something else equally misleading.

Turning now to how one might accurately measure current inflation, I suspect it could be difficult. Perhaps a method somewhat like that used by the BLS would be the place to start, but excluding the cost of any one item that jumps more than others. It is senseless to include new inventions like cell phones or laptops that didn't even exist until recently, and now keep changing and improving.

One of the more interesting books in my reading list is *Trillion Dollar Triage*, by Nick Timiraos. The author heaps much praise on the Federal Reserve for managing "the economy" so skillfully, especially chairman Powell. The book was published in 2022, just as we were suddenly in the grip of the worst "inflation" in 40 years, caused at least in part by Powell, and I can just imagine trying to stop printing until revisions could be made.

The author provides interesting bits on the inner workings of the Fed, such as:

Page 286: Yellen remained far less convinced (about inflation). "I still think the medium-to long-run problem is inflation too low rather than too high," she said in a June 2021 interview. "I don't believe secular stagnation is going away, and so most likely, we remain in a world of chronically low interest rates, and there will be more concern in the years ahead about inflation too low than too high. I know it's really easy to forget all of that when you've had such high monthly rates of inflation....But we've never undergone a shock like his before, and we have to have some humility about how it's going to play out."

Page 254. With Clarida, he (Powell, in 2019) had been driving the committee to a shift that sounded subtle but could in fact be quite radical. If inflation had run below 2%, the Fed would seek to push inflation temporarily above its 2% target in order to 1) persuade the public to expect inflation to average 2% and 2) set prices and wages accordingly.

Page 283. Now (2021) Summers was saying that the stimulus, on top of the Fed's policies, was too much too fast. If he was right, inflation would now menace the economy not just for a year or slightly more, but potentially year after year until the Fed hit the monetary brakes. (The author then disparages Summers for that remark that would soon prove to be prophetic.)

Page 256. (In response to criticism of his new policy) Powell was unfazed. "I'm not at all concerned that people are saying "Oh, it's not credible."" Powell said two months after the announcement. "It'll be credible when we get inflation meaningfully above 2 percent for an extended period and we don't react to it. We'll just say, *Look at that*. That's the only thing that can build your credibility after a decade of running below 2 percent inflation."

By the time this book was published, "inflation" had suddenly risen to 9%, the highest in 40 years, and the Fed had belatedly begun a desperate attempt to reduce it by raising the interest rate and "cooling the economy." The Fed has a mandate, made law in the Employment Act of 1946, of "maintaining full employment." Please explain their recently stated policy of increasing *unemployment*! (I rarely use the exclamation mark in my writing.) Also, after leading the free world's economy for over half a century, but then going into a decline starting around the 1970s, why then is the Fed now trying to "cool the economy"? So many questions; so few answers.

Added in August 2023

This report was begun over a year ago when inflation had become a handy election issue for glib politicians to campaign on. My original focus was on the causes of inflation. Lately I have switched to questioning the accuracy of official reports on inflation. From the start, my suspicion of something being wrong was aroused by the Graph of Inflation on page 5. Why would the strength of the U.S. dollar jump around like crazy until around 1860, somewhat less so until 1940, and then settle down to smooth climbing to the present? The source of that graph is Warren-Pearson to 1860, then NBER to around 1917, and finally BLS to 2015. Warren was a professor of agriculture at Cornell. He and his student Pearson studied trends in commodity prices, especially agricultural. One must wonder why their jumpy data was used by the BLS as a measure of inflation. Perhaps the same should be asked of NBER data. How would retail stores have managed their pricing amidst such chaos? And one must wonder what the U.S. Treasury bond market might have been doing if our U.S. dollar really was jumping up and down by 50% or more for whatever reason every few years. A different and likewise jagged graph of historic "inflation" was published by Reinhart and Rogoff, and yet another even more questionable by Reuters/Jeffries. Imagine an employer having to drastically adjust salaries up or down every few years. Even more bizarre is the Nowcasting website of the Federal Reserve, which often shows their CPI *rate* in just a few days jumping by double or dropping by half. To add to the absurdity, their rough measure of "inflation" is carried to 14 decimal places, which by the way does not even come close to agreeing with the "official" BLS measure of CPI.

The BLS data presumably started out as an index of the price of things bought by a typical urban consumer, hence the name CPI-U. The methods used to compile this data have been changed at least 20 times, such as by adjusting the basket of goods to cheaper items. Their reason given for this is that in times of high inflation, such as we have been in recently, many poor consumers will adjust their spending habits to economize. But in doing so it becomes even more questionable as a measure of inflation. To make matters worse, these substitutions are made in secrecy. When I tried to obtain details from the BLS, all I got was a run-around. There are even what are referred to as *hedonic* adjustments. If your new computer costs more but has more memory, that may not be considered a price increase but might even be a decrease. I will skip the details here because they are available on several websites. See especially "Why Is the Consumer Price Index So Controversial," by Palmer and Kelly. It seems that the actual inflation rate may be more than that quoted by our Treasury Department and used so widely. For still more on the trick methods used by the BLS to adjust their method of measuring "inflation," refer to their 14-page Handbook of Methods, available on the Internet. It contains, by my count, 42 formulas used to "adjust" prices, two of which are shown below. Note that they even include a fudge factor for "elasticity of substitution." Next time you buy a dozen eggs, check for *elasticity*.

Month-to-month price change under the constant elasticity of substitution formula is given by:

$${}_{i,A}IX_{[t-1:t]}^C = \frac{\left(\sum_{i \in I, a \in A} \left(\left(\frac{E_{i,a,V,bx,\sigma}^C}{\sum_{i \in I, a \in A} E_{i,a,V,bx,\sigma}^C} \right) \left(\frac{IX_{i,a,t}}{IX_{i,a,V}} \right)^{(1-\sigma)} \right) \right)^{\left(\frac{1}{1-\sigma} \right)}}{\left(\sum_{i \in I, a \in A} \left(\left(\frac{E_{i,a,V,bx,\sigma}^C}{\sum_{i \in I, a \in A} E_{i,a,V,bx,\sigma}^C} \right) \left(\frac{IX_{i,a,t-1}}{IX_{i,a,V}} \right)^{(1-\sigma)} \right) \right)^{\left(\frac{1}{1-\sigma} \right)}}$$

The constant elasticity of substitution pivoted expenditure weight for a annual

$$E_{i,a,V,bx,\sigma}^C = P_b^{i,a} Q_b^{i,a} \left(\frac{IX_{i,a,V}}{IX_{i,a,bx}} \right)^{(1-\sigma)}$$

where,

A = all basic areas (U.S. city average);

a = CPI basic area;

i = CPI basic item;

I = all basic items;

t = month;

b = annual expenditure reference period;

x = index base period (initially December 1999 = 100);

V = pivot month;

$P_b^{i,a}$ = price of item i in area a during period b ;

$Q_b^{i,a}$ = quantity of item i in area a during period b ;

σ = elasticity of substitution for the index period; and

$IX_{i,a,t}$ = lower-level index for item i in area a in month t .

If the Fed and others have been systematically under-reporting inflation, the question would be: why? Could it be that government officials, especially elected ones, hate to vote for tax increases, and inflation is a hidden tax that no one has to vote for? Moreover,

many government benefits, such as Social Security, are adjusted for "inflation," and any error would result in a big savings for our government, but at our expense. Perhaps even more to the point, it would make it look like the Fed was doing its job. But keep in mind that Congress and the Administration would also be in on any such tinkering.

At the start, I said I would just compile data and let others draw their own conclusions, but here I make an exception. I have found how difficult it would be to accurately gauge the *historic* rate of inflation, and I now have the answer to that. Ignore all such graphs, especially those "adjusted for inflation." It is the more recent rate that really matters. As nearly as I can tell, the basic underlying rate now averages around 4%. If correct, then desperate efforts by the Fed to bring it down to near their "desirable" 2% might result in more of an economic decline than we are already in. Look at the graph on page 5 and explain how this is even possible. Instead of "cooling" our economy and increasing unemployment, wouldn't it make more sense for our government to address the basic *causes* of inflation?

Added Note, March 2024

I started this in 2022 when "inflation" was making news during the bi-election campaigning. And now, here it is once again, prompted by the upcoming presidential election. The problem right away is that it is difficult to determine the exact rate of inflation. Who in our government is responsible for measuring and reporting it? The reports coming out of the BLS may be misleading. To begin with, they are not even called "inflation" but rather Consumer Price Index or a half-dozen other names. It is somehow inferred that that the CPI is a rough indication of inflation, when what it evidently tries to measure is, for lack of any exact word, perhaps the average urban person's comfort of living, as explained on page 13.

One of the increasing expenses facing many households now is credit card debt. In just the past four months, the average interest rate has increased from 23% to 28% and now appears to be headed even higher. The BLS completely ignores this large expense in measuring our comfort of living.

I have tried to obtain from the BLS website a list of the items used in their survey, but was told the list was too long to send. My computer would have no problem with 90,000 names, so I think what they were saying was that the list is secret. It has been revealed that BLS often substitutes cheaper items during times of high inflation. It would seem to follow that, for consistency and accuracy, they would then substitute those more expensive items back in during low inflation. I have tried repeatedly to find out if this is the case and have run into a complete stone wall. I suspect the devious responses I received were computer-generated.

Why all the secrecy? I think I have uncovered at least part of the reason. According to an article in the San Francisco Chronicle, May 25, 2008, the Republican House Speaker Gingrich told the BLS Commissioner Abraham that if she could see her way clear to

"doing these things, we might have more money for BLS programs." (source: Shadowstats). Evidently she did. Their annual budget is now \$740,000,000, for which we get questionable data manipulated for elasticity, utility, etc. You might do better by just noting your monthly grocery bill. Furthermore, assuming the Chronicle report to be accurate, it suggests that the problem goes beyond inflation, and is just one more indication of a problem with our whole fabric of government.

Another of the many problems faced by our country these days is inaccurate or misleading reporting by the news media, especially those with a political bias. For example, on Nov. 7, 2023, a N.Y. Times editorial by Paul Krugman stated that: "The bottom line is that disinflation is real — indeed, spectacular," i.e. nearly back down to 2%, with some insulting remarks for those who thought otherwise. On Oct. 12, 2023, he reported: "The war on inflation is over. We won, at very little cost." And on Dec. 5: "The truth, however, is that inflation is looking very much like yesterday's problem."

The amount of misinformation on inflation one finds these days is discouraging. In 1956, a New Zealander named Phillips wrote a paper claiming to have discovered a statistical inverse correlation between inflation and unemployment. His infamous Phillips Curve has been widely adopted by many economists and found in textbooks even to this day, while at the same time being thoroughly rejected by others. Many periods show no such relationship, and by careful selection, one can find periods of just the opposite, as does author Mankiw in his book, *Principles of Economics*. And even if there were a correlation, that is *far* from showing cause and effect. Yet even at this moment we find the Federal Reserve Board trying to "balance inflation and unemployment." in order to achieve their *soft landing*.

Could this confusion we are having with inflation be symptomatic of a larger problem with our government overall? You have to wonder when our Secretary of the Treasury says we need more inflation, not less. But above all, there is reason to be seriously concerned about the failures of the Federal Reserve and where it is leading this country. With inflation on a steady increase from the first of January to the end of March in 2024 by all four of the most commonly used measures of the BLS, Fed Chair Powell is reported to have said on March 29: "it's definitely more along the lines of what we want to see." And then on April 16 as it continued its upward trend he said: "inflation continues to make its way lower."

At least according to my research, the attempts by the Federal Reserve to bring "inflation" down to their mysterious 2% are not only likely to fail, but also cause more harm than good. One even hears, believe it or not, the idea of fighting "inflation" by curbing the increase in wages. It looks to me like a complete change of leadership and direction are sorely needed.

I had considered broadening this report to include problems we now face with a government dominated now more than ever by Washington lawyers, lobbyists, campaign "contributions," (i.e. bribes), special interests, the wealthy, corporate money, etc. But then I discovered that Paul Volker has already said it better than I could in the last five

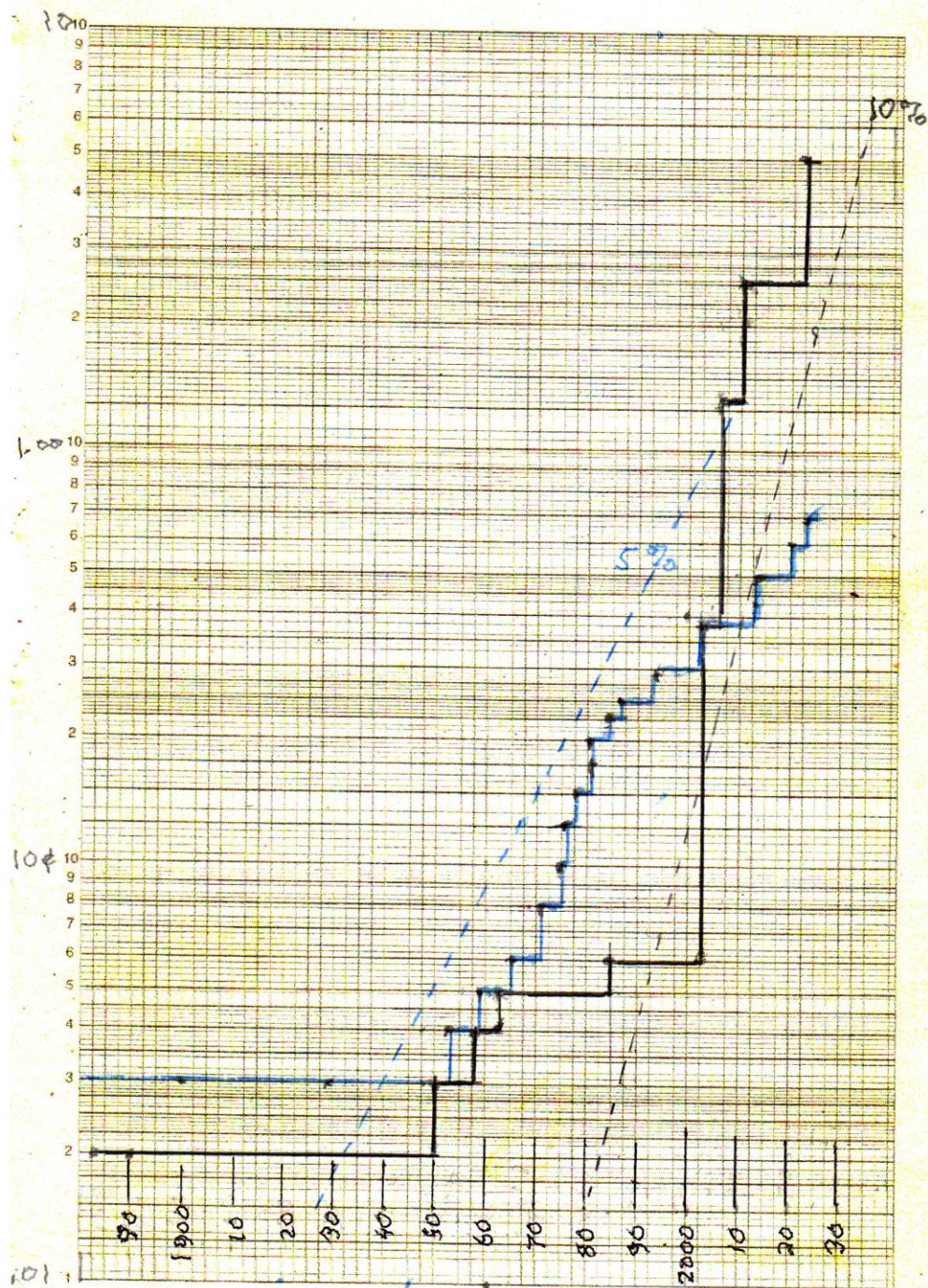
pages of his book, *Keeping At It*. See also the last page of my companion article, *Reflections*, also in my website.

So why then am I doing this? According to my studies, our once great country may be headed toward financial ruin. I suppose any author who makes a prediction like that may derive some satisfaction in seeing it actually come true. Perhaps it's just human nature. But in this case, I realize how self-serving that would be. I still love my country, and I would like to think this report is my contribution added to the still small but growing chorus, both within our government and outside, trying to bring about saner financial policy and some much needed reform. The issue now is how to get those messages across.

Added note January 2025:

Since inflation is so difficult to define, much less measure, I would ignore all BLS figures now quoted so incessantly, especially during the recent presidential election. Of what use are they? If you are buying a house, you are probably most concerned about the cost of borrowing, but the BLS does not even include that. If you are an employer, you are probably interested in the inflation of wages, but the BLS does not even include that either. Think of the irony: the Bureau of *Labor* Statistics not including the cost of *labor*. If you are concerned about your own cost of living, probably the best way is to simply keep track of your expenses, ignore the misleading reports, and brace yourself for continuing inflation. Finally, if for whatever reason you wish to know the current trend in the rate of "inflation," check the rate of U.S. Treasury T bills, which is based on market forces and not subject to manipulation by glib politicians and misreporting by the press and the BLS.

Having said all that, nevertheless on the next page is a graph of historic First Class postage in blue, and Parcel Post rates in black. Over the past 40 years, the First Class rate has averaged around 4% to 5%, and Parcel Post over 10%. Call these rates what you will, keeping in mind that these are reliable and accurate numbers, not subject to manipulation and distortion by politicians. And all that is even before the recent presidential election. Now what?



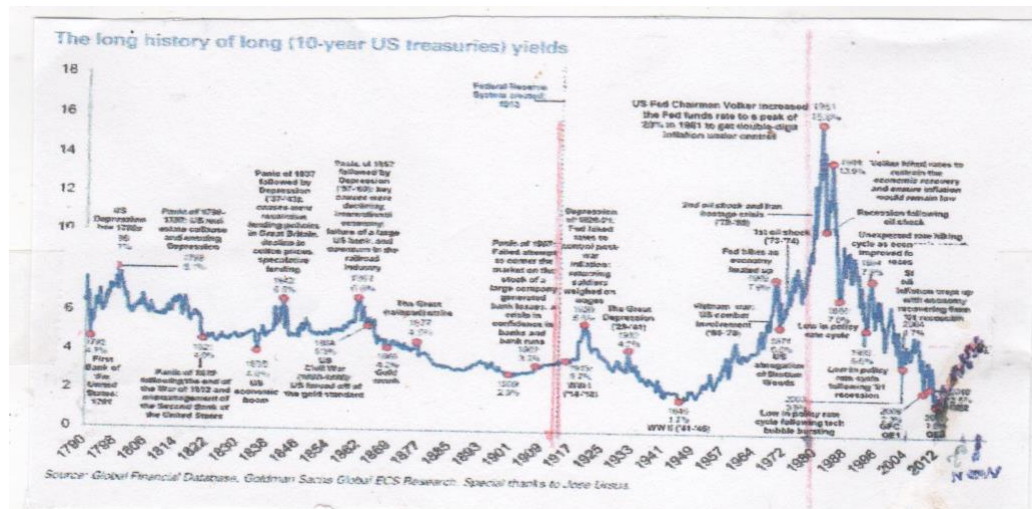
Added Note on Inflation, Sept. 2026

Once again inflation is in the news, partly because it appears to be running out of control (as usual). Also we now have a new chairman of the Federal Reserve, Warsh. And then there is the upcoming bi-election. Most of the candidates are pledging to fight inflation, some even eliminating it completely but without offering a clue as to how. Some of what follows is taken from my earlier reports on my website, but repeated here for emphasis.

I have made a concerted effort the past few years to learn all I can about inflation, like the previous chairman Powell, both of us starting out from ground zero. I come from a background in engineering, Powell from Wall Street. I like to think I learned a lot more than Powell ever did.

The Federal Reserve was established in 1917, their policy of trying to control inflation began in 1978, and their goal of 2% began in 2012. First of all, dispensing with that arbitrary 2% figure, it is said to have originated with some author in New Zealand many years ago and has been adopted ever since by the Fed (and others) without offering any explanation of exactly how it was arrived at.

A lot of my research involves graphic analysis, as can be seen in my previous report. Figure 1 on page 4 shows a BLS version of “inflation” rate vs. Fed Funds interest rate since 1970. It appears to show very little control, if any. I now have a much better graph, wishing I had discovered it earlier. It shows the 10-year US treasury yields since 1790.



The reason I have chosen treasury yield as a measure of historic inflation I have already explained on page 10 in my website. Briefly, the figures usually given are at best very unreliable and almost a joke, such as those by Warren-Pearson. Our inflation was essentially zero from 1800 to 1900. The price of bread remained at 6 cents but going up briefly to 7 cents during the Great Depression. US postage was 3 cents for most of that time. All of this was accomplished without any Federal Reserve. The first vertical red line is when the Fed was established, the second line is when they started furtively trying to control inflation, clearly making it worse rather than better, much worse in fact.

Basically the Fed attempts to control inflation by adjusting the Federal Funds interest rate. It may sound like a simple case of negative feedback, but it isn't. I have had a fair amount of experience with that kind of regulation in my engineering days working with the design of power equipment. The complex mathematics of it was way over my head, and all I did was apply the theory worked out by others. If not done exactly right, it can lead to worse regulation rather than better, including overshoot and even oscillation, just as we so woefully see.

For a start, one of the problems is delays within the system. On page 254 of the book *Trillion Dollar Triage* by Timiraos, Powell brags about his novel new policy of delayed response to inflation. "It'll be credible when we get inflation above 2 percent for an extended period and don't react to it. We'll just say, *Look at that.*" What followed was the highest and most erratic inflation in decades, (although perhaps for complex reasons).

Our underlying historic inflation rate is at least 3% and probably more. It is now firmly built into our economy. There is nothing the Fed can do to change that. It is like futilely stomping with your boot on a flooded basement. The furtive attempt by the Fed is at best only temporary. Don't just take my word. Among economists whom I respect are Paul Volker and especially Milton Friedman. See what they say.

The reason I am doing this is that I still love my country in spite of all that is now taking place, and I like to think I can still do something useful in my old age. Please study this, offer corrections or suggestions as you see fit, and pass along to others.

Stewart Coffin, Sept. 1, 2026