






# June 2022 Newsletter: Demand Destruction

June 20, 2022

## Market Overview

	<table><thead><tr><th>Gold Price (oz)</th><th>12-Month Change</th></tr></thead><tbody><tr><td>\$1,837</td><td>3.1%</td></tr></tbody></table>	Gold Price (oz)	12-Month Change	\$1,837	3.1%	<table><thead><tr><th>CAPE Ratio</th><th>US Market Valuation</th></tr></thead><tbody><tr><td>28.4</td><td>High</td></tr></tbody></table>	CAPE Ratio	US Market Valuation	28.4	High
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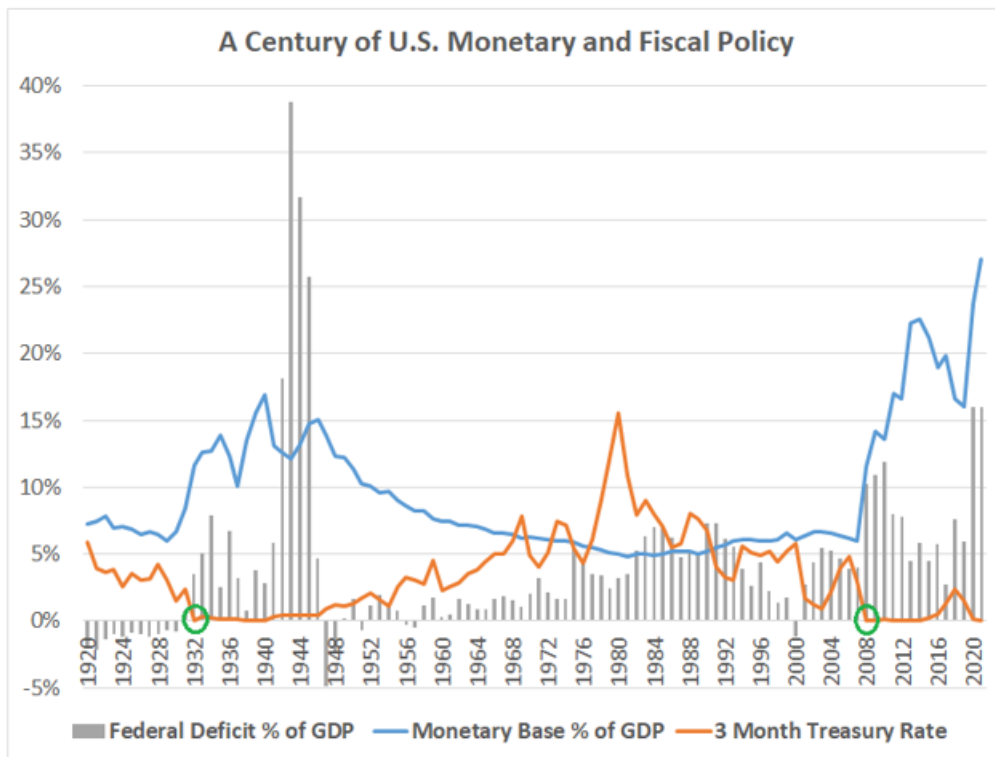
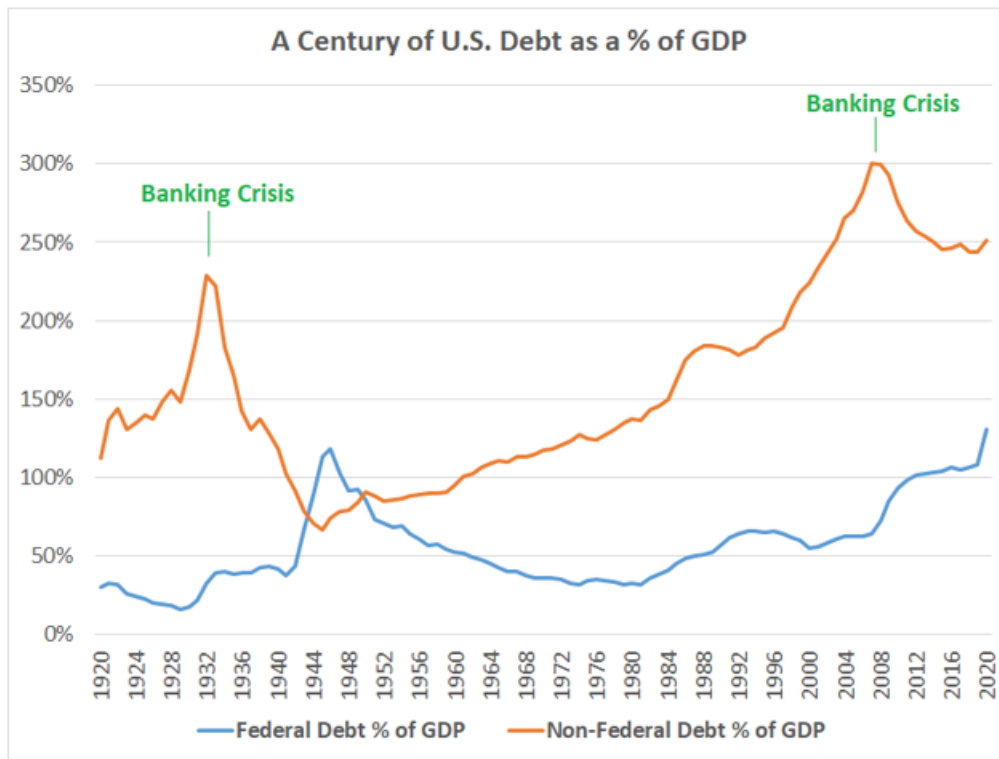
This newsletter issue analyzes policymakers' current attempts to rein in price inflation via demand destruction, and why that approach is unlikely to work as well as they think.

## Inflation and Debt

My May 2021 newsletter issue was called "[Fiscal-Driven Inflation](#)", where I discussed how the combination of fiscal and monetary policy that we were seeing at the time was similar to what occurred back in the 1940s wartime era. This was a topic I had covered extensively throughout 2020 and 2021.

When people think of inflation, they are quick to think of the 1970s, but I've been using the 1940s as the closest historical analogue since before the inflation began, due to the conditions that were setting up for it. Both the primary cause of the inflation, and the response to that inflation, currently look more like the 1940s than the 1970s throughout developed markets.

This was the key chart from that May 2021 newsletter issue, and it remains relevant today:



**Chart Source: Lyn Alden**

Data Sources: Federal Reserve, US Treasury Department,

And here's a zoomed-in look at the unique policy response to these 1929 and 2008 financial crises, where the monetary base was expanded rapidly, unlike other periods in history:

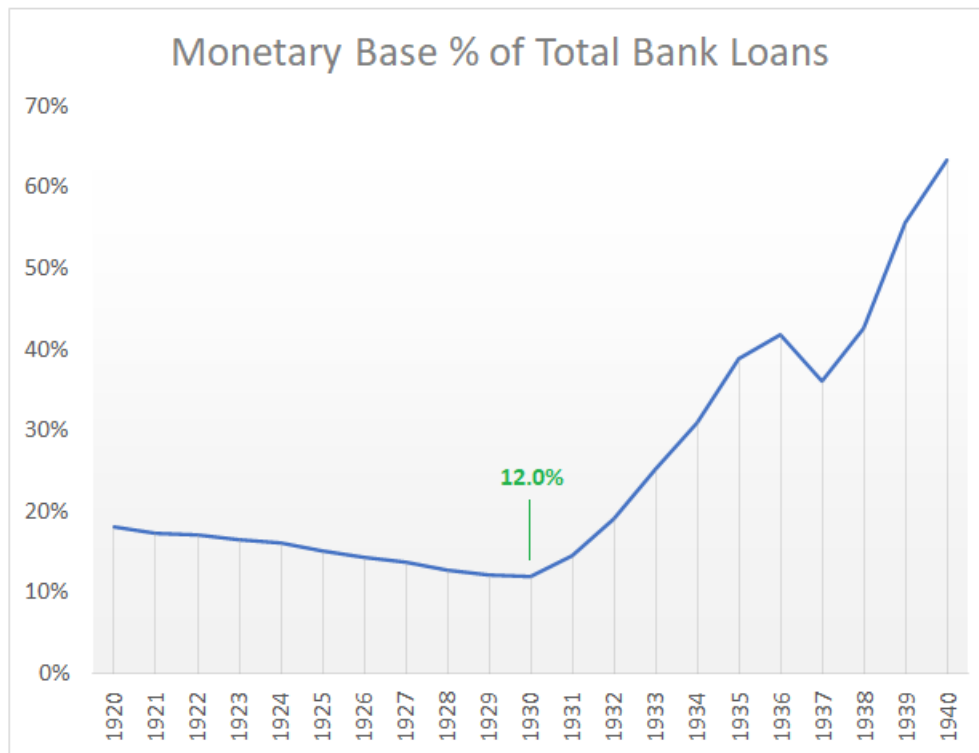
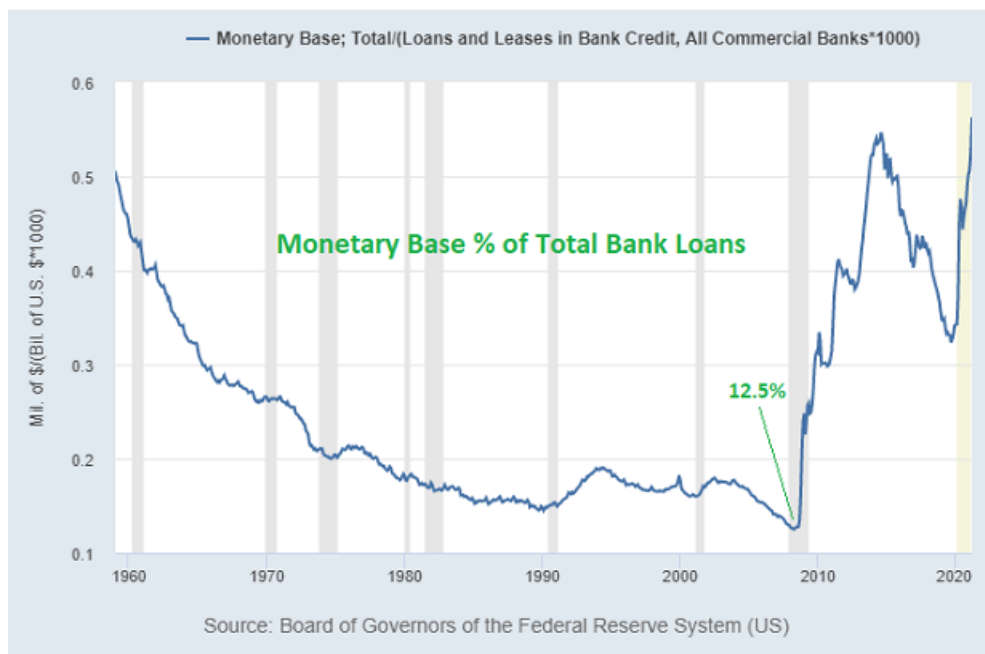


Chart Source: [LynAlden.com](http://LynAlden.com)

Data Sources: [macrohistory.net](http://macrohistory.net), [St. Louis Fed](http://St.LouisFed)

Òscar Jordà, Moritz Schularick, and Alan M. Taylor. 2017. "Macrofinancial History and the New Business Cycle Facts." in NBER Macroeconomics Annual 2016, volume 31, edited by Martin Eichenbaum and Jonathan A. Parker. Chicago: University of Chicago Press.



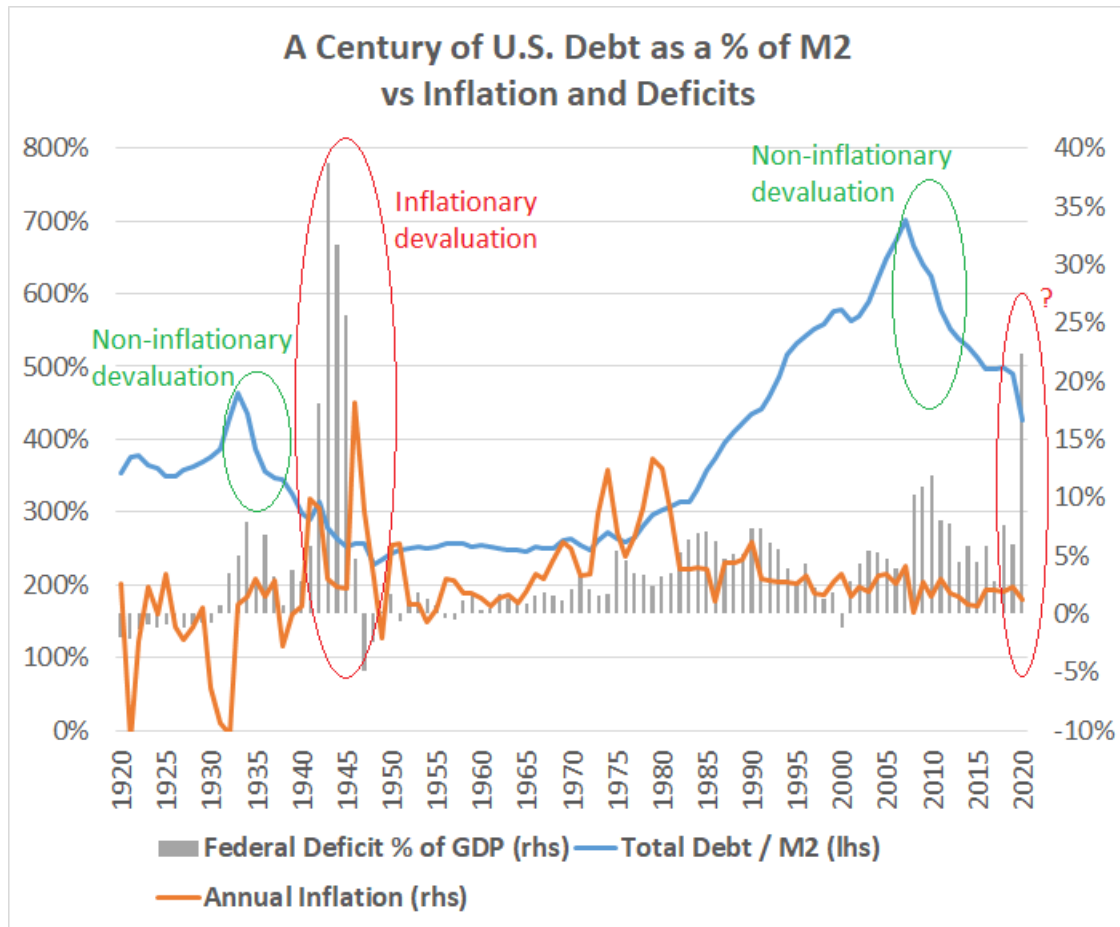
Source: Board of Governors of the Federal Reserve System (US)

However, expanding base money and recapitalizing the banking system doesn't translate into inflation right away. The decade after a developed market financial crisis (private debt liquidation) is a period of industrial capacity oversupply, commodity oversupply, financial deleveraging, and sluggish demand for things. Broad money isn't going up faster than usual, even as base money is. The result is disinflationary.

After years of grinding through that slow-growth environment, transferring some of the debt from the private sector to the public sector, working off the oversupplied capacity, having higher and higher levels of populist politics among the population as a result of such a negative environment, and eventually turning towards fiscal stimulus- *that's* when things eventually start to get inflationary in terms of broad money supply and prices.

Here's how I put it in my [September 2020 piece](#) on the subject:

In the years after those 1933 and 2008 peaks, there was a deleveraging event in debt-vs-M2, which was not very inflationary, and was led primarily by monetary policy. After that stagnated for a while after the 1930s peak and ran into the next recession/war, fiscal spending heated up and caused the next leg of devaluation, which was inflationary.



Data Sources: U.S. Treasury Department, U.S. Federal Reserve

After all, if policymakers realize they are in an environment of persistent currency disinflation from various trends, what do they do? They print currency!

At first it starts from monetary policymakers expanding the monetary base, but then it spreads to fiscal policymakers when the situation remains stagnant (since monetary policymakers, unlike fiscal policymakers, cannot directly spend).

If fiscal policymakers realize that the economy is stagnant and banks aren't lending, they can pass fiscal bills to go around the banks (or through the banks by backstopping loans for them) and get money directly to consumers and businesses, aka "helicopter money". This could take the form of higher spending, or could take the form of unfunded tax cuts, or both. Therefore, it's not really a left-leaning or right-leaning political phenomenon; deficits can take the form of whatever the trending political view decides.

The main consequence for policymakers to print and spend too much fiat currency with large deficits, is that it can cause runaway inflation. So, when inflation is measured to be low or even negative due to excessive debt in the system, they aggressively print and spend. Eventually they overshoot, but that consequence comes with a lag and feels good at first.

This concept is what Ray Dalio refers to as the "long-term debt cycle". As the old saying goes, "history doesn't repeat but it does rhyme" and in many ways, what happened throughout the 2000s, 2010s, and 2020s is a quantitative rhyme of what happened in the 1920s, 1930s, and 1940s for the United States.

The 1920s and 2000s decades in the US were both periods of easy money and speculative excess in financial assets, driven by monetary policy, capital flows, and other factors. The 1920s bubble culminated in the 1929 crash, and the 2000s bubble culminated in the 2008 subprime mortgage crisis. These were the two biggest financial crises of the past century, and in both cases interest rates quickly went to zero for the first time in generations.

The 1930s and 2010s decades were both periods of economic stagnation, disinflation, and bank recapitalization in the aftermath of those financial crises. In fact, these were the only two periods in a dataset stretching all the way back to 1890 where US nationwide average home prices fell significantly in nominal terms. The banking system was recapitalized in both of these decades, but consumers for the most part were not bailed out, and so base money grew substantially while broad money did not. Populism began to increase around the world as people had great discontent about their economies.

The 1940s and the 2020s decades (thus far) were both periods of major fiscal dominance, or "wartime finance" after a long period of rising populism, economic stagnation, and an external catalyst. Faced with a war in the 1940s and a pandemic/lockdown in the 2020s, the federal government performed absolutely massive fiscal spending, and drove federal debt/GDP to around 130% in both instances. Broad money supply expanded rapidly, and price inflation followed with a lag. However, because debt levels were already so high, the Federal Reserve was slow in both cases to raise interest rates, resulting in significant currency and debt devaluation. The Federal Reserve's short-term interest rate is currently 1.5%, which is about 7% less than the official inflation rate. The last time that gap was this wide was during and shortly after the 1940s.

The dataset for historical analogues can be expanded when you look at the situation from the perspective of multiple countries, especially ones with particularly long data sets such as the United Kingdom and Sweden.

To put it bluntly, when debt gets this high relative to GDP, the only way out is to default in some way. If the debt is denominated in a currency that the government can't print (like for emerging markets with dollar-denominated debt), it eventually leads to nominal default. If the debt is denominated in a currency that they can print, it usually leads to significant devaluation of that debt via inflation, where inflation (and along with it, nominal GDP) runs much higher than interest rates for a while.

At that point, the ability to get out of inflation depends on private markets' and policymakers' ability to create new industrial capacity for goods and services and commodities. In other words, high levels of productivity must be re-established, or the pain continues in one form or another.

## Differences between the 2020s and 1940s

The 2020s and the 1940s were similar in many ways, but different in some others. There is no perfect analogue.

Understanding history helps us navigate the present, but it's always a blurry map with a lot of imperfections, and so we always need to carve our own path and analyze the situation as it currently exists.

The first difference is that back in the 1940s, the US was a rising power in terms of its share of global GDP, and ran a structural trade surplus.

In contrast, today the US is a waning power in terms of its share of global GDP, and runs a structural trade deficit. Therefore in many ways, the closest comparison to what the United States is going through in the 2020s, is what the United Kingdom went through in the 1940s. Back in the 1930s and 1940s, the United Kingdom had the global

reserve currency, but was running a structural trade deficit, was losing ground in terms of its global share of GDP, spent a lot of its resources on World War I, and began doing even more massive fiscal spending to fight World War II.

The second difference relates to the productivity of the fiscal spending. In the 1940s, it went primarily towards building industrial manufacturing facilities, sourcing commodities, hiring soldiers, and then sending those returning soldiers to technical school or universities on the government's dime when they returned, to get them educated and ready for the domestic workforce. While this was all inflationary at first, it at least came with a lot of productivity growth attached to it (which causes the *good* type of disinflation) in the decades that followed. New technologies and a ton of new industrial capacity, as well as a more educated population, were some of the positive outcomes for what was otherwise an utterly terrible decade for most people.

In contrast, most of the stimulus during 2020 and 2021 went to keeping consumers and businesses solvent despite the reduction in productivity that came with the pandemic and lockdowns. While it was helpful for people in many ways, especially stimulus checks and child tax credits towards the working and middle classes, a lot of it also went towards unnecessary consumption and malinvestment. For example, a sizable chunk of the PPP loans (which were forgiven) went to small businesses that were not going to lay off employees anyway, including literally to some financial asset managers and other firms like that, and so it went straight to the bottom line of their wealthy business owners. It also went towards various corporate bailouts and other programs. In the aftermath of all of this new money creation, we don't have more commodity production capacity, manufacturing capacity, or a more educated workforce.

The third difference is that the US and the developed world in general had much younger demographics in the 1940s. After the decade of war ended, their governments could turn towards austerity to rein in the money supply growth and return to a period of more normal monetary and fiscal policy, especially now that they were enjoying a productivity boom.

In contrast, the demographics pyramid today is very top heavy, which means that government deficits to support senior citizens' retirement and healthcare systems are quite big. There is no ability in the foreseeable future for developed countries to practice fiscal austerity, unless they're willing to blow up all of these systems and nominally default on some of their government debt. Politicians that try to, will likely get voted out of office. In the US during maximum employment, fiscal deficits are at least 4-5% of GDP. If there is a recession and tax revenues fall, those deficits widen.

## **The Federal Reserve's Dilemma Today**

The US and the rest of the world is facing severe inflation, in part due to an undersupply of oil and gas, raw materials, refined products, and various infrastructure relative to what the economy currently needs to grow. And because commodities are a global market in terms of supply and demand, these high prices are affecting almost every country in the world, whether they did much fiscal stimulus or not.

Plus, there is currently not a big disinflationary force such as Chinese labor expansion or other things to offset the growth in money supply.

Unlike the 1970s, however, there is currently massive debt-to-GDP in the system, both in the private sector and at the federal level. So, raising interest rates above the official inflation rate (e.g. over 9%) would result in widespread insolvency, unlike the 1970s. Therefore, faced with inflation, central banks including the US Federal Reserve have been rather slow to tighten monetary policy.

Back in the 1940s, when federal debt went to over 100% and inflation was running hot, the US Federal Reserve ended up doing yield curve control. They held short-term rates at 0.375%, and capped long-term Treasuries at 2.5%, despite the fact that official inflation averaged about 6% for the decade, and peaked as high as 19% year-over-year at one point. As a result, people holding cash and government bonds lost 30-40% in terms of purchasing power compounded throughout this decade. People holding cash and government bonds in most other countries lost even more.

In the 2020s, the response is still underway, and the full story of course hasn't been written yet. The initial reaction by monetary policymakers was to call the inflation transitory and hold rates low. When that proved intolerable, they began raising interest rates, halting their balance sheet growth, and formulating a plan to gradually reduce their balance sheet. It remains to be seen how effective that tightening policy will be, in the face of so much systemic debt. So far, it's not working out so well.

## The Path Towards Recession

The Federal Reserve currently has what is known as the “dual mandate”: maximize long-term employment while maintaining price stability. A third mandate-like responsibility is to maintain financial stability, meaning that capital markets and banking systems need to run with sufficient liquidity and functionality.

The official consumer price index is up more than 8.5% over the past year, which is at four-decade highs. Meanwhile, official unemployment is 3.6%, which is near five-decade lows.

So, like a robot following an algorithm, monetary policymakers have what is basically a legal directive to try to increase unemployment and rein in consumer spending, in order to create more slack between supply and demand and follow their dual mandate. This is despite the fact that both unemployment and inflation tend to be lagging indicators.

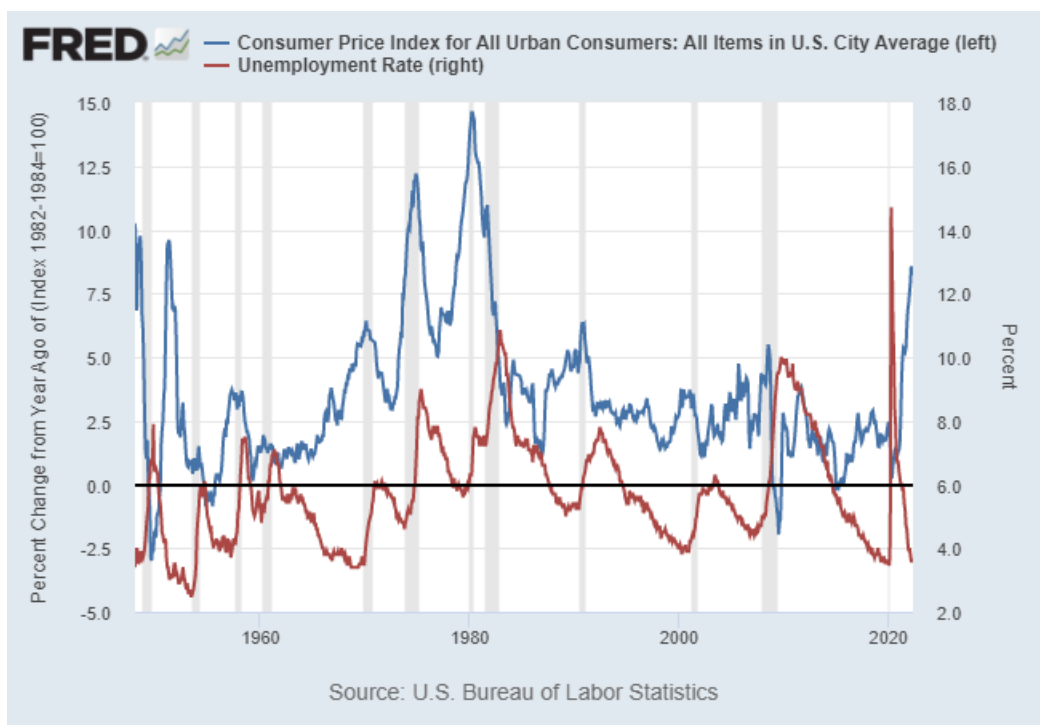


Chart Source: St. Louis Fed

They wouldn't phrase it quite that bluntly, but creating some more unemployment is basically the plan here. The US Federal Reserve can't print more oil, refineries, pipelines, copper, fertilizer, ships, or manufacturing facilities, but they can reduce consumer demand for periods of time for some of those things, through very uncomfortable methods.

The US Federal Reserve is projecting an unemployment level of 4.1% a year and a half from now, which is higher than the current rate of 3.6%, and their policy decisions are aiming towards that direction.

This could bring down price inflation for a period of time, but most likely at the cost of a recession. Historically, reductions in employment lead to vicious cycles of less consumption and more reductions in employment, so the

idea of increasing unemployment via monetary policy “just a little bit” is probably farfetched.

Specifically, they’ve never really been able to increase employment by 0.5% and have it stop there. When unemployment goes up by 0.5%, it historically keeps going. Maybe this will be the first time where it does not, but I would not bet on that. This was my meme from the May 2022 newsletter:



Back in my December 2021 research report for premium subscribers, I outlined a new defensive view around the margins, as it became increasingly clear that the US Federal Reserve was serious about trying to tighten policy into this situation. I wasn't calling for a recession yet, but I was expecting an economic slowdown and less attractive conditions for risk assets. So far, it has been even sharper than I would have guessed.

Ever since the global financial crisis, US stocks have been very reliant on persistent stimulus, either monetary or fiscal, in order to keep going up.

This chart is cluttered but quite important in my opinion. It shows the Wilshire 5000 price index (the closest proxy for the broad US stock market) and the Fed's balance sheet. I'll walk through it in the following paragraphs:

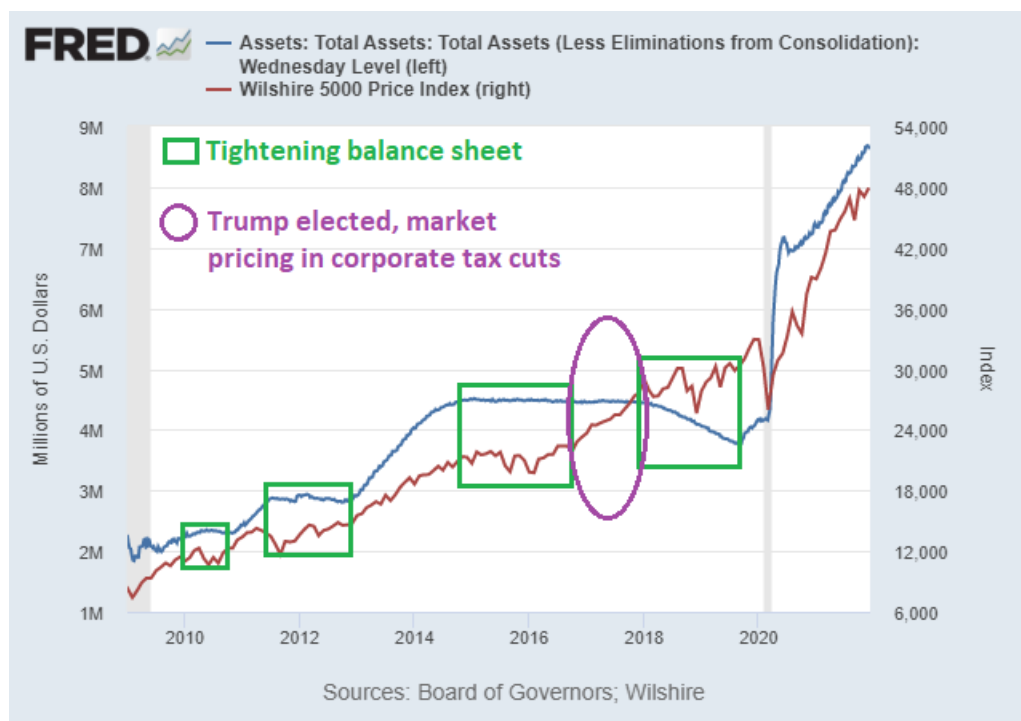




Chart Source: *St. Louis Fed*, annotated by Lyn Alden

In 2010 (first green box), the stock market had partially rebounded from its 2009 depths. The Fed had performed emergency quantitative easing (QE1) during the crisis, but had not been actively stimulating recently. The Fed's balance sheet went sideways, and the stock market chopped along sideways as well. Then in late 2010 (the end of the first green box), the Fed announced QE2 and both the Fed balance sheet and the stock market began going up together.

From late-2011 to 2012 (second green box), the Fed held their balance sheet flat and the stock market chopped along sideways again. Then after that green box, they did QE3 from 2013 to 2014 to expand their balance sheet a lot, which coincided with another bull market period.

From 2015 to 2016 (third green box), the Fed once again held their balance sheet flat and the stock market chopped along sideways again. This was a bigger deal because the dollar strengthened, and several emerging markets including Brazil in particular entered very serious recessions. The price of oil crashed and remained down for years as global growth slowed. The US experienced an industrial recession (which was not quite big enough to cause a full recession), in large part because of how weak the energy sector was, which cascaded into weakness in manufacturing to supply the energy sector.

The year 2017 (purple circle) was an exception. The Fed continued to hold their balance sheet flat and began gradually raising interest rates, but Donald Trump was elected to be president in November 2016 and was sworn in to office in early 2017, with a Republican majority in both houses of Congress. The stock market quickly began pricing in tax cuts including corporate tax cuts in particular, which indeed materialized a year later. This was a form of fiscal stimulus; tax cuts without associated spending cuts, resulting in a bigger fiscal deficit, which was good for the stock market. Corporations were able to repatriate hundreds of billions of dollars from overseas and use the majority of it for share repurchases, which was great for stock prices but didn't meaningfully impact GDP growth or employment.

From 2018 through much of 2019 (fourth green box), there wasn't any more fiscal stimulus coming down the path. The Fed continued raising rates but also began performing quantitative tightening, which means shrinking their balance sheet. The stock market once again entered a very choppy sideways period. By 2019 it was clear that the global economy was slowing, the US yield curve inverted, and the Fed slightly reduced interest rates.

From late 2019 onward, the Fed has been performing massive monetary stimulus. This was initially triggered by the repo rate spike in September 2019, but then was kicked into high gear by the COVID-19 global lockdowns to address the illiquid Treasury market. The largest fiscal stimulus and monetary stimulus in modern history occurred together, and this was massively beneficial to the stock market.

With fiscal stimulus winding down, and the Fed now tightening, the base case would be for a volatile market again as we enter another probable "green box" in 2022. Equities have been very reliant on these ongoing stimulus efforts. Plus, equity valuations are much higher now, and 2021 already had record inflows into equity at a scale that exceeded the prior twenty years combined. Everyone piled into equities. It *could* be different this time, but that's not the assumption I would go with. The caveat is that fiscal stimulus from a Build Back Better bill might serve as another purple circle, but that remains to be seen, and much of that money is not very fast-acting like stimulus checks or corporate tax cuts are.

So, I am looking for a defensive posture around the margins.

-Lyn Alden, December 12th 2021 research report

I published my December 2021 newsletter called "[The Fifth Age of Oil](#)" on the same day as that report, which reiterated my bullish view on the oil and gas sector due to significant undersupply and lack of capex. Oil was \$70 at

the time. That newsletter issue also supported the view that broad equity indices don't look very attractive for 2022, including an observation that S&P 500 profit margins were probably peaking.

My January 2022 newsletter called “[The Capital Sponge](#)” continued with this analysis by pointing out how over-owned equities are, along with other issues. Some of those things described in that issue played out quite as expected (such as weak equity index performance, energy sector outperformance, and value factor outperformance), but some other aspects have gone the other way (specifically, the idea that the dollar might be hitting a local peak relative to other currencies didn't pan out, especially once the war in Europe broke out).

My March 2022 newsletter called “[Global Bifurcation](#)” came in the wake of the Russian war on Ukraine, where I outlined some of the macro shifts that this event would likely cause. This includes bifurcated supply chains and commodities markets, gradually shifting sovereign reserve practices, and the theme that many emerging markets would probably ignore sanctions and continue to buy commodities from Russia out of necessity. While it's still early, indeed we are seeing some net foreign selling of Treasuries, emerging market countries did continue to buy commodities from Russia, and Russia has been able to prop up the ruble to multi-year highs relative to the euro and the dollar due to how reliant Europe is on Russian gas imports.

Most recently, my May 2022 newsletter issue was called “[Inflation or Recession](#)“, where I discussed policymakers' current attempts to rein in price inflation by reducing consumer demand for things. I outlined a view that this attempt at tightening would likely lead to a stronger dollar and a US recession if persisted with. By this point, the data were increasingly pointing to outright recession in the US and elsewhere rather than just choppy equity markets. This was despite the fact that various officials, such as Treasury Secretary Yellen, [were saying](#) (and are still saying recently) that the economy is resilient and that a recession is unlikely.

The rest of this June issue picks up where the May one left off. So far, that recession theme continues to be the path we're on unless something changes, so let's update that view.

## Recession Indicators

In the US, a private nonprofit organization called the National Bureau of Economic Research “NBER” is deferred to near-unanimously as the authority that gets to declare periods of recessions. And they declare recessions in hindsight based on a number of indicators, once the data are firmly in.

A lot of people think of recessions as being “two consecutive quarters of negative real GDP growth”. This is not the NBER's definition of a recession, but all instances of two consecutive quarters of negative GDP growth occurred around periods that the NBER later declared to be recessions.

So for all intents and purposes, two negative quarters is a reasonable real-time indicator of a recession. Whatever we want to call it, that sort of environment is a sustained downturn in economic activity.

**The US experienced negative real GDP growth in Q1 of this year. Currently, the Atlanta Fed GDPNow estimator, which tracks a multitude of incoming variables and adjusts weekly, is projecting 0% real GDP growth for Q2. We're teetering on the brink of two consecutive quarters of negative GDP growth.**

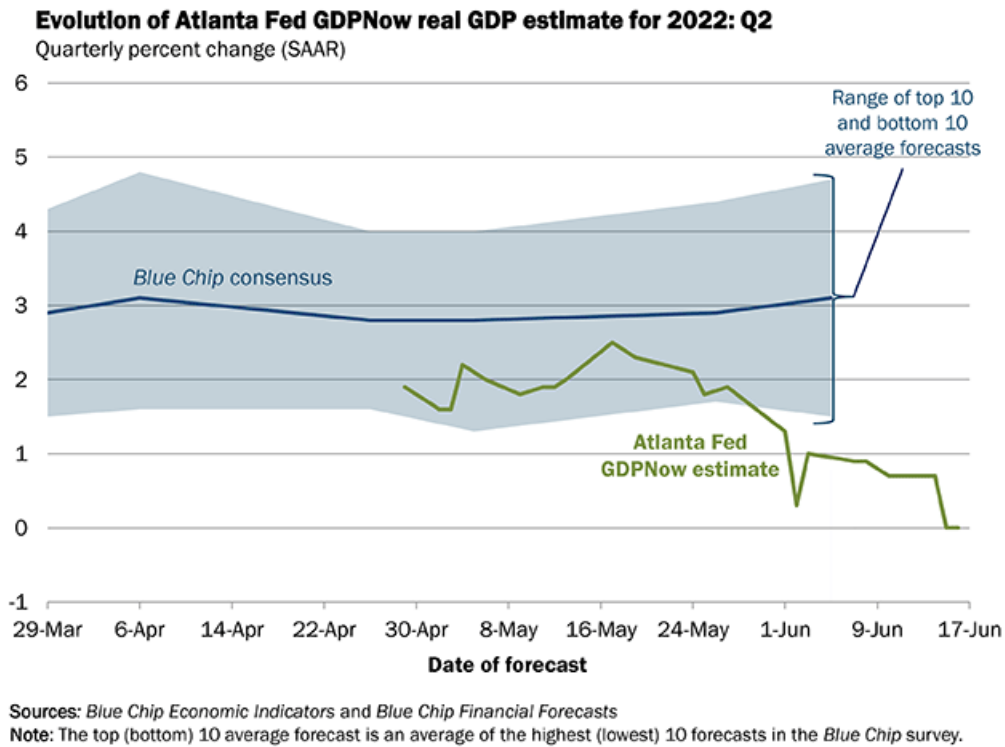


Chart Source: [Atlanta Fed](#)

A slightly harsher definition of a recession that I'll put forth here is a decline in year-over-year real GDP. Most NBER-defined recessions meet that criteria, with the exception of the post-dotcom recession in 2001 that was mild enough to avoid that.

For this current period, since stimulus-driven growth was so substantial in mid-2021, even after two negative quarters we would not reach negative on a year-over-year basis in mid-2022. We would need another quarter or two of negative GDP growth to reach that harsher definition of a recession. Whether that happens or not will depend in part on policy choices.

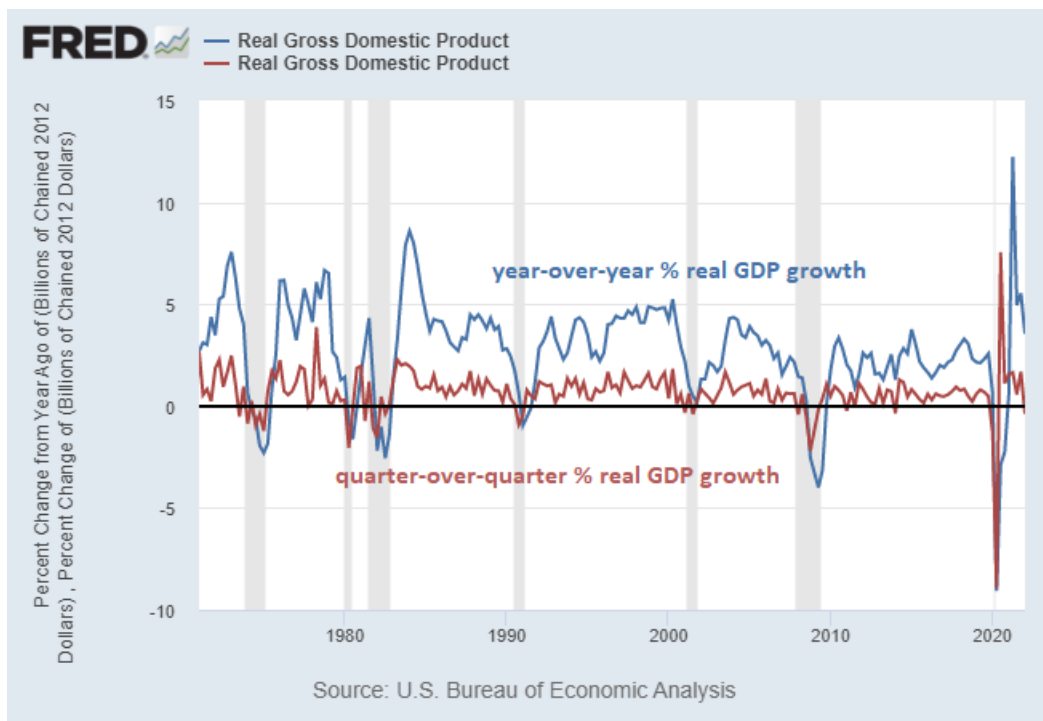


Chart Source: St. Louis Fed (NBER recessions shaded in gray)

Recessions vary in terms of depth and length. And there can be double-dip recessions, where we have two short but closely-spaced recessions.

The University of Michigan's national survey of consumer sentiment reached record lows here in June 2022, in a dataset that goes back nearly seven decades. It's currently even lower than it was in the depths of the 2008 global financial crisis, and even lower than during the worst parts of the stagflationary crisis of the late 1970s and early 1980s.

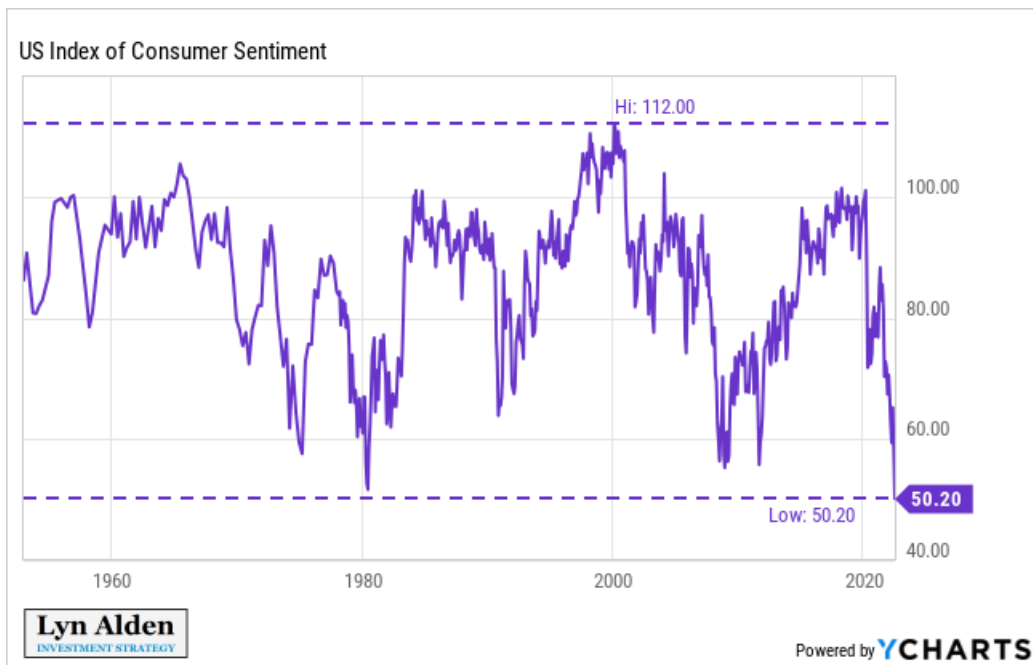


Chart Source: YCharts

Real retail spending is currently negative year-over-year. It had a big contraction at the start of 2020 during lockdowns, then had a huge spike during re-opening and stimulus, and then stagnated down to negative territory from there. A number of retailers ranging from Amazon to Walmart to Target have reported bad results.

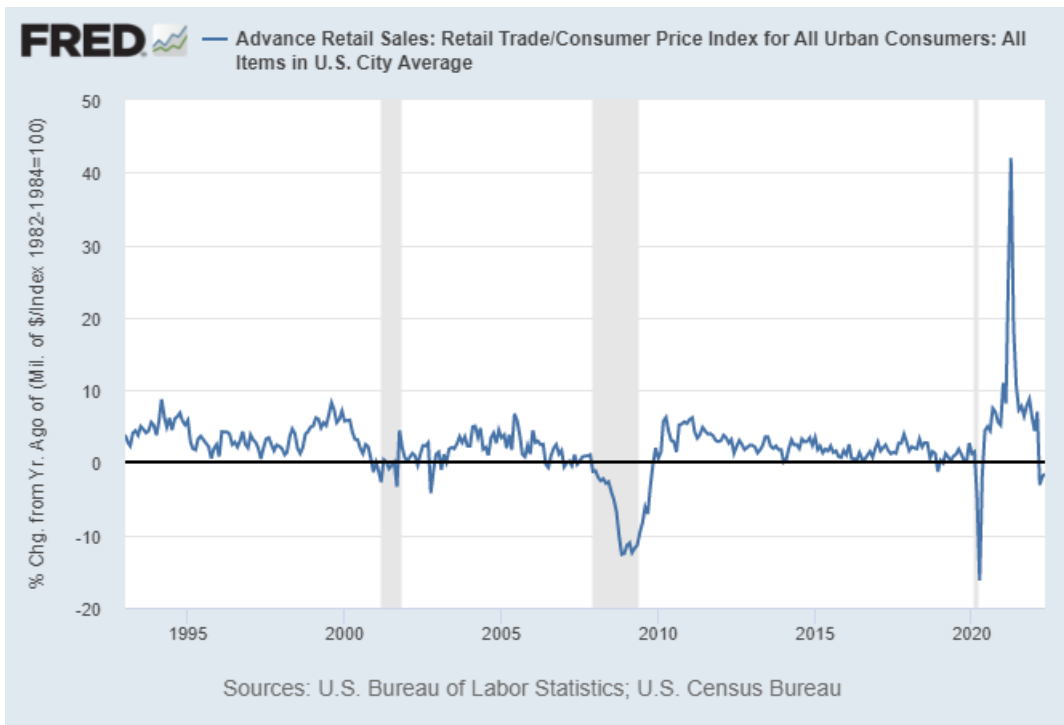


Chart Source: St. Louis Fed

Initial jobless claims have been inching up for three months now:



Chart Source: St. Louis Fed

Industrial production, which was in stagnation from 2007 to the present, is however still looking strong in the near-term cyclical sense:

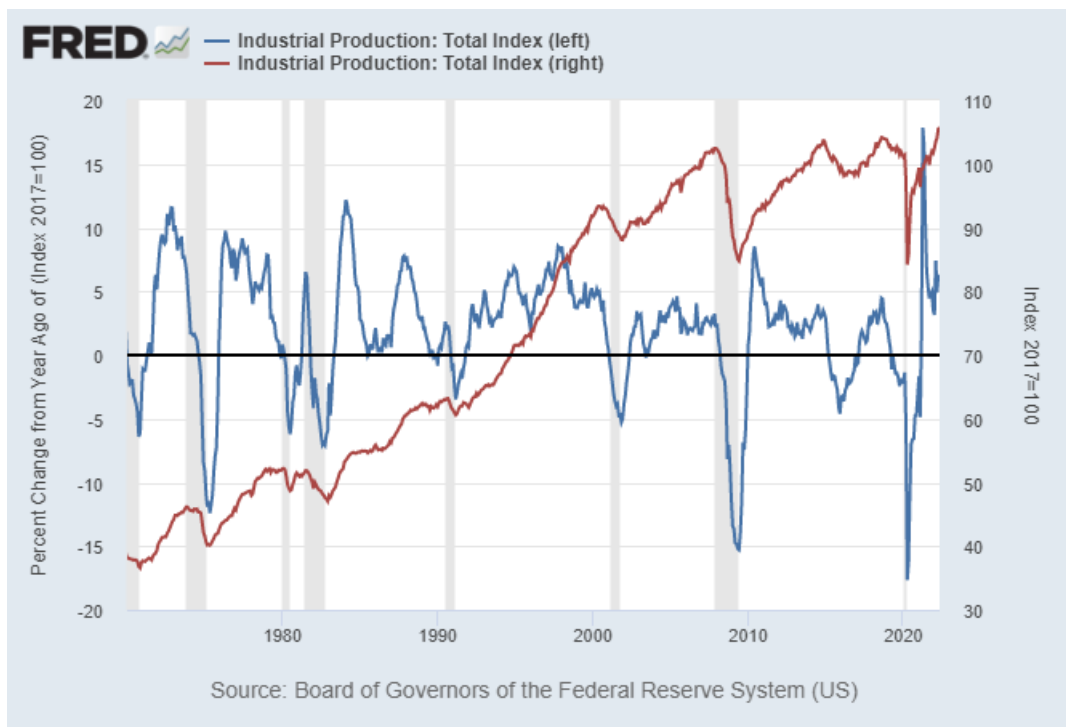


Chart Source: St. Louis Fed

Wages on average have increased by 6.1% over the past year. This is while official inflation was 8.5%. Meanwhile, a basket of meat/poultry/fish/eggs went up 14.2%, houses went up 16%, and gasoline went up 61%.

So, the typical wage earner got a *wage cut* in terms of purchasing power over the past year.

The housing market has slammed shut. A year ago, mortgage rates were 3%. The monthly cost of a 30-year \$300k mortgage at a 3% interest rate is \$1,265. The monthly cost of the same mortgage now at 6% is \$1,799, which is 39% higher. When you add that the median house is up in price by 16% over the past year, the monthly cost of paying for a mortgage on the same house as it did a year ago is \$2,086 or around 65% higher.



Chart Source: [@M\\_McDonough](#), [@TheStalwart](#),

That makes it harder to buy a house for the first time, and also harder to sell an existing house to move to a new house, which would entail exiting a low-rate mortgage and starting a high-rate mortgage.

Real GDP growth represents our increased technology and organization to do things more efficiently. It generally increases over time, as we utilize denser and more efficient forms of energy, along with better materials and better computing power.

For example, a person used to have to manually farm, and the invention of the tractor made each farmer radically more productive, and able to do the work of ten men. Now we can imagine a fleet of self-driving tractors, overseen by a farmer, making him or her even more productive. A smaller and smaller share of the world needs to be farmers in order to feed the world... as long as technology is improving over time and the the supply of raw materials remains abundant.

However, we occasionally have periods of pullback and disorganization, and thus a decreased standard of living, due to underinvestment or malinvestment or external shocks. Supply chains get messed up. Commodities encounter supply shortages. Wars happen. Sometimes cultures degrade and reduce their rate of innovation, or technology in a certain area reaches inherent limits for a while until some breakthrough in another industry gives another opportunity for improvement.

In these environments, it becomes more expensive to get the same things, and there are some things that we can't get at all. In particular, if the supply of energy is disrupted, it affects almost everything else.

We're in one of those pullback periods now, and it's showing up as stagflation. We have more disorganization and frictions, with a lack of surplus capacity for several of the key things we need. And now that policymakers are tightening monetary policy, it is putting a brake on consumer spending patterns.

## Why Demand Destruction Probably Won't Work Well



The problem is that this inflation is happening at a time of near-record debt levels, and so there is a thinner-than-usual tolerance for stagnation to occur without triggering debt liquidation.

The US Federal Reserve can't increase the supply of energy or other goods/services, but it does have blunt tools to curtail demand. And it currently has a mandate to use those blunt tools, regardless of whether or not they will work. That's the institutional programming that they have to work with.

The only thing that would stop them from using those tools, is if other parts of their dual mandate (employment levels and/or financial stability in the form of frozen credit or Treasury markets) get worse than inflation. And that seems to be coming, but is not here yet. The US Federal Reserve relies primarily on lagging economic data, so as an institution they are designed to put out current fires rather than anticipate fires.

When Paul Volcker famously raised rates to 19% in 1980 to slow down money supply growth, total debt (public and private combined) was 160% of US GDP.

Today, total debt is 370% of GDP. So, a much higher interest rate would cause widespread insolvencies and economic contraction.

In 1980, the money supply growth was mainly coming from commercial bank lending, and price inflation was mostly a demographics-driven demand issue rather than a supply issue. Tightening monetary policy was effective at reducing bank lending, and thus effective at reducing money supply growth.

Today, the money supply growth mainly came from fiscal spending, and price inflation is more-so a supply-scarcity issue rather than due to particularly strong demand.

In 1980, the energy supply problems that they had were mostly geopolitical, and were resolved with geopolitical means. There was plenty of global capacity to bring new oil to market, quickly.

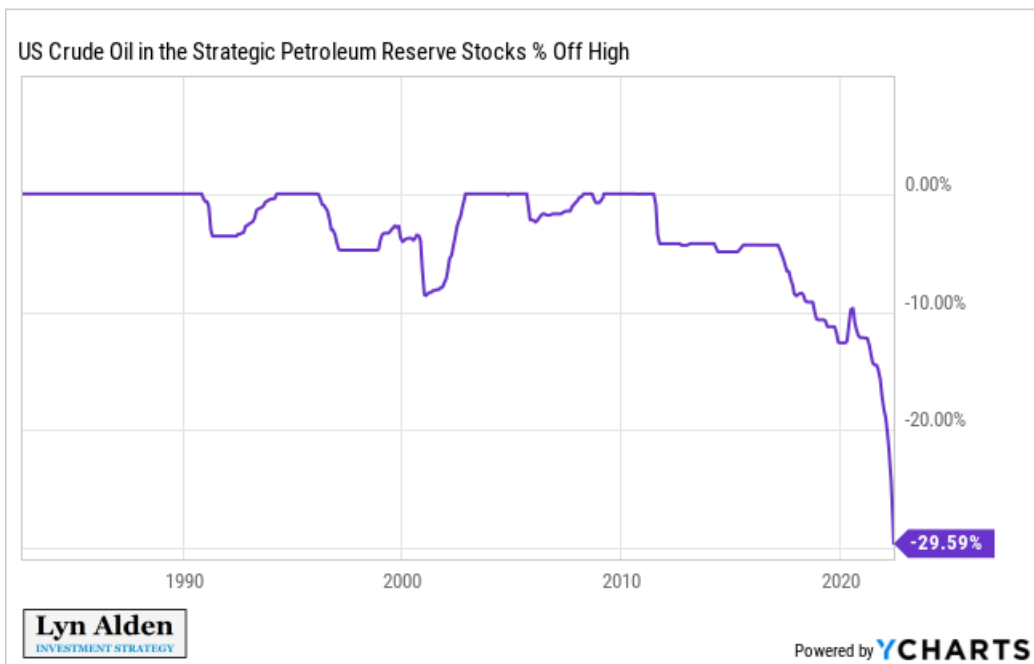
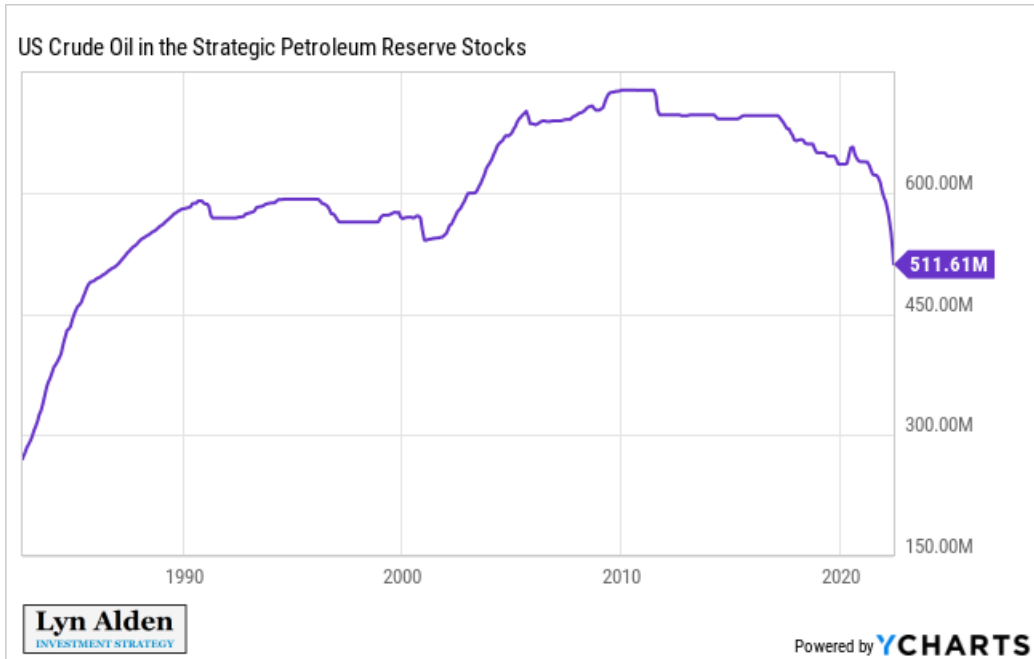
Today, energy supply problems are primarily due to a lack of sufficient capex and development over the past several years for oil production, gas production, refineries, pipelines, LNG terminals, electrical grids, and even



things like keeping existing nuclear power plants open. Then add a war to the mix to accelerate and magnify the problem. This lack of sufficient capacity will likely take years of capital-intensive work to solve.

Currently, oil is \$110 per barrel.

This high price is despite the fact that the US Strategic Petroleum Reserve is actively selling some of its oil into the market to try to suppress prices.



And it's despite the fact that China has been using rather strict lockdowns, and so their jet fuel usage and gasoline usage throughout this springtime was back down to where it was at the depths of the pandemic in early 2020, which is a multi-year low.

# Chinese flight tracking

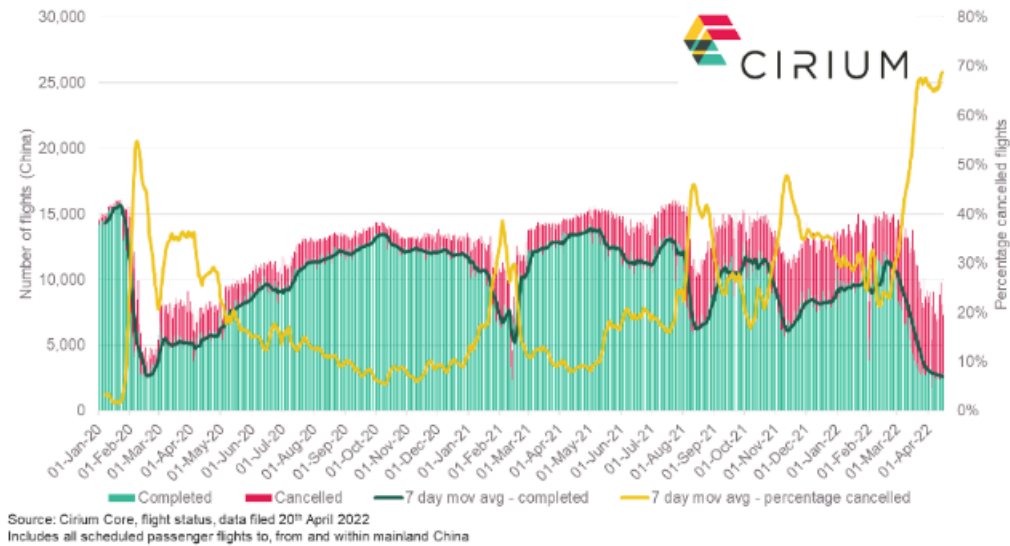


Chart Source: [Cirium](#)

So, the two biggest countries are actively contributing excess oil supply to the market and/or destroying oil demand, and yet oil is at \$110/barrel.

If inflation is reduced by reducing global energy usage over the next year (a.k.a. severe recession), while the supply-side problems remain mostly unaddressed, then inflation would be ready to return as soon as demand destruction ceases.

## Geopolitical Game Theory

Global energy consumption has increased almost every single year in modern history. The handful of exceptions were extreme periods of global economic weakness:

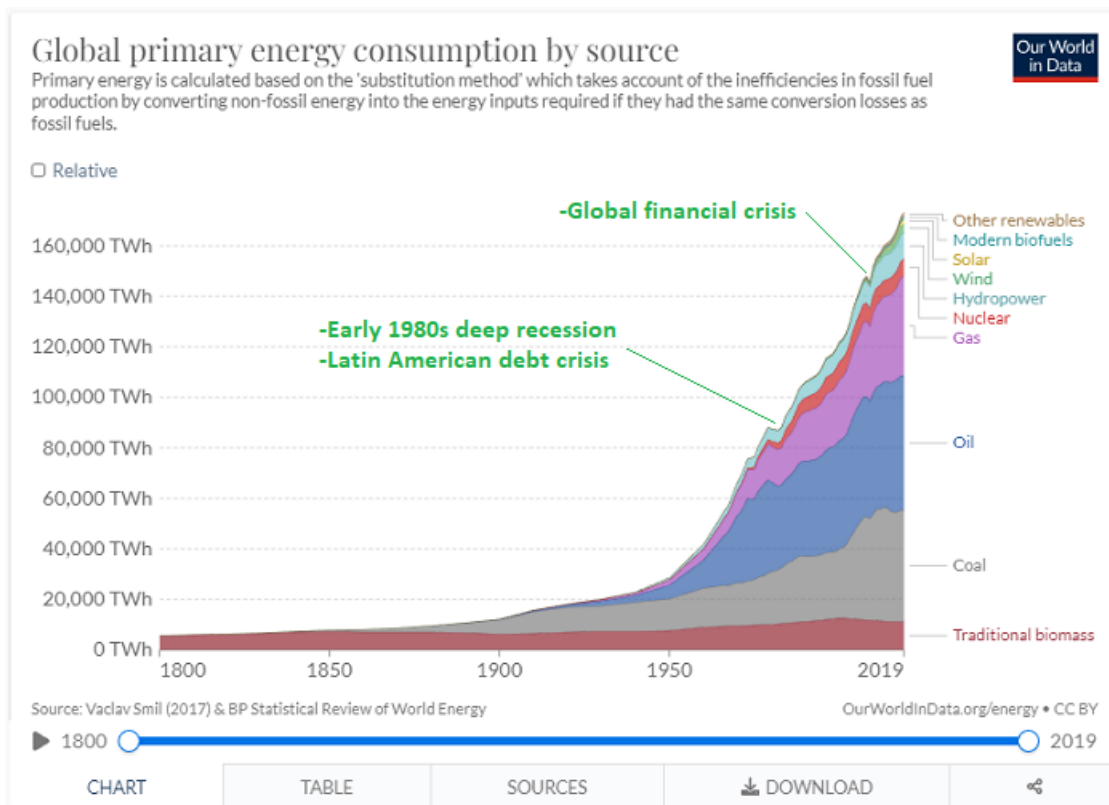


Chart Source: [Our World in Data](https://ourworldindata.org)

Looking at the post-WWII era, global energy consumption dipped for three years from 1980 through 1982 as the US tried to stabilize the flailing dollar, dipped for one year in 2009 during the global financial crisis, and dipped for one year in 2020 due to the pandemic lockdowns (which is not shown on this particular chart, since it ends in 2019). Those are the only times that global energy consumption decreased year-over-year, and these were the three worst economic periods in the post-WWII era.

To the extent that some developed countries have been able to flatten or even slightly shrink their energy consumption, it's in significant part from a combination of 1) lack of economic growth and 2) sending a large portion of their most energy-intensive manufacturing industries to developing countries. For the world *as a whole* to shrink energy consumption in a year, means quite a lot of economic devastation is occurring.

Around the margins, developed countries have become less energy-intensive relative to GDP, with more growth from software and services, albeit from very high levels of per-capita energy consumption.

For example, the average American citizen consumes 15x as much oil per year as the average Indian citizen, and 11x as much grid electricity. As another example, the average Australian citizen consumes 3-4x as much oil per year as the average Chinese citizen, and twice as much grid electricity, even though a large portion of Chinese energy consumption is actually involved with making products for the rest of the world rather than just for their own end-user consumption.

The marginal energy demand now comes from developing countries. For them, since they have much less energy and commodity consumption per person, their quality of life is enhanced significantly with each marginal uptick in energy and commodity consumption.

Perhaps the most relatable example is air conditioning. Japan and the US have over 90% air conditioning penetration. In contrast, less than 20% of people in Mexico and Brazil have air conditioning, despite the higher average temperatures there. And less than 10% of people in Indonesia and India have air conditioning. Broadly speaking, the much colder "Global North" ironically uses an order of magnitude more air conditioning than the much warmer "Global South".

If low-income countries with massive populations like India and Nigeria ever use as much per-capita oil as middle-income emerging markets like Thailand or Mexico (which is still nowhere near what the wealthiest countries use), the absolute amount of global oil demand would increase by quite a bit. Even as India quickly ramps up its solar energy production from a small base, it's ramping up its coal, oil, and gas consumption from a large base by far more in absolute terms.

Getting access to electricity, the internet, better transportation, a home with various comforts like air conditioning, and more nutrient-dense food- these are all things that require more energy consumption and improve the standard of living rather directly.

Getting sustained demand destruction, especially for energy and commodities which are a global pricing market, is hard to do due to the realities of geopolitical game theory.

If the US does its best to rein in energy usage and cause a recession to try to reduce energy-based price inflation, China could come out of its self-imposed lockdowns, do some stimulus, and ramp up their oil consumption. The US would then be in a recession with still-high oil prices. Meanwhile the US Strategic Petroleum Reserve would already be at historically low levels, and unable to keep selling into the market. Then what?

And it's especially problematic for the smaller countries, as their economies get moved around at the whims of the big countries. What happens regarding commodity inflation is entirely out of their hands.

Are emerging markets broadly going to reduce total energy consumption by any meaningful extent over the next few years? No, and if anything they'll keep using more, unless something causes a global depression and famine.

That's one of the incentive problems here; any individual country practicing austerity doesn't work well for solving global supply-side problems, especially when debt is already this high after a century of *not* practicing austerity. A country can practice fiscal and monetary austerity, and *still* face a lot of inflationary pressures as a result of other countries gobbling up commodities.

The underlying inflationary problems run much deeper at this point than just what the current deficit and money supply growth rate is.

Now, the US does have some extra impact with its fiscal and monetary policy, because there is over \$13 trillion worth of dollar-denominated debt in offshore markets. To the extent that the Fed and Treasury can strengthen the dollar, they can squeeze a bunch of dollar-indebted emerging markets and slow down their demand too, such as Brazil, Mexico, Turkey, and so forth.

A strong dollar historically results in weaker global growth, weaker US corporate profits, weaker foreign demand for US Treasuries, and a host of other problems for the US and other countries. But, they can try it and see the order of which countries' economies break down first. Countries on the periphery will go down early (e.g. Sri Lanka), but for the major powers, it becomes a balance sheet contest. Eventually, a strong dollar comes back around and hits the US because the US ends up having to finance more of its own fiscal deficits, in what basically becomes a balance of payments problem.

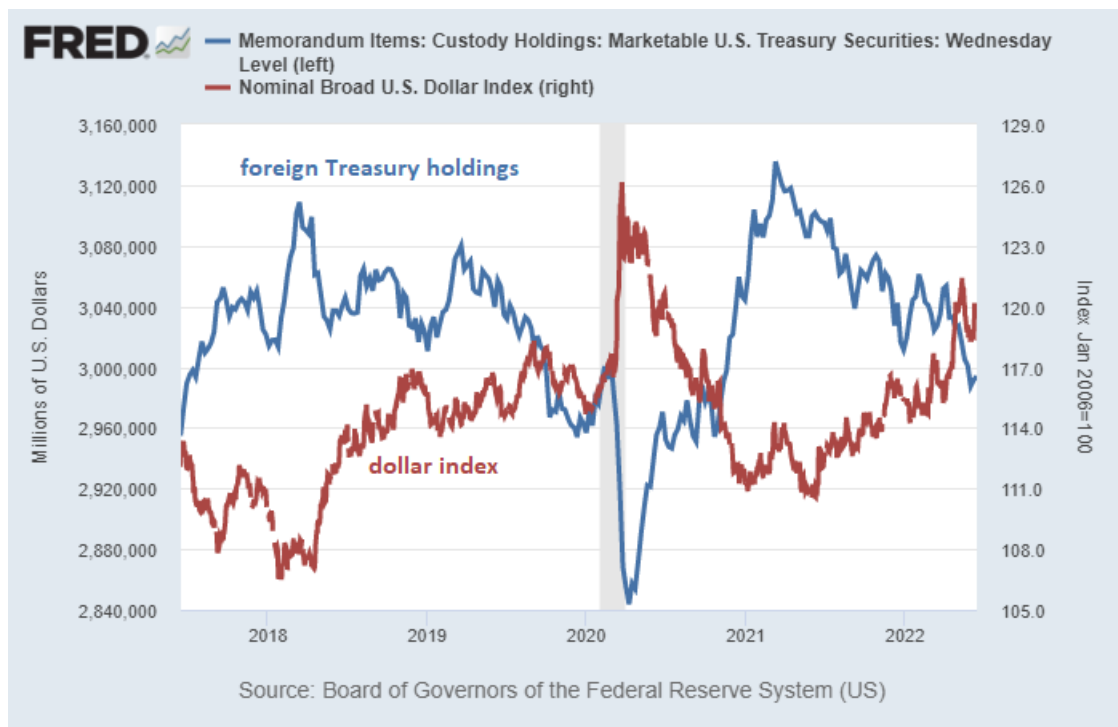


Chart Source: St. Louis Fed

So, US policymakers may be able to tighten fiscal and monetary policy enough, to cause a domestic and global recession significant enough, to reduce energy prices and inflation temporarily. There could be a sharp disruption, or more of a sideways stagnation as they try to give some space for supply to catch up.

However, when the US and other developed countries want to stimulate their way out of that recession again, inflation would likely be quick to resurface. This is because many of the supply constraints would still be there. Destroying demand in the face of supply constraints is like running away and hiding from a monster in a closet, so the monster just sits outside and waits for you to come out again. Until the monster is actually dealt with, it's still there, waiting.

Oil got up to \$120+/barrel in this cycle. I can imagine a scenario where we push it down to \$70 in a recession, then stimulate our way out of the recession and oil goes to \$150. So then we try to rein it in again and get it down to \$90, and then simulate again and send it to \$180. Those are just hypothetical numbers, but the point is, I would expect some sort of zig-zag grind higher during this decade during rounds of tightening, debasement, tightening again, and debasement again.

Things are going to be challenging for the US economy, European economy, Chinese economy, and global economy in aggregate, until we get past this energy bottleneck. This involves basically all forms of energy to varying extents, as well as refining infrastructure, pipeline infrastructure, export infrastructure, electrical grid infrastructure, and other related industries.

## Portfolio Updates

I have several investment accounts, and I provide updates on my asset allocation and investment selections for some of the portfolios in each newsletter issue every six weeks.

These portfolios include the model portfolio account specifically for this newsletter and my relatively passive indexed retirement account. Members of my [premium research service](#) also have access to three additional model portfolios and my other holdings, with more frequent updates.

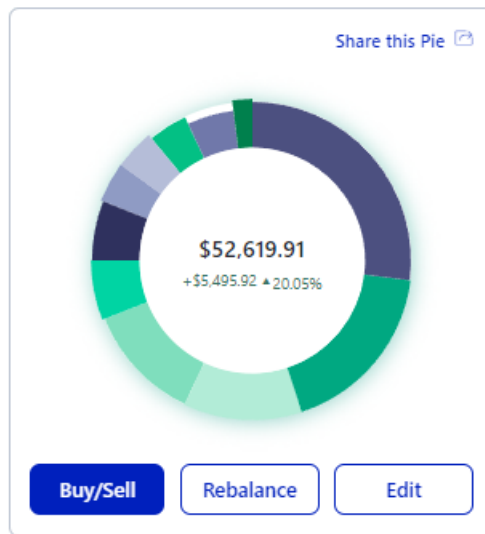
I use a free account at [Personal Capital](#) to easily keep track of all my accounts and monitor my net worth.

## M1 Finance Newsletter Portfolio

I started this account in September 2018 with \$10k of new capital, and I put new money in regularly. Currently I put in \$1,000 per month.



It's one of my smallest accounts, but the goal is for the portfolio to be accessible and to show newsletter readers my best representation of where I think value is in the market. It's a low-turnover multi-asset globally diversified portfolio that focuses on liquid investments and is scalable to virtually any size.

I chose [M1 Finance](#) because their platform is commission-free and allows for a combo of ETF and individual stock selection with automatic and/or manual rebalancing. It makes for a great model portfolio with high flexibility, and it's the investment platform I recommend to most people. (See my disclosure policy [here](#) regarding my affiliation with M1.)



## Slices

Name	Value	Gain / Return	Actual / Target
Dividend Stocks	\$14,026.57	+\$4,529.14 ▲ 77.59%	26.6% <b>27%</b>
International Equity	\$9,580.76	+\$59.98 ▲ 0.94%	18.2% <b>18%</b>
Growth Stocks	\$6,442.62	-\$315.60 ▼ 13.81%	12.2% <b>12%</b>
Commodities	\$6,289.12	+\$3,391.96 ▲ 151.65%	11.9% <b>12%</b>
iShares SHY iShares 1-3 Year Treasury Bond...	\$3,330.04	-\$181.51 ▼ 6.81%	6.3% <b>6%</b>
iShares IEF iShares 7-10 Year Treasury Bon...	\$3,261.32	-\$105.14 ▼ 3.12%	6.1% <b>6%</b>
Sprott PHYS Sprott Physical Gold Trust Units	\$2,284.87	+\$151.16 ▲ 6.94%	4.3% <b>4%</b>
SIVR Aberdeen Standard Physical Sil...	\$2,278.60	-\$184.17 ▼ 9.42%	4.3% <b>4%</b>
SPDR SLYV SPDR S&P 600 Small Cap Valu...	\$2,068.07	+\$426.47 ▲ 29.71%	3.9% <b>4%</b>

	Digital Assets	\$1,944.60	-\$3,155.85 ▼ 87.19%	3.6% 5%	>
	PPLT Aberdeen Standard Physical Pl...	\$1,113.34	-\$67.52 ▼ 6.76%	2.1% 2%	>

And here's the breakdown of the holdings in those slices:

## Newsletter Multi-Asset Model Portfolio (M1 Finance)

Dividend Stocks	27%	International ETFs	18%
Bristol-Myers Squibb (BMY)	5%	Vanquard Emerging Markets (VWO)	24%
Bank of Nova Scotia (BNS)	5%	Vanquard Pacific Markets (VPL)	20%
Intercontinental Exchange (ICE)	4%	iShares Latin America (ILF)	18%
PulteGroup (PHM)	4%	Vanquard European Markets (VGK)	18%
British American Tobacco (BTI)	4%	iShares MSCI India (INDA)	10%
Enbridge (ENB)	4%	Global X Southeast Asia (ASEA)	10%
Altria (MO)	4%		
AmerisourceBergen (ABC)	4%	Commodity Producers	12%
Ciana (CI)	4%	Natural Resources ETF (GUNR)	8%
CVS Health (CVS)	4%	North Shore Uranium Mining ETF (URNM)	8%
FedEx (FDX)	4%	Rio Tinto (RIO)	8%
D.R. Horton (DHI)	3%	EOG Resources (EOG)	8%
Amgen (AMGN)	3%	Franco Nevada (FNV)	8%
BlackRock (BLK)	3%	Wheaton Precious Metals (WPM)	8%
Texas Instruments (TXN)	3%	Sandstorm Gold (SAND)	8%
United Health (UNH)	3%	Suncor (SU)	8%
Johnson and Johnson (JNJ)	3%	Nutrien (NTR)	6%
Grupo Aeroportuario del Centro (OMAB)	3%	Canadian National Resources (CNQ)	6%
US Bancorp (USB)	3%	TotalEnergies (TTE)	6%
Cisco (CSCO)	3%	Royal Dutch Shell (SHEL)	6%
Kinder Morgan (KMI)	3%	Barrick Gold (GOLD)	4%
Union Pacific (UNP)	3%	Pan American Silver (PAAS)	4%
Aflac (AFL)	3%	Sibanye-Stillwater (SBSW)	4%
Novartis (NVS)	3%		
eBay (EBAY)	3%	Digital Assets	5%
Prudential Financial (PRU)	3%	Grayscale Bitcoin Trust (GBTC)	55%
JP Morgan Chase (JPM)	3%	Marathon Digital Holdings (MARA)	15%
Discover Financial (DFS)	3%	Core Scientific (CORZ)	15%
Brookfield (BAM)	3%	Microstrategy (MSTR)	15%
Growth Stocks	12%		
Adobe (ADBE)	10%	iShares 7-10 Year Treasury ETF (IEF)	6%
Amazon (AMZN)	8%	iShares 1-3 Year Treasury ETF (SHY)	6%
Fiserv (FISV)	8%	SPDR Small Cap Value ETF (SLYV)	4%
JD (JD)	8%	Aberdeen Silver ETF (SIVR)	4%
HDFC Bank (HDB)	8%	Sprott Physical Gold (PHYS)	4%
Alibaba (BABA)	8%	Aberdeen Platinum ETF (PPLT)	2%
Alphabet (GOOGL)	8%		
Etsy (ETSY)	8%		
Roku (ROKU)	8%		
Twilio (TWLO)	8%		
Booking Holdings (BKNG)	8%		
MercadoLibre (MELI)	5%		
Zoom (ZM)	5%		

## Changes since the previous issue:

The portfolio remains focused on being an “all weather” diversified portfolio, with a current overweight emphasis on defensive value.

I recently shifted some short-term Treasury inflation-protected securities into 7-10 year Treasury notes as they went up to 3% yields, which is unusual for me because I am usually a bear on longer duration notes/bonds. This shift is in anticipation of demand destruction, and thus is a mild disinflation hedge within an overall portfolio that is more geared towards inflation.

## Other Model Portfolios and Accounts

I have three other real-money model portfolios that I share within my [premium research service](#), including:

- Fortress Income Portfolio
- ETF-Only Portfolio



- No Limits Portfolio

Plus I have larger personal accounts at Fidelity and Schwab, and I share those within the service as well.

## Final Thoughts: Nearing Checkmate

When a chess game gets to its later stages, the winning player often starts to get the losing player's king into a series of checks. That losing player can move their king out of it, but their set of move options continues to dwindle, and if they're not successful at forcing a draw, they eventually get caught in a checkmate.

I think major central banks including the Federal Reserve, Bank of England, European Central Bank, and Bank of Japan are nearing the losing side of a checkmate scenario, where economic realities dwindle their set of possible choices to zero. The latter two have likely already been put in checkmate, while the former two are hanging on for the moment.

This is primarily due to the long-term debt cycle described earlier in this issue, where their economies were stimulated to higher and higher debt as a share of GDP and lower and lower interest rates over decades, until they hit super high debt levels with zero or slightly negative rates. Then, they grind through that low-rate disinflationary period for a while, until they finally work through excess capacity, and reach a period of scarcity, stimulus, and inflation.

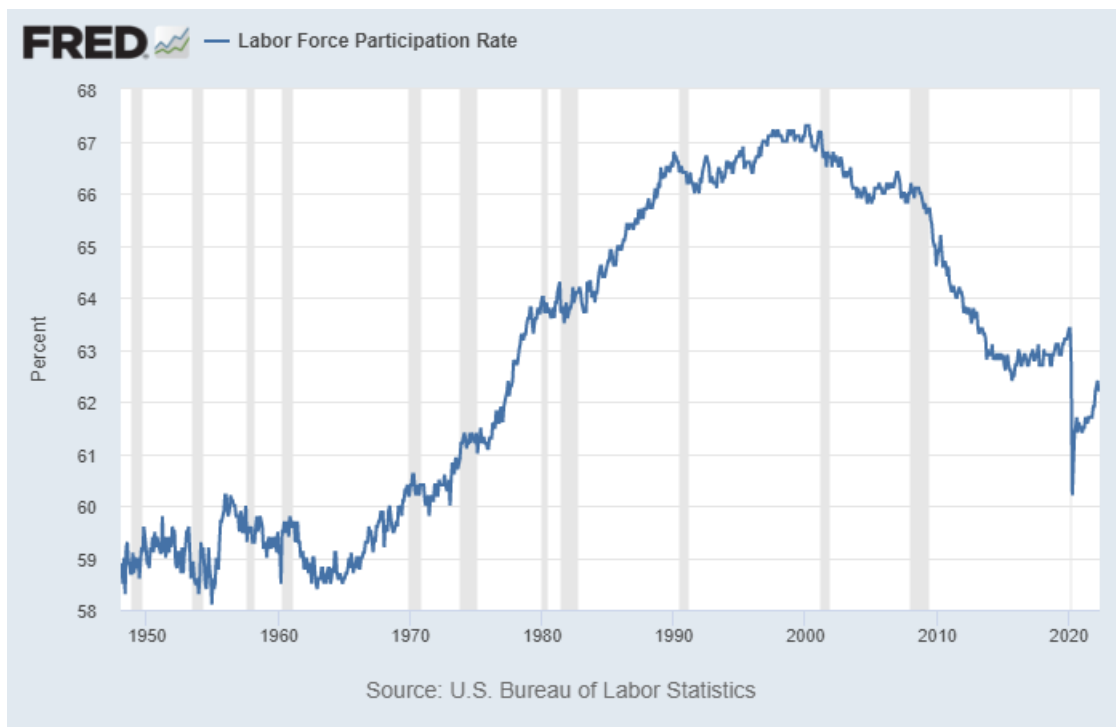
“Checkmate” in this context happens when a central bank encounters inflation that is above its target level, but still can't stop printing money, due to lack of buyers of their country's government debt, or due to other critical liquidity problems in their financial markets. In other words, it's what happens when a country with a super high debt ratio gets hit with acute commodity shortages, and thus has to keep doing quantitative easing on its government bonds even during high inflation.

This historically only rarely happens to developed market central banks, and until recently hasn't really happened to any of them since World War II (the prior inflationary part of a long-term debt cycle). When it happened back then, it occurred to several of regions at roughly the same time, and that seems to be the case today as well.

### First Check: 2008

Japan hit their economic peak around 1990, where they then entered a multi-decade stagnation. However, they were not a big enough share of global GDP for this to affect much around the world, and they never ran into significant commodity shortages during this time.

The year 2000 in many ways represented the relative peak of the developed world, broadly. The US baby boomer generation was in its prime earnings years, and so the US had its highest level of labor force participation in its history, and the highest US consumer sentiment according to surveys on record. Dollar reserves as a share of global foreign reserves were at their peak. Europe launched the euro currency around this time, in a period of optimism and unification. The Soviet Union had fallen a decade prior, China was relatively small in terms of economic power, and so the western powers were completely unrivaled.



*Chart Source: St. Louis Fed*

And then of course after that peak level, there were the 9/11 attacks, decades of foreign misadventure in response, and in general a lot of signs of “waning empire” status for the US, along with financial troubles in Europe.

In the aftermath of the 2000 dotcom bubble, the US Federal Reserve cut interest rates to 1%, and implicitly encouraged a housing credit bubble to grow. Private market forces amplified this, with mortgage-backed securities and rubber-stamp rating agencies that weren’t doing proper due diligence.

When the housing bubble blew up, it brought down the entire over-leveraged banking system with it in 2008. The US Federal Reserve cut interest rates all the way to zero, and began expanding its balance sheet, which is a way of monetizing government debts and mortgage debts. The Troubled Asset Relief Program and other emergency measures were used to prevent a broad bank liquidation and to increase their reserve ratios. They then did a couple more rounds of deficit monetization into late 2014.

The Eurozone encountered the 2012 European sovereign debt crisis, where the European Central Bank had to step in to suppress the yields of southern European sovereign debt to prevent outright default. They never solved the underlying debt problem during this period, but merely bandaged over it. The Eurozone had an agreement for countries not to go over 60% debt as a share of GDP each, but some countries went over twice that, and even some of the more austere countries went over 60%. There was no answer to this, or path to fix it other than failed attempts at austerity. Rising populism and increased levels of political polarization began to emerge in many of these European regions.

The Bank of Japan ramped up its debt monetization efforts starting in late 2012. Like the Fed, it had a 2% annual inflation target, but encountered persistent disinflation, in large part because commodities were oversupplied and cheap, and because their banking system had no credit growth. The Bank of Japan printed about 600 trillion yen and bought various assets including bond and stocks during this decade, but their broad money supply grew very slowly. Compared to other regions, at least they managed to deleverage most of their corporate sector and avoid too much political polarization domestically.

## Japan Central Bank Balance Sheet

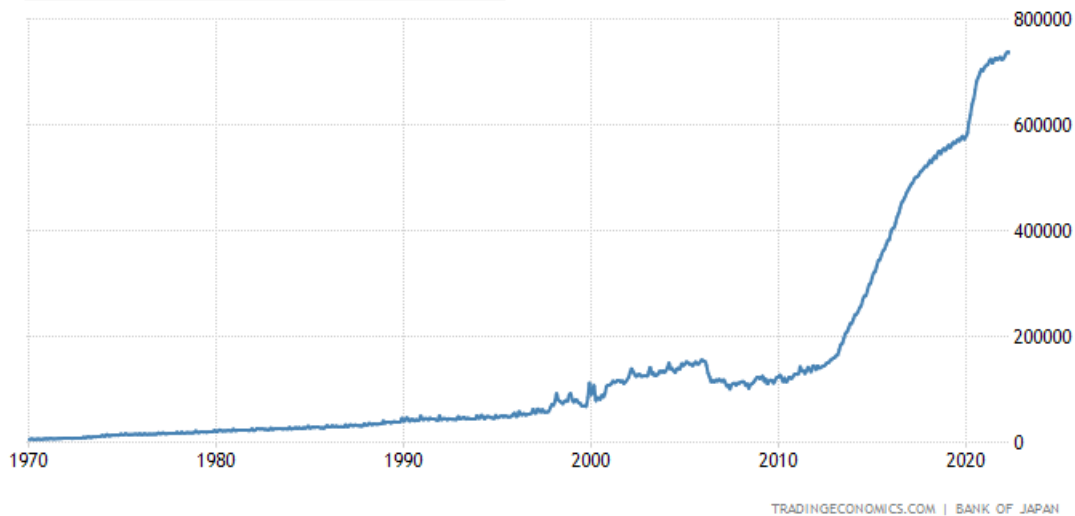


Chart Source: Trading Economics

That all collectively became the first big “check” to the US Federal Reserve and other major central banks, during the 2008-2014 period in particular. Private debts had reached about as high as they could go, with interest rates about as low as they could go.

The central banks’ answer to the check was to counter this big disinflationary impulse and debt liquidation with bank recapitalization and deficit monetization for the first time since the 1930s and 1940s. *Broad* money didn’t expand rapidly, but *base* money did, in the form of massively higher bank reserves.

### Second Check: 2020

In the aftermath of the global financial crisis and these various responses, the world went through a consumer-disinflationary slow-growth 2010s decade. The global banking system began operating with higher reserve ratios, but was not aggressively lending money to create more broad money.

China, however, performed large stimulus, and continued to serve as the primary growth engine of the world for a while.

The US exported a lot of its marginal manufacturing capacity to China, which along with several other developing countries served as a massive disinflationary pool of labor.

China began to rival the US in terms of economic scale, surpassing it in some ways (total electricity generation, total commodity usage, number of skyscrapers, and so forth) while still lagging it in other ways (global reserve currency status, military power projection, etc). China also stopped reinvesting its trade surpluses into Treasuries, and began financing infrastructure loans throughout frontier markets, as a major creditor nation.

Wealth concentration and political polarization in the US increased as China became a rival power, and various types of populism began to emerge, as some groups benefited from this rapid offshoring and trade deficits, and others were on the wrong side of all of it.

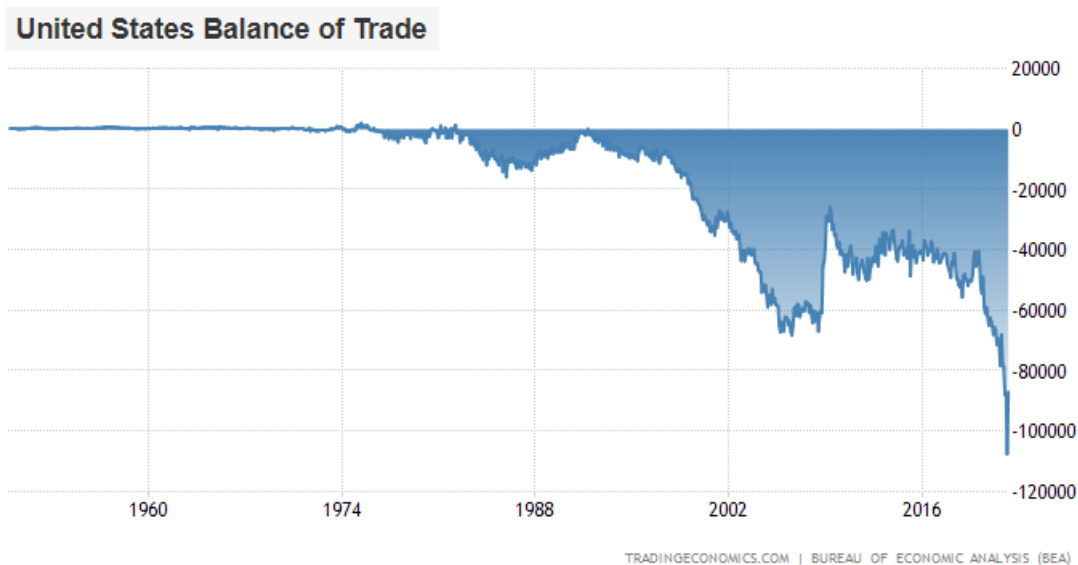


Chart Source: Trading Economics

During 2017 and 2018, the US Federal Reserve tried to end its easy money period, raise interest rates, and reduce its balance sheet, but encountered economic stagnation by early 2019. They had to stop raising interest rates due to frozen credit markets, start cutting rates due to economic stagnation, and in late 2019 they had to suddenly start monetizing deficits again due to a broken interbank lending market among entities that were the primary financiers of the buyers of T-bills.

This heavily-leveraged world then ran into the pandemic and associated lockdowns in early 2020. The dollar spiked higher due to a sharp reduction in global trade and economic activity (there is \$13+ trillion in global USD debt, and all of that debt represents demand for dollars while international cash flows were drying up), so the foreign sector began selling US Treasuries to get dollars, and as a result the US Treasury market froze up. It's supposed to be the most liquid market in the world, serving as pristine collateral for the global financial system, but it became disorderly.

In response, the US Federal Reserve had an emergency meeting and stepped in to print money and buy \$1 trillion worth of Treasuries in three weeks, to re-liquefy the frozen Treasury market. The US federal government and other national governments then performed massive fiscal stimulus in response to consumer and business lockdowns, sending stimulus checks to citizens and companies, so that a big debt liquidations and civil unrest wouldn't occur. The US Federal Reserve and other central banks continued to buy government bonds in order to monetize that stimulus. It resulted in the biggest increase in US broad money supply and overall developed market broad money supply since the 1940s.

Meanwhile, the US found out the hard way that it had trouble making masks, ventilators, medical dyes, and other things like that domestically, after having shipped such a large portion of its industrial capacity to China, which by this point it was embroiled in a trade war with. It turns out, there was a cost to some of that offshoring.

This whole situation was a second "check" to the US Federal Reserve and other major central banks in 2020. Yet again, their answer to the check was to counter a big disinflationary impulse with even more debt monetization. This time, since their efforts were combined with huge fiscal stimulus from politicians, which Fed chairman Jerome Powell publicly said was needed, *broad* money expanded rapidly, in addition to just *base* money. People actually had more money in their bank accounts, unlike during the 2008 policymaker response.

### Approaching Checkmate

All of this stimulus and broad money supply growth, combined with global economic re-opening, caused a surge in economic activity and a melt-up in asset prices.

After years of commodity oversupply and relative lack of capex to bring new supplies to market, the world began to encounter commodity scarcity for the first time in a while. Inflation reached four-decade highs.

Chinese demographics reached their peak level. The Chinese labor force began shrinking, rather than growing, which means their ability to serve as a big disinflationary capital sink for the rest of the world is likely nearing its end. In addition, with rising tensions between the US and China, and the Russian invasion of Ukraine, globalization seemingly reached a local maximum, and is now waning.

Now the world faces real inflation. We need a lot of capex in oil, gas, pipelines, export terminals, copper, nickel, lithium, platinum, uranium, and so forth over the next decade. We need more robust supply chains. And some of it needs to be duplicated because there are now basically two “halves” of the world that represent security risks to each other, rather than mostly one big world that existed for the past three decades.

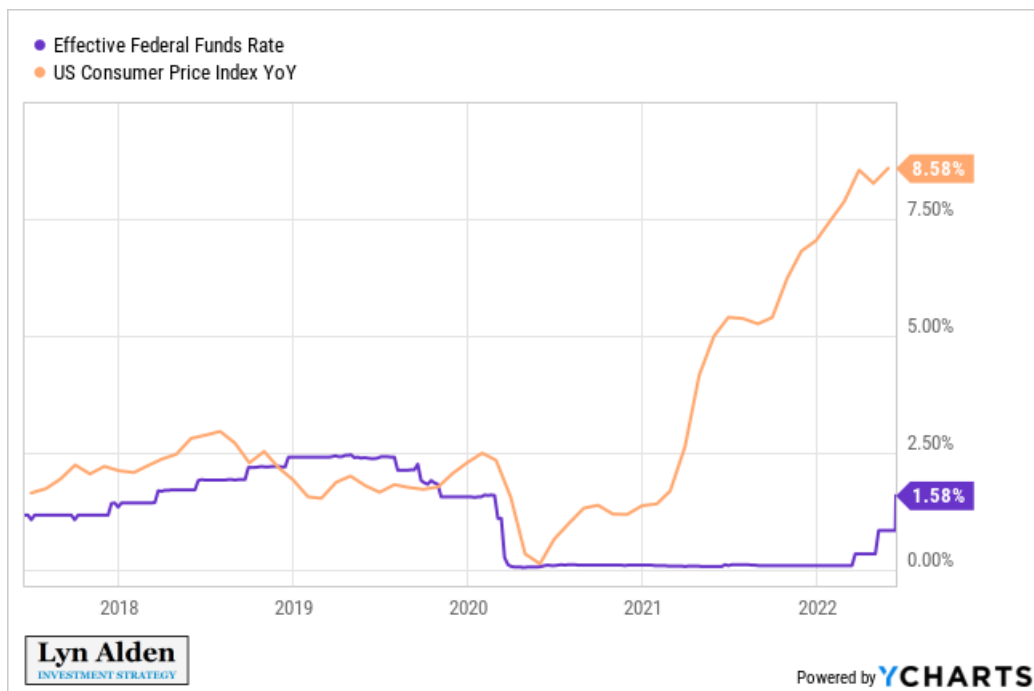
But with debt as high as it is, central banks have trouble raising interest rates. The Bank of Japan, with 250% government debt to GDP, is capping long-duration rates at 0.25%. With inflation currently above their 2% target, they are using a method known as yield curve control, meaning they have an unlimited bid in place to print yen and buy as many government bonds as are needed to prevent their bond yields from going over 0.25%, and it's causing a rapid devaluation of the yen relative to the dollar. The market has tested the Bank of Japan's commitment to that peg, and so far they have confirmed their commitment to it.

The European Central Bank held an emergency meeting this week as Italian government bond spreads blew out, while they have 150% debt to GDP. The ECB is still printing euros to buy government debt even with official Eurozone inflation at 8.1%.

The fact that both the Bank of Japan and the European Central Bank are forced to continue monetizing government debt even when inflation is above their target in order to keep government bond yields at serviceable levels, is basically checkmate on their policy. When countries have 150%-250% government debt to GDP and no clear path to dealing with that, the private market rate for buying that debt without central bank support is too high for them to afford. It would cause a fiscal spiral.

So, the Bank of Japan and European Central Bank are in acute financial repression mode, as they print money coincident with a period of inflation, and thus are directly violating their price stability targets due to an acute lack of other options. Checkmate.

Meanwhile, the US Federal Reserve, Bank of England, Bank of Canada, and Bank of Australia are among the developed market central banks still trying to hold the line, having not quite been put in checkmate yet. They're raising interest rates to try to rein in demand, but for the most part their interest rates are the furthest below their official inflation levels since World War II.



The UK and the US both have sovereign debt over 100% of GDP, and total sovereign+private debt of between 300% and 400% of GDP. Both countries are encountering what look like recessionary conditions, and have inflation at multi-decade high levels.

If the US Federal Reserve in particular, due to its size and due to its global reserve currency status, reaches a point where it is unable to continue raising interest rates and reducing its balance sheet due to liquidity problems in the Treasury market or credit market, while inflation is still a problem, then the quorum of central banks of the developed world will basically be in checkmate, and the global financial system will be in a different regime than it has been operating with during the entirety of the post-WWII period.

## Getting Out of Checkmate

Unlike a game of chess where checkmate represents the immediate end of the game, central banks can be temporarily relieved from their checkmate status by external forces largely outside of their control. It's like some version of team chess.

For example, if one central bank is in checkmate (defined here as being stuck monetizing government debt despite high levels of inflation, due to a sovereign default or fiscal spiral that would occur otherwise) then a reduction in commodity prices due to outside factors can temporarily give it a reprieve from inflation. Outside factors could include things like the de-escalation of a war, or could include other central banks purposely causing demand destruction and a recession to get inflation down.

The US Federal Reserve and US Treasury Department together have the deepest toolset among the various countries, and would still have some moves even within what is otherwise a nearly-checkmate position. If the US Federal Reserve finds itself having to do QE again to support a seized-up Treasury market during a period of inflation (which would be outright checkmate), they could instead take some indirect moves that have better optics.

For example, the US Federal Reserve could change the Supplementary Leverage Ratio "SLR" for the US commercial banking system, which sounds like jargon but would allow US commercial banks to buy more US Treasuries. They could market this decision as a bank liquidity support package, when really it would be about ensuring the smooth functioning of US Treasury markets.

As another example, the US Federal Reserve (at the direction of the US Treasury Department) could also disguise their next round of QE by expanding United States' foreign exchange reserves, and thus assisting other checkmated central banks by purchasing some of their government bonds instead of purchasing their own US Treasuries, so that those governments (e.g. Japan) can then buy some more US Treasuries for their foreign-exchange reserves rather than selling them. That's kind of an "I'll pat your back so that you can pat my back" kind of situation, and it could be marketed by policymakers as a global exchange-rate stability accord.

As we head deeper into the 2020s decade, this is the type of environment where wonky actions like that are more likely to be resorted to than in normal times. There are all sorts of possibilities.

## **Investment Implications**

While we are in the phase where the US Federal Reserve in particular is still holding the line and trying to tighten monetary policy into inflation, while supply-side problems remain mostly unaddressed, most asset prices are rather risky. The largest central bank in the world is actively draining liquidity from the financial system while most economic indicators are pointing towards significant economic deceleration.

However, once they are forced to pause that tightening for one reason or another, or the market starts to price in the fact that they will pause soon, then various hard assets would be the things to own once again. Outright recession, broken credit markets, and those sorts of things are what could force the Fed to pause or pivot.

Central bank pushbacks against inflation are deflationary for most asset prices for as long as they can sustain that pushback in the face of weakening economic data. Central bank capitulations against inflation, on the other hand, should be inflationary for most asset prices whenever they occur.

Best regards,