



AT WHAT COST?

I have mentioned him before, but one of my favorite thinkers/authors is Thomas Sowell. He is officially an economist, although he is more of a blend of economist and sociologist. He has frequently written about different social topics in the U.S., but, unlike most academics, does it in a very easy to read manner and with an unbelievable amount of research and data, comparing things in the U.S. to analogous events in other countries over time. His writing is like the great Einstein quote “If you can’t explain it simply, you don’t understand it well enough.” This has always inspired me to try to do the same (hopefully I do). Sowell is 90 years old, but on the rare occasion that you see him interviewed, he is amazingly still as sharp as ever. In the time since he stopped teaching roughly 50 years ago he has published roughly 40 books, which is incredible. I probably have read three quarters of them. When you watch any interview with Mr. Sowell where somebody states that some government program has worked and why does Mr. Sowell does not agree, he asks back “at what cost?” This has always stuck with me. When you think about any “solution,” consider all the potential outcomes (especially the potential unintended consequences) and try to think analytically with data as opposed to emotionally. With all the craziness in the world I am reminded of Mr. Sowell’s 1995 book, *The Vision of the Anointed*.

To Mr. Sowell the anointed are the politicians, heads of media, non-elected government leaders and academics who think they are smarter AND more compassionate than everyone else and only they can make the best decisions for society. While there is much going on in the U.S. and the world that this framework could help explain, I will stick with my recent discussions about the U.S. Federal Reserve Bank and its leaders. The Federal Reserve leaders, like many others in the anointed groups, only see problems that fit their conception of how the world works and that’s it. No need to consider why the solutions haven’t worked. The only answer is they must not have done enough. Here is a great, related quote from the book: “Why anyone would expect better decisions to be made by third parties who pay no price for being wrong is one of the mysteries of our time.”

Considering the question, “at what cost?” applied to the Fed, let’s start with an assumption that everyone agrees that the Fed is supposed to smooth out business cycles that are inevitable. Then, starting Quantitative Easing (QE) and lowering interest rates post the Global Financial Crisis in 2007 was the right move. But at what point of recovery should they “ease off the gas”? They had a very brief time of raising rates, not just ending QE but actually shrinking the bond holdings, but alas neither of those things lasted very long given the equity markets fell, so the Fed sprung to life and lowered rates and QE was reinstated. So, per Mr. Sowell, what is the cost of seemingly permanent low rates or seemingly permanent QE (I have written before that it would be really tough to raise rates much, if at all, or for very long as the interest expense would cripple the government budget deficit)? The answer, logically, is inflation.

We have seen inflation since 2009 but it has shown itself primarily in asset markets (stocks, bonds, real estate, art, etc.), but now as we have moved to more direct stimulus to the masses it has spread to consumer and producer prices. Mr. Sowell wrote that when the anointed say that when their preferred outcome didn’t happen, (i.e., the transitory inflation that the Fed talks about) that doesn’t prove that the solution was a bad policy but instead there are many factors/complexities to consider. Essentially, never admit a mistake. Then they will inevitably say “things would have been even worse had we not done this.” The ultimate problem, as he states, is that “There are no solutions, there are only trade-offs; and you try to get the best trade-off you can get, that’s all you can hope for.” But the politicians (Fed in this case) are seeking solutions when no true solution exists.

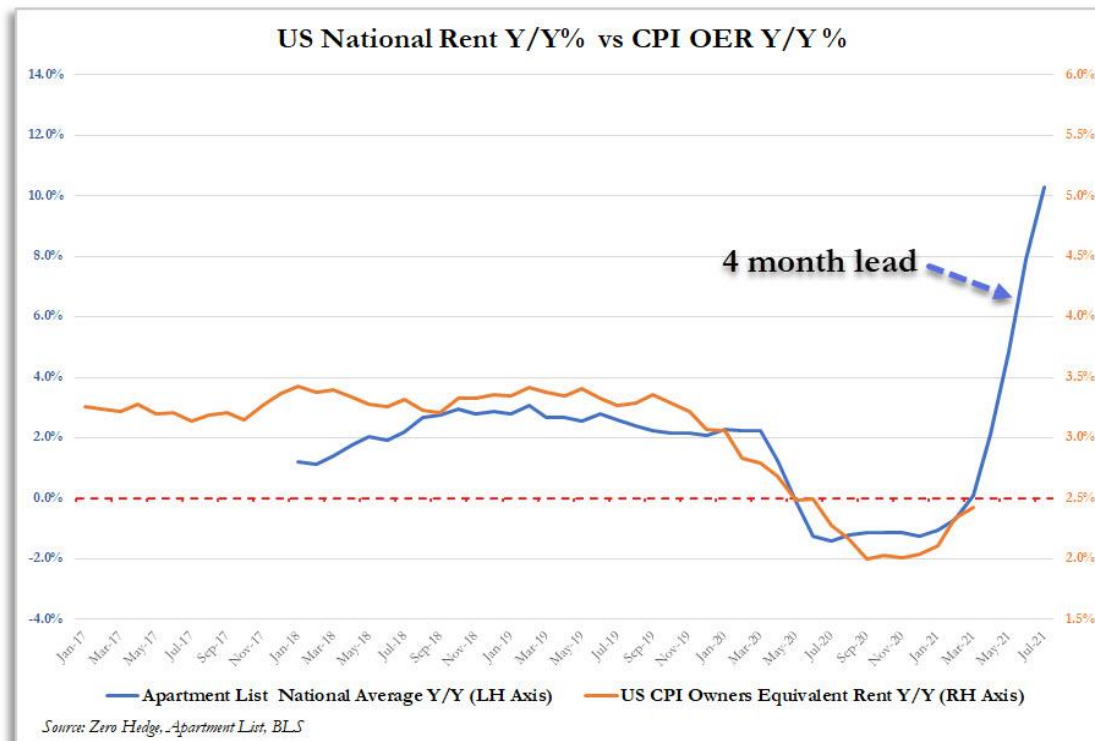
Given the strong economic rebound post the Covid lockdowns, why continue the low rates/QE? This seems to be purely political as opposed to economic. This seems clear, but if you are still not sure, Fed chairman Powell recently spoke in front of the Senate and said “low rates are not really a choice any more.” Hmm. Interesting. This reminds me of a great quote by the Irish/English playwright, George Bernard Shaw, “He knows nothing; and he thinks he knows everything. That points clearly to a political career.”

Further for all the “transitory” talk about CPI running “hot,” I will argue that is all politics as well. There are certainly some supply chain issues affecting the CPI, some of which have already reversed (such as lumber – more on this below) but not very much based on how the CPI is calculated. The biggest factor in CPI is housing. We seem to be back to 2007 in that everybody is talking about housing increases (and rents). The weird thing is back in 2007 you could get a mortgage with no documented income and get a loan equal to 100% of the value of the house so there were countless stories of people buying many houses. Thus, the fact that things got overheated is easy to understand. That housing bubble burst, but how about now? We don’t have the same easy lending so why is this happening? Again, logic says inflation.

We have written before how the CPI calculation has been manipulated to the point that it is quasi-fraudulent, but even if we just go with how it is today, roughly 1/3 of the CPI calculation is housing.



Let's start with home prices. The U.S. Median home price in July 2021 is \$390,000. That is up from \$237,000 in July 2012, a 5.1% compound average growth rate in those 10 years. It is also up from \$330,000 in July 2020, an 18% increase year over year. Some of this being catch up from some early Covid weakness in many big cities. These are medians and it is hard to gauge the accuracy but as a sanity check it is interesting to note that according to the Federal Housing Finance Agency, which is the Federal agency that sets the amount that qualifies for a "confirming" loan (non "jumbo" loan) has raised the confirming loan amount by 4.5% annually, on average, over the past twenty years.



Source: Zero Hedge

The owners equivalent rent (OER) part of the CPI lags home price increases (see the chart above), so that part of CPI hasn't really hit yet (keep in mind, OER is 25% of CPI by itself). Rest assured, it will. Switching to actual rent, part of the huge spike in rent is a rebound from the hardest hit pandemic cities that lowered rents to keep occupancy from totally collapsing, but the jump way above the old highs implies there is more here than recovering the lost rents. Rental growth, like housing price growth, is hottest in the Southwest, ex-California (Californians moving) and the Southeast (Northeasterners moving south), but it is strong virtually everywhere. According to Case Shiller, roughly 94% of 183 metropolitan areas recently measured had double-digit gains, up from 89% in 1Q21 but close to 0% a couple years ago. More proof would seemingly come from the IMF which showed that home prices from virtually everywhere around the world are far outpacing rental incomes. Specifically in the U.S., according to the IMF, home price increases have exceeded rental income by 18% since 2015.

As a quick side note, it is tough to be in the prediction game, but here goes. In the next few years/decade we will start seeing 40-year mortgages. It will be a lever the government will tell the banks to use in order to make buying a house more affordable. Since the current norm, the 30-year mortgage, seems like it has been with us forever, let's dive quickly into a little history. The word "mortgage" is derived from two Latin words: "mort", means death and "gage" means pledge. So death pledge. Nice, right? To be clear the death part refers to the pledge being dead once the loan is paid off, as opposed to your death while trying to pay off the loan.

There are evidently vague references but no proof of mortgages in Roman times but, historians believe, the first definitive proof of a mortgage comes from English common law documents that date back to 1190. Around 1900, U.S. mortgages were structured with at least 50% down payments and had amortizing terms of 5 years. While this seems wildly restrictive, this isn't far off from many emerging economies today around the world. They were also floating rate and fully interest only with the balloon payment of the remaining 50% principal due at the end of the 5 years. During the Great Depression repayment of mortgages was obviously really poor and not much new lending was happening. Thus during



FDR's "New Deal" came the Federal Housing Administration (FHA). The FHA created the appraisal system and other protections for home buyers and lenders alike. More importantly to our story, they mandated mortgages be available at 15 and 30-year amortizing terms, as opposed to interest only, and a 20% down payment in order to make homes more affordable by needing less money up front and spreading out the payments. But the interest rate offered was still primarily variable. At the time with a steeper yield curve the 15-year term had better rates thus it was more popular. It wasn't until rising rates along with high inflation in the late 1960s that floating rate mortgages became really tough, specifically on those that had already bought a house. This led to Congress creating the Federal Home Loan Mortgage Corp ("Freddie Mac") in 1970 which then spawned the prevalence of fixed rate mortgages.

Back to my prediction. Extending a mortgage loan from 30 to 40-years lowers the payment by more than 15% at today's rates. If our government-pegged interest rates continue going down in order to ensure the government can pay the interest expense on its mountains of debt, then the monthly reduction in mortgage payments are over 20% on a 40-year mortgage. When you start hearing complaints about how "young people" can't afford to buy a house any more (it has to be coming soon because sadly it is true in most parts of the country) then you will start to hear politicians pushing for a 40-year mortgage. Going further a 50 year mortgage gets you a 25% monthly payment reduction vs today and over 30% at lower rates. Maybe I'm being conservative by saying 40 years? Mathematically lowering mortgage rates from today's roughly 2.75% to say 1.5% would lower your payment by 15% as well. 1% mortgage is a greater than 20% drop in payments. Mortgage rates are driven by government bond rates which, these days, are manipulated by the government so while a 1% mortgage rate sounds crazy it is prevalent today in most of Western Europe.

If you want more info on why this appears likely, let's look at the history of the auto loan business. When the Model T was introduced in 1908 the price of the car was \$850 and you had to pay in cash, or hope you dealership was capitalized well enough to offer their own loans, which were always less than a year term. General Motors created the General Motors Acceptance Corporation in 1919 to provide auto loans. It started off requiring 35% down payments with the remainder in amortized payments over 12 months. Ford's reaction to the GM initiative was to start a pre-payment plan where a customer would make weekly payments of \$5-\$10 to their local dealer and only when the entire purchase price was deposited could the customer take delivery. How quaint. Since then the auto loan business has been driven by easier terms from the auto makers in order to get people to buy their cars/trucks. The market has slowly but surely continued to lengthen to make cars more affordable. The average new loan these days is a 7 year term and there are many options to go to 10 years. According to the Automobile Club of America, the average car loan term just hit an all-time high of 71 months. This is up from 50 months a decade ago. This has obviously ramped faster than home loans because the auto companies have incentives to extend the term to sell more cars. Homes are different, but it seems logical it is coming.

Source: Bloomberg

So with housing BOOMING why does the Fed continue buying mortgage bonds in order to keep mortgage rates so low? Common sense would imply this would have ceased by now but as Mr. Sowell says, "...the very commonness of common sense makes it unlikely to have any appeal to the anointed. How can they be wiser and nobler than everyone else while agreeing with everyone else?" Common sense says that printing money can not equal prosperity, otherwise it would have worked everywhere in the world and it hasn't. Common sense would also dictate that, historically speaking, high inflation and poor economic outcomes/increasing relative poverty go hand in hand so why would you choose that? Unless there is an ulterior motive. I have previously quoted the just deceased U.S. Economist, Walter Williams, and will do so again here, "Politicians exploit economic illiteracy." How about a related Sowell quote? "Politicians steal your money through inflation." Switching to other commodities that are all inflating and will find their way into CPI, one way or another, I had a chart in my January 2021 commentary showing some of the commodity increases over the previous twelve months.

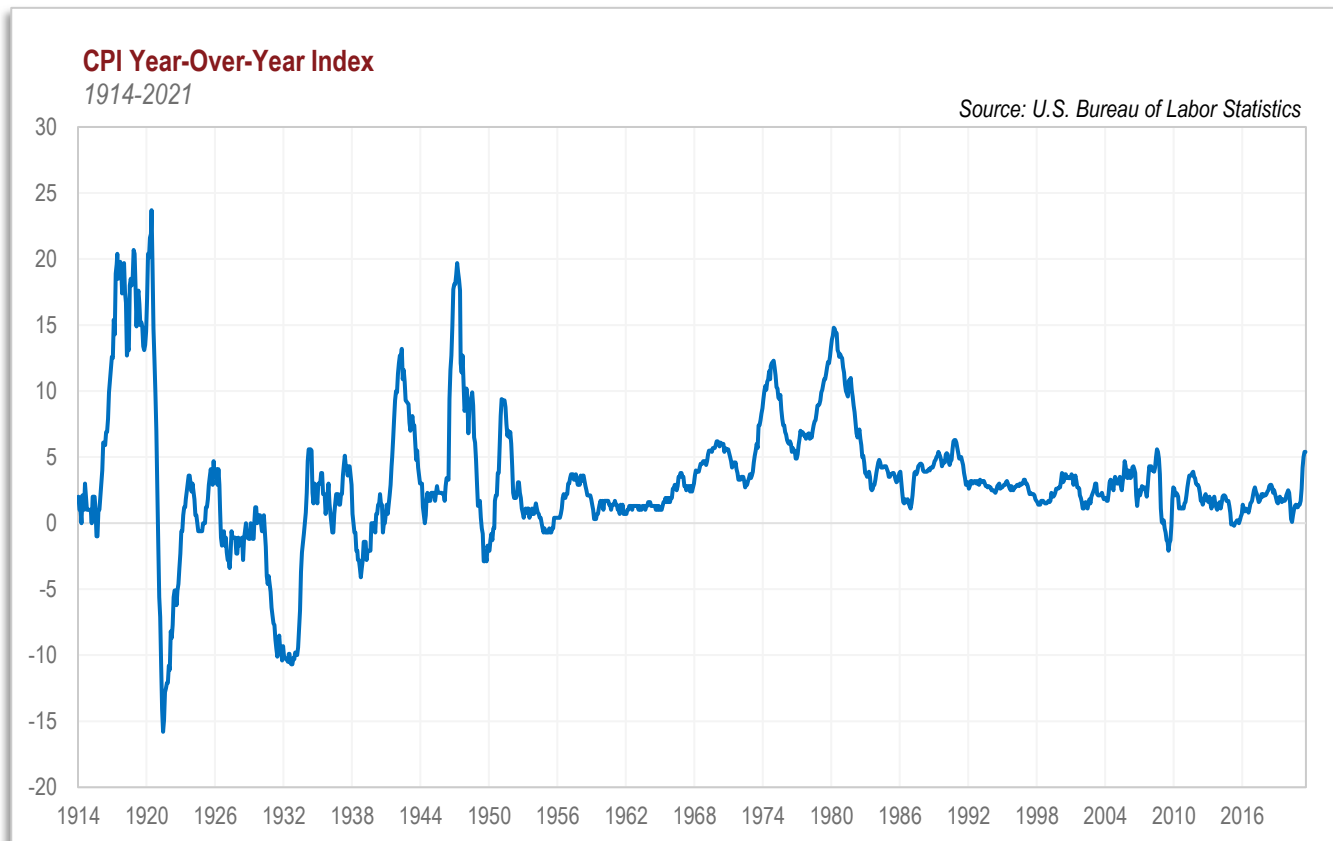
Commodity	April 2021 1-yr rtn	from 1-yr high	Since 3/31/2020
Lumber	250%	-72%	75%
Crude Oil	209%	-15%	215%
Palm Oil	84%	-3%	71%
Copper	81%	-12%	90%
Silver	65%	-19%	68%
Soybeans	65%	-11%	54%
Corn	59%	-16%	42%
Aluminum	57%	-4%	68%
Cotton	48%	-2%	64%
Sugar	43%	-3%	70%
Live Cattle	28%	0%	29%
Wheat	21%	-5%	28%
Chicken	11%	0%	12%
Gold	4%	-13%	13%

Since then there are headlines reading that the prices have come back down to where they started as the supply chain problems eased. While that is true in some cases, it is false in others and at best, misleading. Here is the same list of commodities with the first column of numbers being the 1 year price increases shown in the last commentary. Column 2 is how much they are down from the 1 year high. Column 3 is the price increase since March 2020. As you see, some commodities are down meaningfully from their highs, but still remain far above where they were trading 18 months ago.

While there are numerous statements by the Fed talking about the "transitory" inflation, whether you agree or not, most people will assume that



means that while it is up now, it will revert back to where it started. The problem is, historically speaking, that isn't correct. Recently, Federal Reserve Chairman Powell, spoke to Congress and again said current price increases are "transitory" but finally acknowledged that prices will remain high, although he hopes future prices will only increase by his hoped for 2% vs far higher. In other words, when you hear the word "transitory" don't think that means you are going to get some price relief down the road (ie, prices down). "Transitory" means prices will keep rising, just hopefully not as fast. The Fed hopes they will go back to rising 2% a year instead of the much higher numbers we are seeing now. Below is a chart of CPI from the U.S. Bureau of Labor Statistics. There are not too many years where prices fell below 0%.

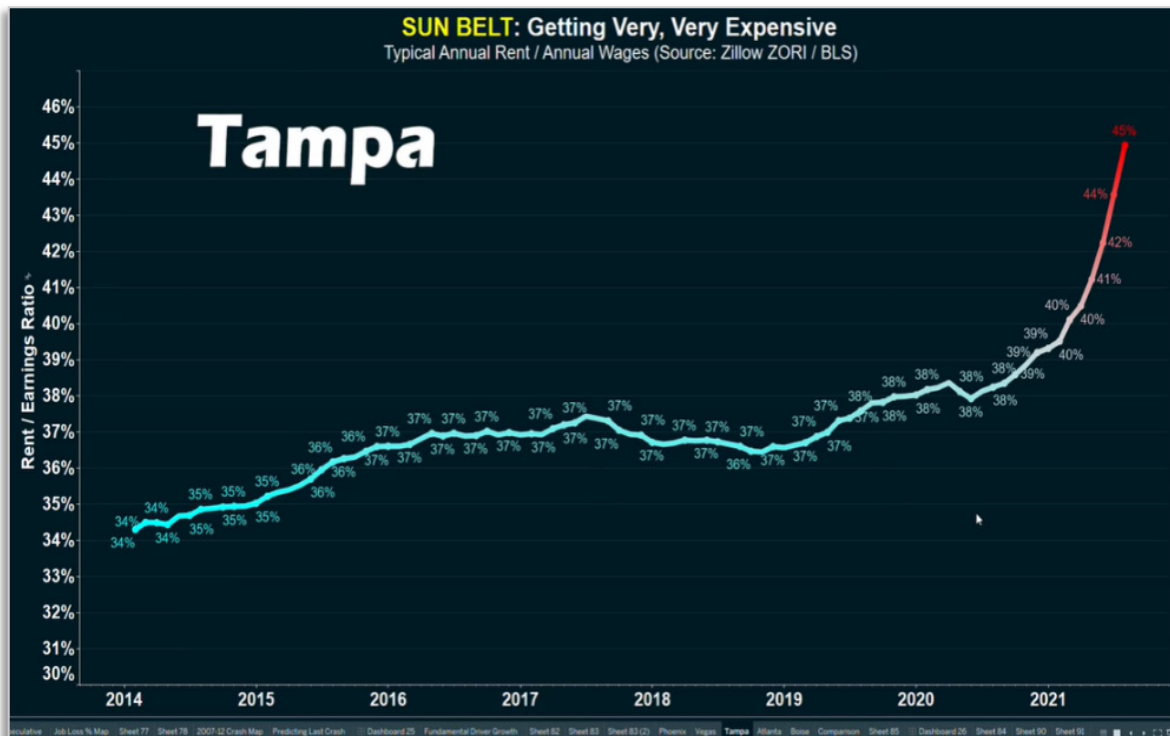


With this in mind let's take one last little twist. Historically, the Federal Reserve Act directed the Fed to conduct monetary policy in a manner that will "promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates." Increasingly, the Fed, like seemingly everything, has turned political and now has added "equity" to its list of things to focus on. Leaving aside whether the Fed should consider this variable, it is ironic that our current inflation, which has been caused by the Fed, has wildly unequal outcomes and has a much worse impact on the poor.

It is a specific example and thus not necessarily representative of the entire U.S., but below is a chart reflecting the rent to income ratio in Tampa, Florida where we are based. While the eviction moratorium probably made this ratio worse and with the moratorium ending it may retreat slightly, but I would be shocked if we go back to the old lows. The average person renting in Tampa used to spend 34% of their income on rent, now they spend 45%. That is terrible for the non-wealthy (renters) or society at large. Since housing is a must have, something else has to be cut from the average household budget, which is bad for the economy. Since my last two commentaries were titled after a Reagan quote, here is another Reagan quote specifically related to inflation, "*Inflation is as violent as a mugger, as frightening as an armed robber and as deadly as a hit man.*" What is implied by the quote but not overtly said is that inflation tends to rise faster than incomes so the average person's standard of living goes way down. History is littered with stories about this let alone today in Argentina, Venezuela, Lebanon, Turkey, etc.



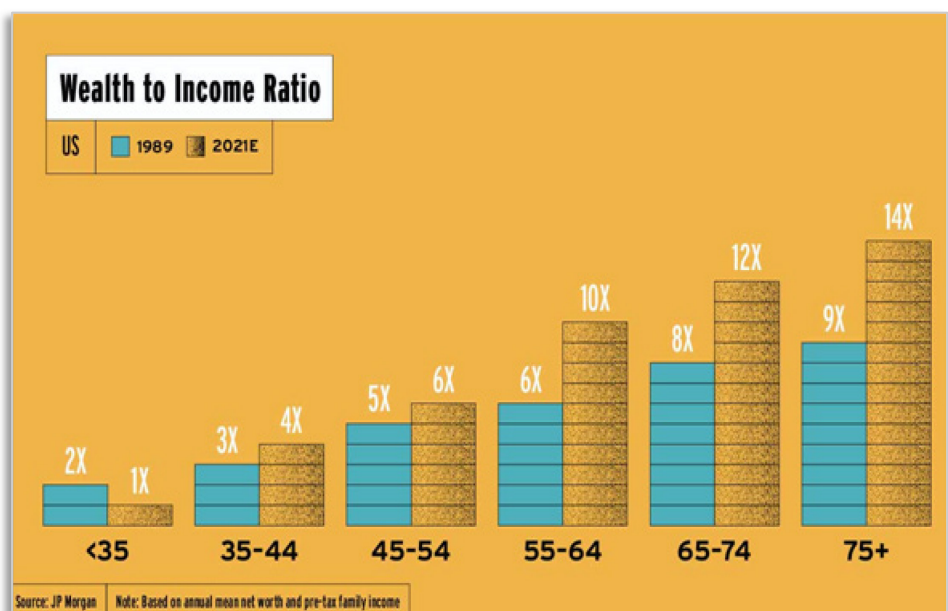
Source: Zillow ZORI / BLS



It is unfortunate that people don't understand better that inflation does nothing but hurt the average person so for the Fed to say they want more inflation is nothing but a scam on the average American in order to devalue the dollar and the U.S. Government's existing debts. Here is another great Sowell quote, "If increased government spending with borrowed or newly created money is a 'stimulus', then the Weimar Republic should have been stimulated to unprecedented prosperity, instead of runaway inflation and widespread economic desperation that ultimately brought Adolf Hitler to power."

Since President Nixon took the U.S. off the gold standard, the U.S. Dollar has lost more than 90% of its value based on the CPI. Again, it is actually worse than this since the CPI understates inflation at every turn. At the time, President Nixon said "Let me lay to rest the bugaboo of what is called devaluation," and promised, "your dollar will be worth just as much as it is today." Umm. No. Since then the dollar value of gold has gone from \$35 an ounce to roughly \$1,800 an ounce today. In percentage terms, that's a 4,757% increase (8.2% annual increase).

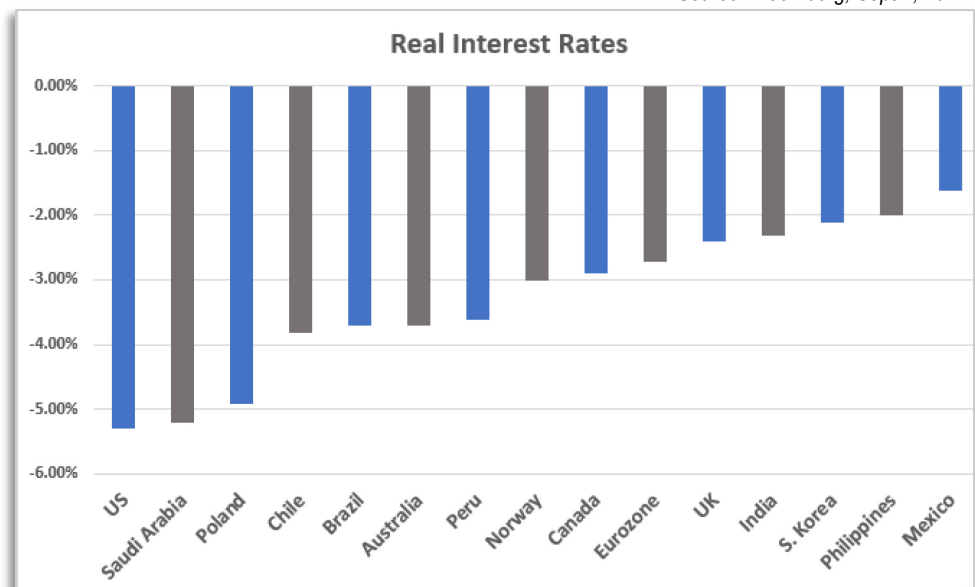
While we, and many others, have written about the income inequality problem, which is a big deal, how about the wealth inequality? Here is an interesting related chart showing the wealth inequality over time. The direction/trend is obvious, but these are always interesting to see in actual numbers.



Source: Bloomberg, Sept 2, 2021

Sadly, everything going on reminds me of the great quote by Alexis De Tocqueville from 1855, "The American Republic will endure until the day Congress discovers that it can bribe the public with the public's money."

In my last commentary ([found here](#)) I specifically opined that creating hugely negative real interest rates via rising inflation combined with manipulating interest rates down is the government's covert way of reducing debt via devaluation. That said, whether you agree with that or not, increasingly negative real interest rates are not a benefit for virtually any environment and are worth monitoring. The chart below



shows some global real rates to consider. (Real rates in the chart above are defined as the 1 yr bond rate minus current CPI. Source: Bloomberg) Notice, this isn't just a U.S. phenomenon. It's happening virtually everywhere. Further, remember that our current 5.4% trailing twelve month CPI right now has been manipulated down over the years. According to [www.shadowstats.com](#), if we used the 1980 methodology the current CPI would be 13% if we used the 1990 methodology CPI would be 9%.

I will end this segment on inflation with a quote from the Dallas Mavericks owner, Mark Cuban, who somewhat recently said that low interest rates are kind of like universal basic income, but for rich people. Is that what the Fed is going for? (Rhetorical question)

Moving on to more specifics about the markets, let's start with one quick pocket of the market that probably doesn't get enough press. U.S. high yield bonds, or "junk" bonds. This isn't terribly surprising given the bubble in all bonds, but this remains one of the craziest things I have ever seen. I could say negative nominal rates on all kinds of bonds are truly outrageous, and while that is true, how about negative "real" rates on US junk bonds? That is the nominal (actual) rate on the bond less the CPI. Junk Bonds are named as such because of their low credit quality and MUCH higher likelihood of default. This default risk is why they historically traded at big yield premiums and big spreads over applicable U.S. Treasury Bonds.

According to Bloomberg, in March 2000, right before the Tech Bubble burst, junk bond yields averaged 12.48%, which was 875 basis points (bp) above the CPI of 3.73%. The spread is obviously the risk premium. It is always hard to know what any risk premium should be, but a bond with a decent likelihood of default having an 875 bp risk premium doesn't seem terribly high to me.

In November 2007, right before the Global Financial Crisis set in, the junk yield had fallen to 9.15%, but more importantly the spread over applicable U.S. Treasuries was down to 475 bp.

In February 2020, right before the initial Covid drop in the market, the spread was down to just 290 bp. Yes, high yield bonds default rates were down. They were down because of the money printing fueled bank desperation to "extend and pretend" the math of not forcing any liquidations, which is clearly still going on today.



Source: Bloomberg, Sept 2, 2021



How about now you ask? Nominal yields on U.S. Junk Bonds are now below 4% and spreads are down to 270 bp, which leaves these bonds with a real rate of -1%. Think about that. A bond rated as much more likely to default virtually guarantees you a negative return versus inflation. In Sowell's words, "at what cost?" When you give junk rated companies long-term capital at a negative real return to investors, you are going to get a lot of demand from those corporations, which leads to a huge mob of zombie companies (companies that would otherwise be liquidated and their resources redeployed more productively on an honest free market, but more specifically can't even pay their super low interest expense with their operating income.) History shows this will end at some point, in which case this pain will be realized. The chart on the previous page shows over 85% of U.S. junk bonds have negative real rates. This is crazy.



Source: Bloomberg, Sept 8, 2021

Let's change gears and discuss the history of stock market performance in inflationary times. What is potentially an interesting exercise is if rates stay low/QE remains and our inflation is NOT transitory, on the whole, then what does that mean for stocks? The general consensus is it would be very good. Inflation = higher prices for products/services = higher revenues = higher earnings = higher stock prices. The logic is hard to argue with but how about the data? I went back as far as I could (1871) looking at stocks vs earnings vs inflation on an annual basis (the source was a mix of Bloomberg and Robert Shiller data.)

No matter the time period you look at, it is directionally very similar. S&P earnings track CPI remarkably closely, which makes sense. But S&P returns absolutely fall short of inflation in all of these time periods. If you want to still believe the government that our current inflation is purely "transitory" then maybe you don't care. But if you think inflation could remain high for a while, that isn't necessarily terrible for stocks nominally, but history would say it is certainly very bad in real terms. Also interesting is that during periods when CPI was negative for two years in a row, or more, the market performance was better than the negative CPI. From this point of view, "Deflation" isn't as terrible as the Fed says. Specifically, according to Bloomberg and Robert Shiller data,

- If we use 1871 as the starting point there were 39 years that had two or more sequential years with CPI over 3%, annually. During those 39 years, CPI averaged 7.8% and the S&P500 earnings growth averaged 7.9%, but the S&P500 returns only averaged 5.7%. Of those 39 years, 13 years had a negative absolute return, 23 years had an S&P500 return less than the CPI and 16 years the S&P500 returned higher than the CPI.
- If we use 1871 as the starting point there were 24 years that had two or more sequential years with CPI over 5%, annually. During those 24 years, CPI averaged 10.4% and the S&P500 earnings growth averaged 10.4%, but the S&P500 returns only averaged 1.9%. Of those 24 years, 11 years had a negative absolute return, 19 years had an S&P500 return less than the CPI and 5 years the S&P500 returned higher than the CPI.
- If we use 1940 as the starting point (maybe 1871 is too old and not really applicable?) there were 17 years that had two or more sequential years with CPI over 5%, annually, there were 17 years. During those 17 years, CPI averaged 9.1% and the S&P500 earnings growth averaged 7.4%, but the S&P500 returns averaged 0%. Of those 17 years, 10 years had a negative absolute return, 13 years had an S&P500 return less than the CPI and 4 years the S&P500 returned higher than the CPI.
- If we only use the period between 1973 and 1981, which is the last real inflation this country has seen, CPI averaged 9.3% and the S&P500 earnings growth averaged 10.8%, but the S&P500 returns only averaged 2.5%. Of those 9 years, 4 years had a negative absolute return, 3 years had an S&P500 return less than the CPI and 2 years the S&P500 returned higher than the CPI.
- Conversely, if we use 1871 as the starting point there were 33 years that had two or more sequential years with CPI less than 0% annually. During those 33 years, CPI averaged -3.7% and the S&P500 earnings growth averaged -3.6%, but the S&P500 returns averaged -0.6%. Of those 33 years, 16 years had a negative absolute return, 15 years had an S&P500 return less than the CPI and 18 years the S&P500 returned higher than the CPI.

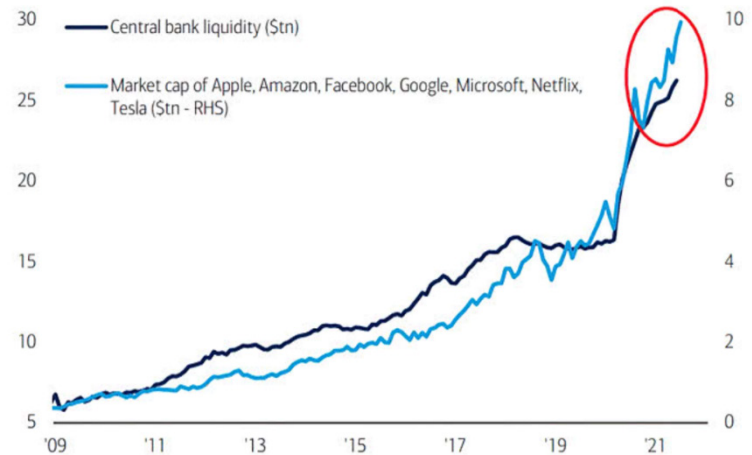


For the last decade-plus, all the inflation/QE/low rates has been nothing but great for stocks, and especially the big, tech stocks. Relatedly, according to Bank of America, “global central banks have bought \$834mm of financial assets every 60 minutes, on average, and every 60 minutes the market cap of global tech stocks has risen by \$780mm”. (See the chart to the right.) Maybe this is coincidence, but we will see if this continues going forward given the data below now that inflation in the CPI is starting to hit.

As you undoubtedly know, much of this debt increase is driven by government programs designed to “help” the average U.S. citizen. Recently, West Virginia Senator Manchin said in a statement that although he voted to move ahead and debate the newest spending plan, he was worried about the “grave consequences” of such spending on the nation’s debt. Wait, a politician seems to care about the total debt? Weird.

Chart 7: FAANG & Fed’s Excellent Adventure

Central bank liquidity & tech stocks’ symbiotic relationship



Source: BofA Global Investment Strategy, Bloomberg

Since I like my movie quotes... The above “grave consequences” reminds me of a scene in the 1992 movie, *A Few Good Men*, starring Tom Cruise. In the final big courtroom scene, Cruise’s character, Lieutenant Kaffee (a lawyer) calls the head of the Guantanamo naval base, Army Colonel Jessup (played by Jack Nicholson) to take the stand in court in order to get him to admit to ordering the “code red” (disciplinary action) on a weak soldier. During the exchange:

Lt. Kaffee, “Did you give an order to Colonel Markinson?”

Colonel Jessup, “I ordered Markinson to have Santiago transferred off the base immediately.”

Lt. Kaffee, “Why?”

Colonel Jessup, “I felt his life might be in danger...”

Lt. Kaffee, “Grave danger?”

Colonel Jessup, “Is there another kind?”

Back to Senator Manchen’s comment above about “grave consequences”, ie, inflation from the massive spending bills. Is there another kind of consequence from inflation?

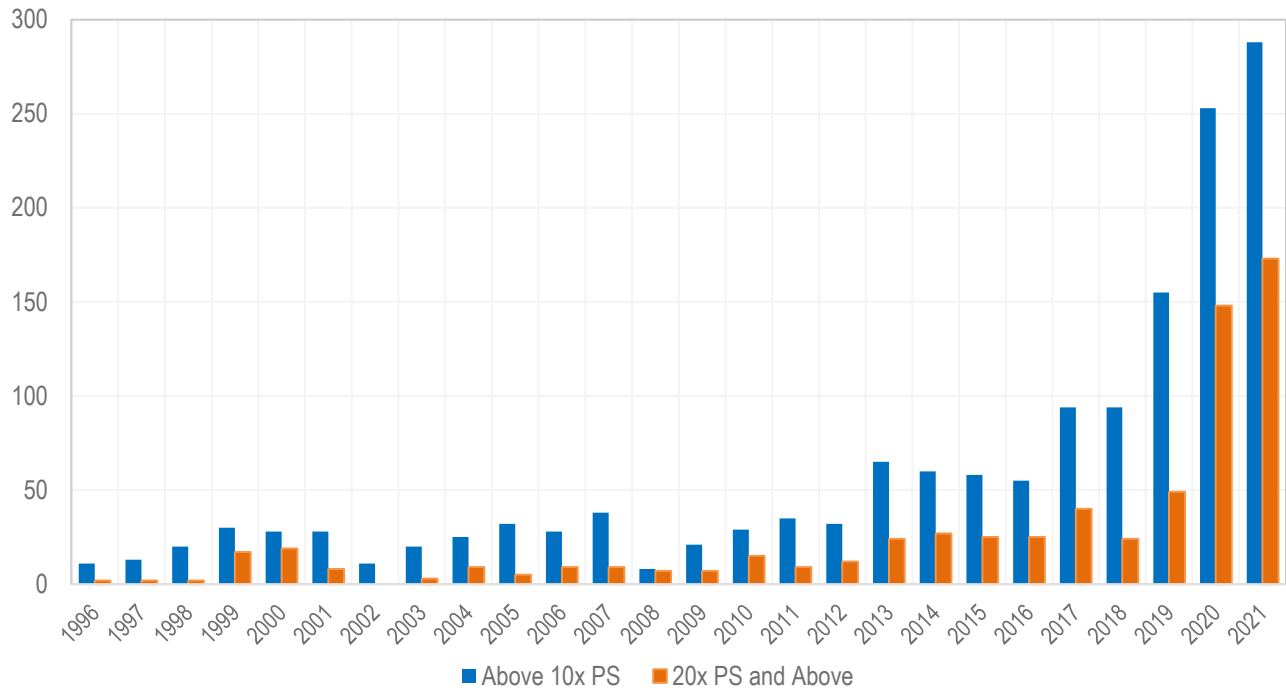
As I have written in the past, It seems apparent that there is no way out for the Federal Reserve. More specifically, I mean they can’t sustainably raise rates, which doesn’t mean they won’t raise them by 25 basis points only to reverse course when the market tanks, because in addition to crashing the stock market, the federal government can’t handle the interest expense with higher rates. More subtly, can they really stop QE for similar fear of the markets crashing on the news? It appears to be a “damned if you do, damned if you don’t” scenario. Back to Sowell, “At what cost?”

Let’s move on to expensive stocks caused by the bubble created by our government/Federal Reserve actions. I’m sure you have seen many charts that illustrate the spike in the number of companies trading above 10x market cap to sales. There are a few quasi-monopoly businesses that generate truly outrageous margins or have sustainable growth prospects (Visa, Google, etc.), but are there this many? Here is a chart showing the number of stocks trading over 10x and 20x market cap to sales over the past 25 years. (Keep in mind I reduced the number of companies dramatically by only including companies with market caps above \$250mm AND excluding all REITs and companies with less than \$25mm in sales, thus eliminating all SPACs.) The numbers and trend line are still shocking.



Number of Companies that Trade over 10x & 20x Price to Sales

Source: Bloomberg



Here are two related charts I recently saw. The risk here seems, but it is amazing how many people believe 'this time is different.'



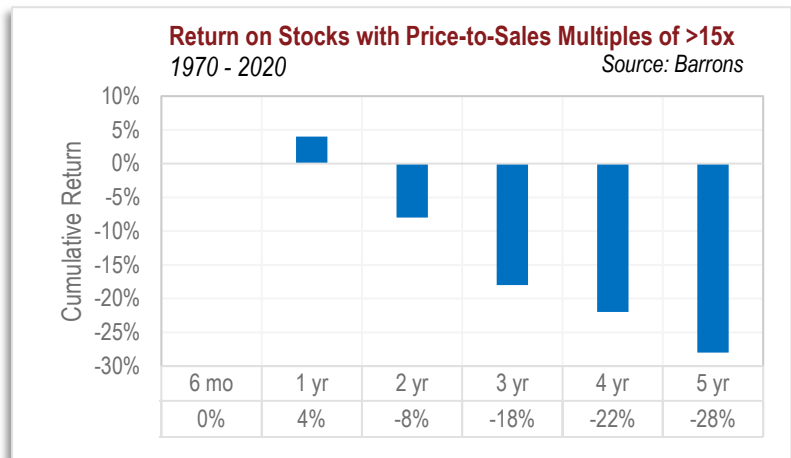
Source: Kailash Capital; Data from 4/30/1989-6/30/2021

As you certainly know, the stocks driving the valuation extremes in the U.S. are predominantly the big tech stocks. Maybe this time is different, but what if it isn't? In China, where a regulatory reform can come out of nowhere and happen somewhat immediately, given their authoritarian government, they are cracking down hard on the tech giants. The why is easy: they are attempting to address their own growing income inequality by trying to keep a better balance in society and amongst corporations (instead of letting a few get too big and powerful). Isn't the current debate of the tech giants being too big and powerful one of the most significant ones in the U.S. right now as well? So far we haven't figured out how to fix this and, while nobody thinks our government can change this, what if they can and do? Based on the Chinese government saying they are going to crack down on certain behavior, with very few specifics so far, Alibaba is down 49% from the highs, Tencent 43%, Meituan 53%, JD 41%, Baidu 57% and Pinduoduo 59%. Perhaps the U.S. is different, but with a new Federal Trade Commission chairperson who is talking tough on anti-trust and monopolistic behavior, maybe not.



How about some historical data on the future returns of stocks with a market cap to sales ratio above 15 times you ask? Here you go. Needless to say, buyer beware. (Source: Barrons)

While there are big tech stocks in China, they are a tiny portion of the MSCI All Country World Index (ACWI) index, so they don't move the needle like the tech stocks do in the U.S. S&P500 index. U.S. tech stocks are up massively, as you, of course, have seen. The top 5 companies in terms of market cap in the S&P 500 are all tech; 6 of the top 10 and 17 of top 50 S&P 500 companies are tech. In the MSCI ACWI ex-U.S. index 4 of the top 5 are tech, if you include Tencent and Alibaba, which are officially communications and retail. 5 of the top 10 and 9 of the top 50 are tech, so not far off from the U.S. The big difference is that the top 4 tech companies in U.S. are >20% of the S&P 500, but the top 4 international tech companies are only 5% of the MSCI ACWI ex-U.S. index.



Here is a chart of the top 11 tech stocks, by market cap, in the U.S. (11 only so I can show Netflix since it is frequently mentioned with the other tech leaders). We all know they are expensive but what is amazing is that with slightly lower growth rate from ten years ago, albeit with slightly better profitability, how the price to earnings (P/E) and enterprise value to sales (EV/Sales) ratios have changed. The median P/E has gone from 17x to 52x in the last 10 years. The median EV/Sales ratio has gone from 2.8x to 8.9x. Again, slightly lower growth and slightly better profitability. The biggest company in the world, ranked by market cap., Apple, is especially illustrative. With much lower growth and barely higher margins, the P/E has gone from 11.4x to 28.6x and EV/sales from 2.2x to 6.1x.

Name	Mkt Cap	1 yr rtn	3 yr rtn	cur P/E	10 yr P/E	cur EV / sales	10 yr EV / Sales	cur net mgn	10 yr net mgn	cur rev growth yoy	10 yr rev growth yoy
Apple Inc	\$2,491,923	31.8%	180.0%	28.6	11.4	6.1	2.2	24.9%	23.9%	5.5%	66.0%
Microsoft	\$2,207,800	43.3%	181.7%	36.0	9.3	11.8	2.5	35.5%	32.1%	17.5%	11.9%
Alphabet Inc	\$1,845,458	86.5%	138.7%	29.0	21.5	4.5	6.9	23.6%	26.3%	32.7%	29.3%
Amazon.com	\$1,667,931	4.2%	83.3%	56.0	124.0	4.0	1.5	6.6%	1.3%	37.8%	40.6%
Facebook Inc	\$1,033,947	45.3%	119.2%	26.0	n/a	8.9	11.0	37.2%	18.0%	39.4%	88.0%
NVIDIA	\$497,004	83.5%	267.7%	91.0	13.0	19.1	1.7	31.8%	10.6%	63.5%	6.5%
PayPal*	\$327,070	48.0%	237.1%	65.4	36.0	14.3	4.4	16.4%	14.0%	24.1%	25.9%
Adobe Inc	\$303,333	42.9%	169.7%	54.2	16.7	16.7	2.8	38.8%	21.3%	19.5%	11.0%
Oracle Corp	\$253,290	61.5%	84.2%	18.5	15.6	6.5	3.9	29.3%	25.2%	3.6%	32.8%
salesforce.com	\$230,444	30.3%	83.3%	52.0	n/a	9.1	8.3	7.1%	3.0%	22.6%	26.9%
Netflix Inc	\$229,039	15.3%	79.1%	53.0	300.0	8.8	1.0	17.1%	7.1%	21.9%	29.5%
Average		44.8%	147.6%	46.3	60.8	10.0	4.2	24.4%	16.6%	26.2%	33.5%
Median		43.3%	138.7%	52.0	16.7	8.9	2.8	24.9%	18.0%	22.6%	29.3%

*public 2015

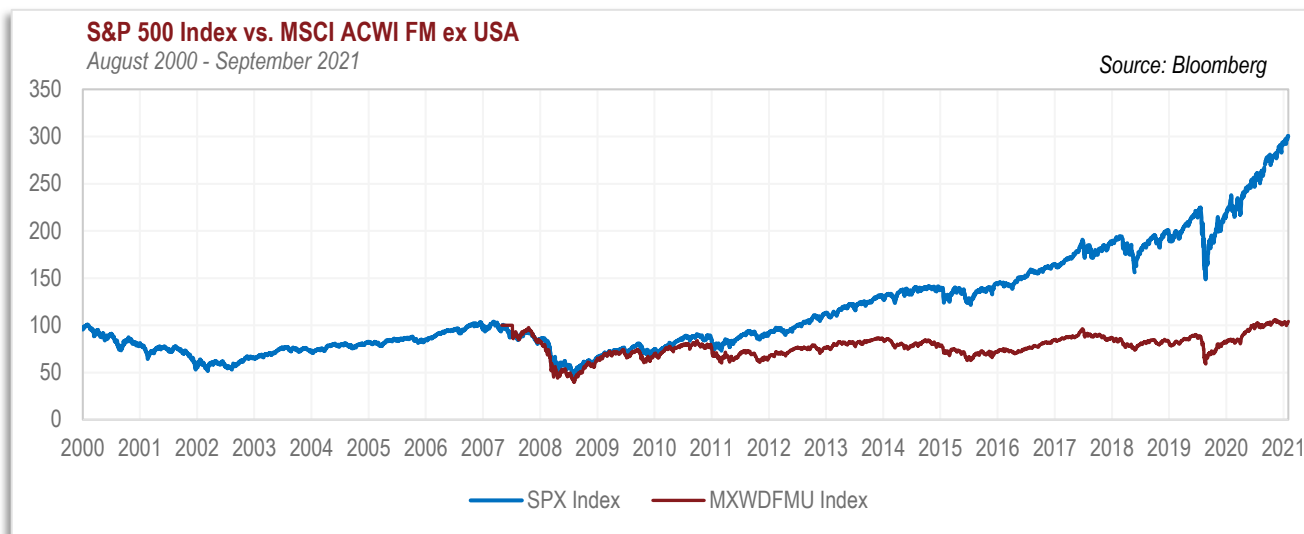
Source: Bloomberg

Higher valuations are virtually everywhere in the U.S. but noticeably higher for those companies that have higher perceived growth prospects, tech stocks in particular. The founder of Netscape (the first internet browser) and now venture capitalist, Marc Andreessen recently said, "Every failed idea from the dotcom bubble would work now." By "work" he doesn't necessarily mean the business, he means the stock price. Valuations are crazy high and venture investments have followed.

With all this in mind, here is a chart going back 20 years showing the S&P vs the MSCI ACWI ex-U.S. Interestingly tight until roughly 2010, when the tech stocks really took off. Why would that be? Maybe QE? Maybe a mix of asset "inflation is coming" combined with "the Fed will



always come to the rescue and print more if the market goes down?" All probable answers, but the real question is: will this continue?



Back to the U.S. vs. the world. Since the lows in 2009, the U.S. markets have dominated the world, especially in USD. Part of this is due to U.S. dollar strength, but not much of it. Since the S&P peak prior to the Global Financial Crisis stock rout, the U.S. dollar is up 19%, on average. It strengthened during the crisis so the dollar is only up 8% since the market low in 2009. Below is a chart showing how the S&P 500 has crushed other markets since the low in 2009. It is interesting to see the outperformance of the S&P 500 vs. assorted international markets since the previous high in October 2007. Would you have guessed that Italy and Spain were down since then, even in Euros, while the U.S. is up 223%? Pretty amazing. While U.S. companies, on average, have had better growth vs. European companies during that time period, the growth isn't good enough to justify the multiples having gone up as much as they have in the U.S. Time will tell if this is sustainable. More importantly to Kopernik, this data would imply that there might be far more opportunity around the world vs the U.S.

Source: Bloomberg

Country	Since low in '09	
	local	USD
U.S.		575%
Indonesia	471%	392%
India	547%	352%
Russia	657%	300%
Germany	311%	278%
Japan	307%	266%
Singapore	176%	215%
France	215%	193%
HK	174%	174%
Mexico	240%	161%
UK	164%	156%
China	103%	113%
Italy	124%	109%
Spain	90%	81%
Brazil	209%	35%

Since prev high in '07	
local	USD
	223%
180%	84%
204%	64%
170%	0%
97%	60%
85%	96%
20%	28%
49%	23%
15%	15%
93%	6%
55%	5%
-28%	-18%
-11%	-26%
-3%	-19%
81%	-42%

Ticker	Name	1/21/2021	cur price	% chg
TSLA	Tesla	\$880.0	\$721.1	-18.1%
NIO	NIO	\$59.0	\$36.9	-37.5%
NIU	NIU	\$35.0	\$25.0	-28.7%
FSR	Fisker	\$16.0	\$13.7	-14.5%
NKLA	Nikola	\$80.0	\$10.0	-87.5%
RIDE	Lordstown	\$22.0	\$6.3	-71.3%
ARVL	Arrival	\$27.0	\$11.3	-58.1%
GOEN	Canoo	\$16.0	\$8.0	-50.2%
HYLN	Hyllion	\$17.0	\$10.5	-38.3%
TPGY	EV Box	\$24.0	\$10.5	-56.3%
CHPT	ChargePoint	\$43.0	\$20.8	-51.6%
VLDR	Velodyne Lidar	\$24.0	\$6.6	-72.5%
QS	Quantum Scape	\$95.0	\$20.9	-78.0%
HYZN	Hyzon Motors	\$12.3	\$9.2	-24.8%
BEEM	BEAM Global	\$61.6	\$28.1	-54.4%
RMO	Romeo Power	\$20.0	\$5.0	-74.9%
WKHS	Workhorse Group	\$23.3	\$9.7	-58.6%

Allow me to make a quick update from my commentary in January, 2021. I wrote that "... other than Tesla, the last two car companies started that are still around are Hyundai in 1967 and Subaru in 1950. So, leaving aside all the failed attempts to enter the auto business, we now are deluged with new EV-focused companies that all are hoping to make it and are all priced as if they will win." While it will no doubt take years



for the final collapse of many of these companies here is a quickie showing how these stocks have done just since January. Not well is the answer. (The first 3 listed were primary listings, not SPACs, followed by the SPACs I referenced in January, and the 3rd section of companies were not listed in January but are new EV SPACs.)

Let's move on from the negatives to the positives. Putting aside all the craziness, the nice thing about being a global, value, public stock investor is that there are almost always areas that are shunned by the investing public, just like there are always areas that are loved. In the very recent past, the entire oil and gas industry was on sale. In March 2020 oil hit 20 year lows with sentiment generally described as terrible. It's funny that such a short time ago the narrative was that fracking supply would continue unabated, combined with the "fact" that oil was going away much quicker than people thought from environmental worries and the shift to electric vehicles. The fracking boom in the U.S. and Canada produced a ton of natural gas as a byproduct of drilling for oil. This drove U.S. Natural Gas to multi-decade lows as well in June, 2020. Again, the narrative was that it would stay down forever. Well, since then...(see the chart below which shows how the commodities and select stocks have done since then.)

Name	% Change since '20 low
Crude Oil	300%
Exxon Mobil	105%
Chevron	105%
Conoco	177%
Marathon	283%
MEG	665%
Cenovus	550%
Devon	485%

Name	% Change since '20 low
US Nat'l Gas	195%
Range	773%
Southwestern	356%
Consol	529%
EQT	366%
Tourmaline	432%
Antero	2174%

Name	% Change since '20 low
Spot Uranium	90%
Cameco	293%
Kazatomoprom	180%
Dennison	572%
Fission	475%
Nexgen	814%

Source: Bloomberg

How about another commodity that was presumed dead: uranium? Since the Japanese accident in Fukushima in 2011, the world has seemingly thought that nuclear energy was going away. The Japanese "temporarily" shut down all their nuclear reactors following the incident and Germany made quick plans to close all their nuclear reactors. The prevailing view was that this would continue worldwide. (It hasn't.) This is another interesting narrative given that nuclear power has been by far the safest of all the potential solutions based on the cumulative people who have died because of operating that plant or mining that core energy source. Nuclear should be considered more in a green energy world, but the public fear over a Chernobyl-like meltdown is so great that the developed world is scared to death to expand. The Japanese are bringing back their reactors slowly and Germany has been slower than expected to shutter their nuclear plants. The bigger story is that reactor growth is strong in many emerging markets like China, India, Turkey and Russia. Since the lows in early 2020 you can see above the huge performance by everything in this sector.

The other key takeaway from looking at the oil/gas and uranium areas is that the performance is so good when the depressed sectors turn around that it overwhelms missing the expensive areas that have performed well. Said another way, you frequently see value investors, like Kopernik, underperform for long stretches of time, then in a very short period of time the performance catches up and then some. It's true that in the short run growth often looks better because of the above dynamic. However, value has historically proven to provide better performance over the longer term.

This means that value investors, like us, are strange in that we enjoy looking at sectors/companies when others foresee the worst going forward. It is much easier to affirm what most people like. Virtually all the stocks we like are rated poorly by Wall Street, if they are covered at all. The key is to do as Charlie Munger says, "What we do at Berkshire is simple. We sit on our ass waiting. The key is to prepare while you wait with extreme patience and discipline. And then act with extreme decisiveness. You won't find this in finance books because these principles are hard to teach." Or as Sam Zell says, "We have a history of investing in arenas where previous capital flows have stopped."

I will conclude by going back to another quote from *A Few Good Men*. When Colonel Jessup is on the witness stand, he says:

"I have a greater responsibility than you can possibly fathom. ... you curse the Marines (Federal Reserve/Government). You have that luxury. You have the luxury of not knowing what I know... My existence, while grotesque and incomprehensible to you, saves lives (the financial system/economy)."



We use words like 'honor,' 'code,' 'loyalty.' We use these words as the backbone of a life spent defending something. You use them as a punch line. I have neither the time nor the inclination to explain myself to a man who rises and sleeps under the blanket of the very freedom that I provide and then questions the manner in which I provide it.

I would rather you just said 'thank you' and went on your way."

This seems pretty appropriate for today and where we are. The quote is very much in the spirit of Thomas Sowell's *Vision of the Anointed*. You can easily imagine a Federal Reserve official saying something like this in private. The financial leaders claim to know what is best and we better not question it. Or, as the character, David St. Hubbins said in 1984's *This is Spinal Tap*, "It's such a fine line between stupid and clever."

Thanks again for your support.

Mark McKinney

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September 2021

I had no good place to tie these quotes into from *The Vision of the Anointed* by Thomas Sowell, but they were good so here you go.

- "To believe in personal responsibility would be to destroy the whole special role of the anointed, whose vision casts them in the role of rescuers of people treated unfairly by "society"."
- "One of the sad signs of our times is that we have demonized those who produce, subsidized those who refuse to produce, and canonized those who complain."
- "One of the first things taught in introductory statistics textbooks is that correlation is not causation. It is also one of the first things forgotten."
- "In short, the anointed are helped to make yet another group feel like victims and to regard the anointed as their rescuers."



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