

January 2022 – MBS Mantra MBS High Income/Absolute Return Strategy returns

Also, Analysis of Inflation

	% Net Return	% Gross Return	2022 YTD Net %	2021 YTD Net %	Trailing 1 year Net %
Aggregated SMAs	-0.16%	-0.09%	-0.16%	+10.0%	+8.6%
<u>Founder's</u> <u>Portfolio</u>	-0.27%	-0.19%	-0.27%	+10.1%	+8.6%

Jan 2022 Income: +1.14%; Annualized: +14.7% (Aggregated SMAs @ recent marks) Jan 2022 Cashflow: +3.1% (~37% annualized rate) Jan 2022 Loss rate: -0.51%

Hello

This newsletter contains extensive analysis of inflation risk. First, however, a review of January MBSM returns.

January was an interesting month, with volatility and declines in almost all markets, as the Fed and other central banks started discussing rate rises and tapering of QE and outright reduction, exacerbated with rising inflation largely from energy and commodities.

However, with an almost 0% gross return for the month, we beat all our benchmarks: Agg: -2%; MBS: -1.48%; HY: -2.73%; S&P: -5.27%.

MBS Income was +1.14% in Jan, (14.7% annualized), enough to offset the negative returns from price change. Marks were lower on average, with some down and some up, with most fixed rate MBS marks lower. Marks on floating rate MBS, which I have been mentioning for a while as being massively underpriced and incorrectly declining, were up slightly, but not sufficiently – bonds similar to ours are trading at significant 20% to 40% premiums to the marks, close to levels that make sense from an arbitrage-pricing perspective. Were we to mark such bonds in our portfolio (~20+% of the portfolio) at their theoretical no-arbitrage price or at the trading prices of similar bonds, our portfolio value and return would increase by ~9%!

We had one deal get called which slightly impacted the monthly return of a few clients. The call returned only the balance of the collateral instead of the balance of the bonds outstanding, slightly hurting our overall TRRs. This was a non-economical call in the traditional sense of collateral being worth less than the bonds outstanding, and only makes economic sense to exercise if the caller can somehow make the bonds worth less by passing through losses to the bondholders, which the servicer did. However, unless larger holders of the bonds complain to trustees, (I

have lodged a complaint too), such bad behavior by servicers will remain an occasional random risk. We maintain a diversified portfolio to limit this risk, which happens infrequently and is not significant over longer holding periods.

Inflation

Inflation has been the topic du jour, with the Fed having reversed course from calling the rise in inflation 'transitory' to announcing that it is planning on raising rates to head it off.

The question du jour is whether the Fed's anticipated actions can tame inflation, or are acts of folly.

MBS and Inflation

An allocator who invests with hedge funds recently asked for my thoughts on the returns of some MBS hedge funds that experienced negative returns in 2021 approaching -20%!

While I am not privy to their strategy or holdings, to me this was a tell-tale sign of diving into IOs as rate-rise expectations gain ground. (It could also be a levered fixed rate MBS strategy, or a Long cuspy MBS, Short low-cpn MBS strategy to isolate the IO prepayment option). Early last year I had also gotten overtures from investors looking to invest in IOs – I told them that it was too early.

The knee-jerk reaction of the "more sophisticated" MBS traders and investors when they are confronted with rising rates is to buy Interest-Only (IO) bonds, as they are supposed to have "negative duration", which will lead to higher prices as rates rise. This should protect against rising rates and inflation.

This is the theory: when rates rise, prepayments are expected to slow down, extending cashflows for IOs, thereby making them more valuable and their present value higher, thus giving them negative duration as rates rise.

This belief is a result of a systematic over reliance on MBS OA (Option Adjusted) models, that have dominated the MBS markets since the 1980s Salomon Brother's mortgage department diaspora (read Michael Lewis' *Liar's Poker* if you are not aware of what I am talking about). Salomon Brother's Fixed Income Research managed to compute a duration for MBS and convinced institutional investors like insurance companies that MBS were Fixed Income assets, allowing for asset-liability matching, and thus opening up a large marketplace in an asset class that had been orphaned until then. Their framework of using OA models (as bullet maturity non-callable bonds with shorted options – thus "Option Adjusted") has become the dominant valuation technology for MBS and is the training vehicle for the armies of MBS traders, researchers and investors that have entered the market since then.

I first learned of the problems of MBS model reliance the hard way: in March 1987, after my MBA at UChicago, I had joined Merrill Lynch in Fixed Income Research. A few months later a trader that had been lured from Salomon Brothers, Howie Rubin, caused a HUGE \$275mm loss in MBS IOs and POs (he mispriced the POs and got stuck with them), resulting in no bonus for us in Research, and a need to find another job – Ray Stone told me that he had "no wood to chop" as his budget had been cut. I moved to Morgan Stanley in 1988.

NYTimes: "Anatomy of a Staggering Loss"

While this loss only enhanced Howie Rubin's career (google him), the mantra at Merrill became "*IO*, *PO*, *its out of work we go*", sung to the tune of Disney's "<u>Heigh Ho</u>".

A direct result of this experience was the MBS research I conducted in the 1990s, finding better ways to predict MBS total returns and risk than models, and correlating macro economics with MBS and other asset class returns. This research and tools created today underpin my MBS High Income strategy, where capital preservation is most important, as well as my MBS investments. I have been co-investing with my institutional clients in bonds I recommend since 1989, including investments in IOs and other MBS derivatives, and have personally lived, touched, and eaten their total returns for over 30 years.

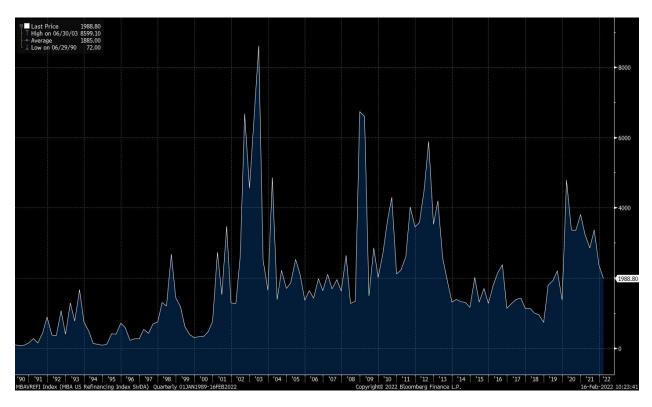
(To learn about another large Salomon Brother's alumni model-driven failure, you can read the real story of LTCM in <u>T-Leaf Reading</u>, pages 11-15.)

Street MBS traders are trained to use OAS (option adjusted spread) Model generated prices and durations in order to hedge for <u>instantaneous</u> price changes in their inventories. Since traders only own product in inventory until it is sold, and usually not for any significant length of time, they are often not experienced in the total return implications of a such a strategy. Other investors, such as long-only money managers, have different motivations for their investments, and to me it seems that they rarely review the total return performance of individual bonds in their large portfolios. As a result, as long as I have been in the markets, "experienced" MBS investors and traders consistently and systematically seem to fall prey to the "negative duration" IO beast, as they are not focused on Total Return risk, but only on Price Risk.

The problem arises from the real-life behavior of many of the variables in models, many of which interact with each other. Even if models capture the behavior of the variables and predict cashflows correctly (they rarely do, resulting in regular risk-management failures), their function is to present-value the projected cashflows under different scenarios, with no visibility of the Total Return timing implications. Since returns are geometric (they compound, not add), negative returns today form a high and rising-by-the-month hurdle rate for future price gains to make up for losses realized - i.e., to get back to a 0% breakeven return. This is especially true for IOs where the nominal balance goes down monthly, often rapidly, hitting the point of no-return.

Prepayments do not instantaneously slow down when rates rise – there are lags involved with borrowers that have locked in refinancing rates, leading to fast prepayments in the near term. As described in this old research piece I wrote in 1994 about <u>the 1987 prepayment slowdown</u>, it can take 6 to 9 months. In today's environment, as rates are still low relative to the mortgage rates that many borrowers have, borrowers will prepay anyway even if rates rise in a steady manner. With home sales driven by rising home prices, a wave of early retirements due to high stock markets, combined with COVID related moves, housing turnover rates can also defy rising rates, and settle at higher levels than predicted by models. Impaired borrowers with high mortgage rates that could not refinance due to past credit score events or job changes, can sell anyway especially as rising home prices bring their LTVs back into the black, or as they retire early and downsize. The implication is that prepayment speeds are faster than the models predict. <u>Many MBS have continued paying down rapidly in spite of rising rates</u>.

A lot of IO and MBS speculators use a decline in the MBA (Mortgage Bankers Association) Refi Index to justify the timing of their investments. While the Refi Index has declined from a recent high of 4781 to 1989 currently, one should not lose sight of the fact that 2000 or 1600 were still high levels for this index in the past – see 1993 or 1998. It will probably take a level below 1000 – say 400 - for cuspy IO cashflows to stabilize and extend.



For IOs, whose value is computed by multiplying a "notional" MBS balance times the price, fast prepayments are a huge impairment for their total returns, <u>as declining balances result in an even higher hurdle price for return</u> <u>recovery.</u> Rising prices of some IOs have not kept up with the reduction in the notional balance of the pools that the IOs are stripped from. In many other cases, IO prices have declined, after initially rising, as the hammering from prepayments required models to be revamped.

I'll use a bond as an example. This an IO that I found on a dealer inventory: FNR 20-20 GI @ \$15-01 on 3/31/2021 with a computed OAD (Option Adjusted Duration, Bloomberg model) of -43.8 yr! More recently, the IO was offered at \$14-15 on 2/9/2022 (-21.83 yr OAD). The collateral has a net coupon of 3.5% and an average mortgage rate of 4.15%, with loans originated in 2016 and 2017 – they've been refinanceable for many years.

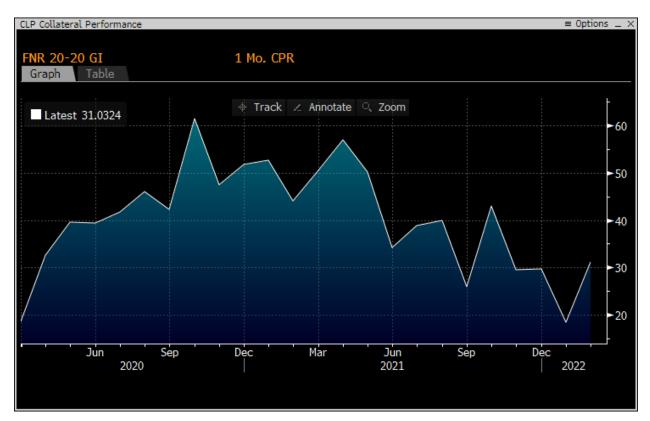
Using the prices above, the total return from 3/31/2021 to 2/9/2022 was -22.6% (-27.7% annualized).

Over the same period from 3/31/2020 to 2/9/2020, the national average 30-year mortgage rate (from Bankrate.com) has risen from 3.27% to 3.98%, a 71 bps backup. The average rate yesterday was 4.23%.

In spite of the backup in mortgage rates, the price of this IO has declined by 3.7%, instead of going up as predicted by the -44yr negative duration.

Did prepayment speeds for this deal slow down as rates backed up? Yes, but as the CPR graph below shows, not rapidly enough, and they are still high. They have almost halved from 56 CPR in April 2021 to 18 CPR in Jan 2022 (and went back to 31 CPR in Feb). Clearly not enough for FNR 20-20 GI, as the carry income and monthly total returns were negative and <u>are still negative</u>, and the market price for the IO did not rise either. The notional balance for this IO declined from \$29.3mm to \$20.2mm. Even at current slower prepay speeds, the return is still negative at a lower price (the 2022 return, from 12/31/2021 to 2/16/2020 at \$14-15) is ~ -2% (-15.78%

annualized). This bond is still suffering from "negative carry" and requires continued price appreciation to generate a 0% return.



For this IO to break even (have a 0% total return) from 3/31/2021 to 2/9/2022, the current price would need to instantaneously rise to \$19.84 (Breakeven Price), a 37% increase, and one that is constantly rising as the notional balance continues to decline with time! At \$19.84, at last month's prepayment speed of 31 CPR, this IO yields -21.9%. The Bloomberg model is projecting 15.5% Long Term CPR – at which speed it would yield -3.2% at \$19.84. If prepayments were to slow down immediately and the IO get priced at 6 CPR, the yield is 7.2% - barely plausible.

The Breakeven Price is analogous to what is needed for a hedge fund to get back to its high-water mark. Such a deep drawdown will prove to be hard to overcome even if prepayment speeds decline significantly more.

Relying purely on models in order to be early in buying IOs, without looking at how total returns behave and their timing, is a sure way to lose money in MBS, as is investing in negative carry bonds.

I let IOs tell me when they are ready to be purchased – when their carry and total return turn positive enough to overcome my Income target hurdles! I sold most of my Agency MBS derivatives in 2020 as COVID hit and changes were made in the rules for mortgage payments by borrowers and default response by servicers, anticipating carry to turn negative which it did. I am instead long a lot of deep discount positively convex MBS with exposure to prepayments in vintage non-agency MBS, which worked very well in 2021 – we returned +10% in spite of declining prices, and which are still working well in the portfolio by providing High Income to offset mark declines.

There are currently better ways to get Negative Duration in MBS investments than to purchase IOs, and I have been invested in such bonds and strategies for many years, creating diversified low net duration MBS portfolios with an emphasis on capital protection and High Income. Please contact me if you are interested.

Causes of Inflation

As any student of economics knows, prices rise when demand is greater than supply. While most of the time this is related to excessive demand, a shortfall in supply can have the same result.

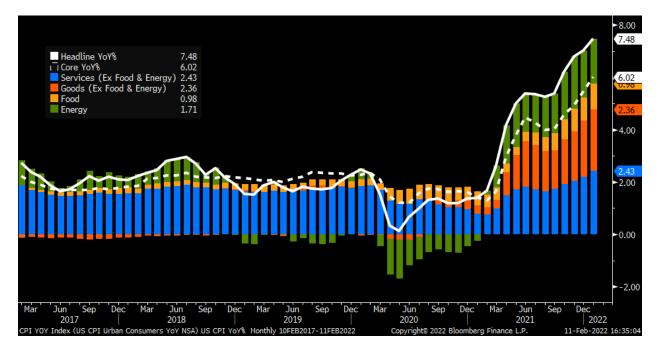
The expectation when a central bank cuts rates is for risk taking to take hold in an economy, leading to borrowing that, through a fractional banking system, will increase the velocity of money and thus money supply, and lead to demand driven growth.

The reverse is expected when rates are hiked: risk taking will decline, people will move money into savings accounts, borrowing and velocity of money will decline, and thus dampen demand, lowering prices.

To understand the impact of a rate hike or QT by the Fed, we need to understand whether the inflation we are experiencing is demand or supply driven.

Whither this inflation?

Last week we saw the highest CPI print since 1982, at 7.5%! Ex Food and Energy, it was 6%, still very high.



As the graph above shows, the recent rise in inflation from 2019 has primarily come from Goods, then Energy, with some contribution from Food. Services inflation, the primary driver of inflation prior to 2020, is only slightly higher than in 2019.

Food inflation picked up first, in April 2020, due to shortages from supply chains collapsing as well as hoarding, as COVID mandates and worker sicknesses created a labor shortage in the entire supply chain. Energy prices initially collapsed, but then picked up in Spring 2021 as economies started recovering. Goods inflation also jumped dramatically in 2021, as stimulus driven consumption picked up, with supply not keeping pace (due to supply chain problems).

The Fed's initial explanation for this was that the pickup in inflation was "transitory". However, they have since backpedaled and are now planning on raising rates, as well as tapering QE. With such a high inflation print, the discussion now is about how many rate rises they will do, and the magnitude of the first one. (See WIRP on Bloomberg).

We are going to attempt to understand whether rate rises will be able to control inflation, or whether the Fed is behind the ball as many pundits believe, or whether what they do is irrelevant.

Current Status – Real GDP

Real GDP Growth (Annual YoY%)

Dec-10	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21
2.6	1.6	2.2	1.8	2.3	2.7	1.7	2.3	2.9	2.3	-3.4	5.7

As the table shows, GDP growth declined by 3.4% in 2020, but rebounded by 5.7% in 2021. The rebound, reflecting deferred consumption as well as transfer stimulus payments and business protection policies from the government, has driven the inflation. The average growth rate from 2010 to 2019 was 2.24%.

However, since growth rates are geometric, using 2019 as the base (100), real GDP in 2021 has only grown by 2.2% from 2019 to 2021, around 1.09% annualized, slower than the foregone average 2.24% rate. All the stimulus, the checks, PPP, QE, etc., has not yet brought us back to where we would have been had the COVID crisis not occurred in 2020 – at a 2.24% growth rate, we should have been at 104.5 in 2021.

	Actual Real GDP			Foregone Real GDP		
	2019	2020	2021	2019	2020	2021
GDP Growth	•	-3.4	5.8		2.24	2.24
GDP index	100.0	96.6	102.2	100.0	102.2	104.5

Essentially, we have lost a year of GDP growth. Given this, it is surprising that we have inflation, and it seems to have surprised Powell as well. The inflation cannot be Demand driven if GDP is lagging.

Another year of 5+% GDP growth will allow deferred demand and the size of the economy to catch up to where it should have been without COVID. For this reason alone, Powell should not risk GDP growth for another year before attempting to rein inflation which could impede growth.

More than anything else, this has exposed a flaw in Just-In-Time global manufacturing and shipping – without inventories at hand we are exposed to the supply chain – this has caused the inflation.

Goods - Supply side

The NY Fed has developed an index of Supply Chain Pressures that suggests that global supply chain pressures remain high but might have begun to moderate.

https://libertystreeteconomics.newyorkfed.org/2022/01/a-new-barometer-of-global-supply-chain-pressures/

By now we have all heard of the worker shortage in many industries including food prep, ports, restaurants, and trucking, and of container ships parked in queues outside of ports, unable to unload.

https://www.freightwaves.com/news/california-pileup-still-piling-up-but-out-of-sight-over-horizon

This link can explain why imported goods (and raw materials for US manufacturing) are having such a hard time getting into the US and why US ports are creating bottle necks in the supply chain.

https://cei.org/blog/why-dont-u-s-ports-operate-24-7-ask-the-unions/

Another component of goods inflation that is often in the news is used vehicle prices. As new cars are in short supply due to a chip shortage, used car prices have shot up in price as demand. Once again, I suspect a large part of this demand for used cars is deferred consumption, and is not an inflation rate that will compound. If anything, it is likely to decline as auto demand is satiated, even if the chip shortage for new cars is not resolved in 2022.

I do not think any action by the Fed will have any impact on reducing these bottlenecks in the supply of goods. Expect goods inflation to remain high for at least 1 more year unless Powell's actions trigger a recession and demand collapses.

More corroboration – FT: "Supply is coming" (Jamie Powell, Feb 16, 2020)

This article is a must-read: https://www.ft.com/content/36ca03ea-8ce4-4a6c-a148-6c9f04c9d348

Basically, many industries, similar to Energy, including semi-conductors, did not invest in capex during the 2010-2020 period, and as a result supply from manufacturing has not kept up with demand. Capex is now being invested, and supply will catch up.

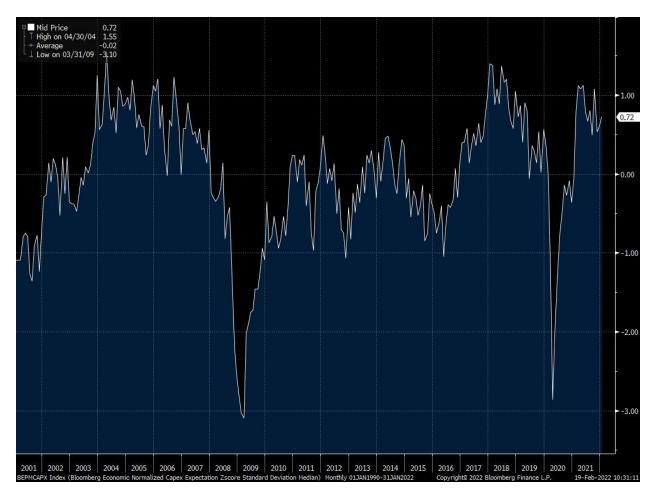
In other words, markets work, and the invisible hand will solve this problem - the Fed need not apply for this job.

Quotes from the FT article:

"Yet one cause we feel that's been little discussed is how a decade of low economic growth in the West before Covid contributed to the inflationary crisis we're experiencing now.

The idea is simple one. If growth is sluggish, as it was in the 2010s, then, at best, firms won't be induced to invest to create more capacity. If you're a grocer, why bother opening another shop if your current one is barely scraping by?"

Bloomberg Economics has created an indicator for this by normalizing capex forecasts from a number of Fed regional banks. We can see this low and largely negative Capex from 2010 to 2017. (BEPMCAPX Index - Bloomberg Economic Normalized Capex Expectation Zscore Standard Deviation Median)



FT quoting a Barron's article:

"The first key piece of context is the boom-bust cycle that hit America's semiconductor industry in the 1990s and 2000s. Sales of American-made semiconductors and related devices fell from \$94 billion at the peak in 2000 to less than \$66 billion the following year. As of 2019, sales were worth less than \$65 billion. Similarly, revenues from printed circuit assembly fell from a peak of \$37 billion in 2000 to \$24 billion by 2002, and were also \$24 billion in 2019.

Unsurprisingly, businesses responded to the lack of sales by keeping a tight lid on their investment in property, plant, and equipment. After hitting at a little more than \$33 billion in 2000, capital spending on physical manufacturing capacity by the total computer and electronics manufacturing sector was just \$25 billion 2019.

Producers in the rest of the world made up the difference as demand from the U.S. and elsewhere continued to rise over the past two decades. But . . . those foreign producers were similarly unprepared to handle the surge in demand for chips during the pandemic."

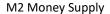
Back to the FT:

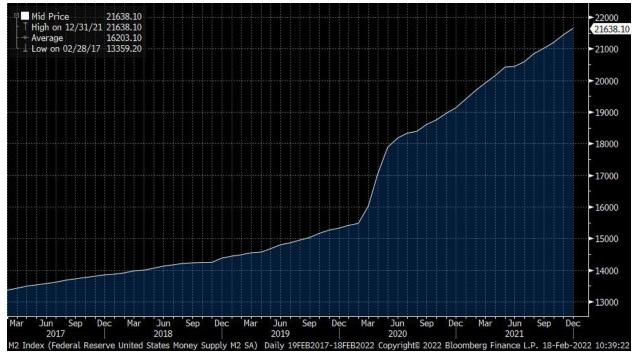
"Since then, the semiconductor manufacturers have done what you might expect in a demand-driven shortage: invest. One example: a short month ago Taiwan Semiconductor announced it planned to spend \$44bn in 2022 on capital expenditure, up almost triple what it spent in 2019."

UBS's Capex Intentions Tracker is expecting 20% y/y capex growth in 2022.

Goods - Demand Side

Usually, excessive money supply leads to growth in demand and GDP, albeit at the cost of inflation. While the Fed has dramatically increased money supply by \$7T through QE, it does not appear to have reached the real economy – GDP has only grown by \$2T from 2019 or \$4.5T since March 2020.





I've written at length in the past about how central bank actions lead to asset inflation - see the next section. This has happened again, but it is not measured by the broad inflation measure, except in the rent component.

The lost year of GDP growth shown above implies that we still have catch-up demand for goods, and have not had overheated growth (and demand) yet.

Overheated demand would induce companies to increase production, and they would borrow money to facilitate this. We are not seeing signs of this in the two indicators that I follow which are traditional indicators of macro-economic activity and are good benchmarks for grading central banks: velocity of money, and C&I lending.

Neither shows any sign of overheating, and actually demonstrates the ineffectiveness of the Fed's QE and rate cuts on the real economy.



Velocity of M2 Money



While wage inflation has risen, largely due to worker shortages due to COVID, the jump follows a decline in 2020. As the severity of COVID declines and workers go back to work, wage inflation appears to have peaked.



UBS Wage Inflation basket (UBXXWAGE Index):

I have no idea if workers will be able to hang on to their wage gains after economies stabilize.

Energy Inflation

This is much simpler to understand, and I believe that it will persist. Again, it has nothing to do with the Fed, and raising rates or reducing the Fed balance sheet or QT will not impact Energy prices unless the Fed causes a recession by triggering an asset market crash.

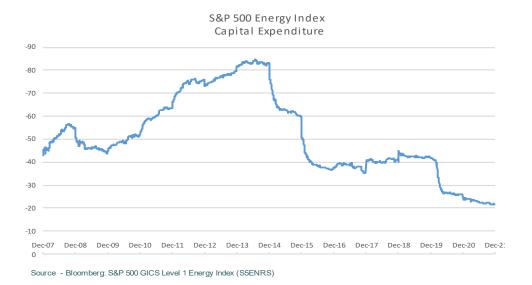
Energy inflation in 2022 is a result of a perfect confluence of events: geopolitical

(Russian/Ukraine/Germany/Nord2 Natgas and war drama) limiting supply, structural constraints preventing capex growth, weather (lack of wind in the North Sea), a surge in demand from deferred consumption, and continued growing demand from the growing middle class of non-OECD countries. The majority of these are fundamental issues, and not temporary.

The main issue again is low Capex investment.

Less than 50% of the energy that is removed from the ground is being replaced in reserves. The recent history of low Capex investment implies limited energy reserves (energy in the ground that can be recovered rapidly), with supplies being tight.





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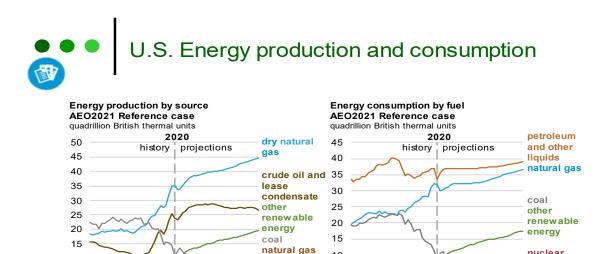
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https://www.reuters.com/business/energy/oil-rises-more-than-7-year-high-mideast-tensions-2022-01-18/

"At the same time, producers within the Organization of the Petroleum Exporting Countries are struggling to pump at their allowed capacities under the OPEC+ agreement with Russia and allies to add 400,000 barrels per day each month."

While US shale producers can ramp up quickly in response to prices, and are indeed supplying Europe, they are not capable of replacing Russian gas volumes, if Russia shuts down exports to Europe due to the Ukraine crisis. Since 2014, they have also learned their lesson not to expand too rapidly. Big oil on the other hand takes decades to develop new fields, and requires billions in capex. (Google 'Exxon Brazil' -

https://www.reuters.com/business/energy/exclusive-brazil-has-oil-exxon-cant-seem-find-it-2022-02-14/).



plant liquids



10

nuclear

10

hydro

Source: U.S. Energy Information Administration, Annual Energy Outlook 2021 (AEO2021) www.eia.gov/aeo

Renewable energy is only growing fast enough to replace coal, but does not provide sufficient redundancy to provide energy security for the countries that have embraced it. The UK has already restarted its coal plants due to the unreliability of offshore wind power. https://www.bbc.com/news/business-58469238

I'm going to blame corporate and political activism and E(SG) mandates for starving the energy sector of capital, which has limited and shrunk their capex expenditures. Nuclear is also prematurely being phased out in Japan and Germany for political reasons, and France is involuntarily shutting nuclear plants in order to repair them due to decades of insufficient maintenance Capex, exacerbating shortages of electricity and energy in Europe.

Renewables cannot grow sufficiently, fast enough, or cheaply enough to meet the demand for electricity from non-OECD countries that are growing and seeking to supply reliable energy to their populations to bring them out of poverty. The gap is being filled and will continue to be filled by Natgas, as OPEC+ cannot boost oil production in a timely manner to meet demand.

The insufficiently planned green transition in the OECD countries, without a requirement for energy security and redundancy, has contributed to energy inflation. Energy demand is growing and inelastic. Oil around \$100 should be tolerable as long as the price does not keep rising, as supply will slowly appear - markets do work. However, a recession could morph into stagflation due to energy inflation.

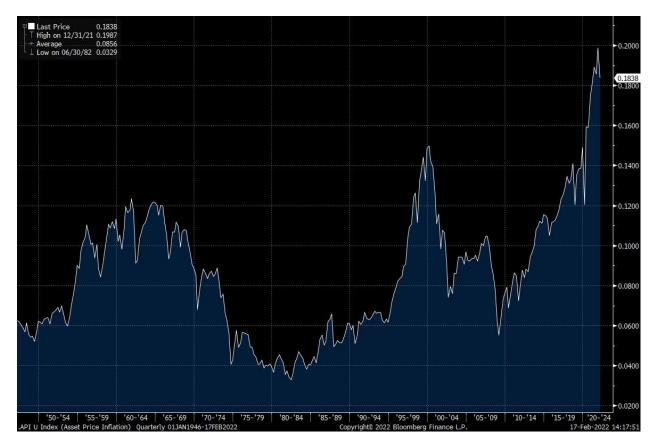
Powell raising rates will not impact energy inflation (with the recession caveat).

Asset inflation

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I've been writing and talking about the Asset Inflation and Deflation caused by the central bank actions since 2008.

Many readers will have seen a similar chart presented before. I call the following graph Asset Price Inflation (API) – it is the S&P 500 Index / GDP. API is the primary if not sole type of inflation that has been caused by the Fed, and is in their control to impact.



In 2016 I built a model of the US equity market going back to 2002 using only central bank policy tools – interest rates and balance sheets – and it tracked with a 96% Adjusted R-Squared! Details are in the <u>Understanding Beta</u> paper on my website. An earlier version of this model in <u>The Failure of Macro Economics</u>, goes back to 1993. I am planning on updating this soon, and will have a more detailed discussion of Asset Inflation in future newsletters.

Most people are aware of the impact of QE on asset prices. However, most people have not thought through QE completely. All foreign holders of US Treasuries, such as foreign Central Banks, are also giving us QE by purchasing US bonds, by exporting their savings and investment capital to us as external injections of money supply (this first happened in 2002 when Japan implemented QE by purchasing USTs, leading to growth that is incorrectly attributed to Greenspan). Some non-UST foreign QE also leaks into the US.

For QE, I therefore aggregate the Fed's Balance Sheet size (FARBAST Index) with the UST holdings of foreign Central Banks (HOLDTOT Index) - CBBS.

Overlaid on the API graph, one can see the relationship – I think it is a component of the causality.



The 2017-2019 gap between QE and API is a function of Yellen raising rates in 2016, which resulted in the Carry Trade kicking in from Japan and Europe, bringing money supply to the US for investment via Injected Capital. The capital flows into the US can be inferred from the currency rates of the Yen/\$ and Euro/\$ – I discussed this in Predictions 2017. (The BOJ usually has capital flow data to verify this as well.)

Raising rates is going to have the opposite effect of what the Powell Fed is expecting – it will be an easing of monetary conditions as more capital will flow in to the US from Europe and Japan, increasing the M3 that we stopped measuring, as it has every time we have raised rates since the 1990s (see details in <u>The Failure of Macro Economics</u>).

Macro interest rate policy works in reverse, as the US capital market is no longer a closed system where money is trapped and velocity and money supply controlled. In a global capital market, capital flows between countries are driven by interest rate differentials, and since 1994, have driven asset prices, with the US being the only scalable market and thus the roosting destination for foreign capital flows.

Japan is currently teed up to dive into the Carry trade again, which will effectively give us more QE - a story on Bloomberg today: 02/22/22 06:38:37 UTC-5:00 Flood of Japanese Cash Ready to Buy Treasuries After Fed

See the first section of <u>T-Leaf reading</u>, to understand how to separate foreign buying of USTs from inflation expectations in TIPs.

I expect risk assets as a whole to keep appreciating as Powell raises rates, with the Yen and Euro weakening (similar to 2017-2018), although there will likely be sector rotations out of speculative long duration stocks with

no earnings or high PE ratios that will be battered by higher discount rates, into shorter duration stocks with current earnings.

The risk to this forecast for US asset prices is that the ECB (possible) and BOJ (unlikely) raise rates too in tandem, reducing carry incentives for capital export to the US.

As for QT, or outright reduction of the Fed's balance sheet, that will depend on what the Fed does as much as what the BOJ and the ECB do with their QE. If the foreign central banks increase QE by purchasing securities while the US reduces QE, they might neutralize what the Fed does, as much of the injected capital seems to flow to the US. Only when the total amount of global QE declines will US asset prices decline, unless the reduction of QE is offset by carry inflows at the same time.

I would love your comments. Please call anytime to discuss any part of this analysis. Please stay safe, and wishing you good health in 2022.

Regards, Samir Shah

February 17, 2022

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