The Convexity Maven

A Commentary by Harley Bassman

March 7, 2023

"The Chips are Down"

Anais Mitchell – "Hadestown", 2010

Life ain't easy, life ain't fair; A girl's gotta fight for a rightful share
Help yourself, to hell with the rest; Even the one who loves you best
Take if you can, give if you must; Ain't nobody but yourself to trust
What you gonna do when the chips are down? Now that the chips are down.

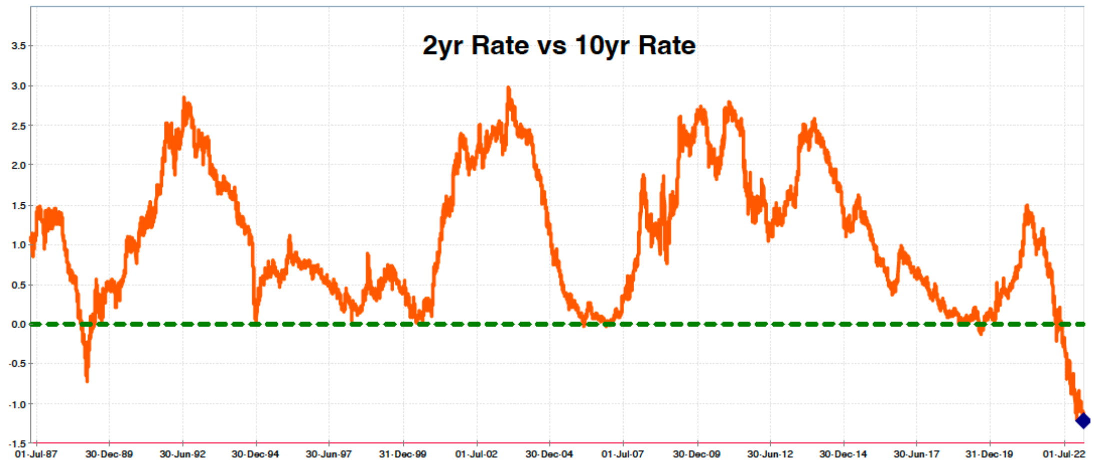
Family lore suggests that my great Aunt Vi ran the West Los Angeles sports book for Mickey Cohen (the Bugsy Siegel gang) in the 1950's. This I can neither confirm nor deny as my grandmother was the black sheep of the family who eschewed gambling. However, in support of nature over nurture, I went to Wall Street in the early 1980s and effectively ran a legal betting site for interest rates; more commonly known as the short-dated options business.

Fifty years later as I was teaching my kids card games, they had a "eureka" moment when they discovered a foolproof gambling strategy: ***Keep doubling down after each loss until you win.***

Facing gambler's ruin, "Team Transitory" is going all-in - will they win ?

Annual Consumer Price Index (CPI) inflation first rose above the FED's target of 2.0% in March 2021 and soon touched 5.0% in May. This was dubbed a **"transitory"** increase pressured by supply chain issues related to various COVID economic policies.

A full year later in March 2022, with CPI inflation nearing 8.0%, the FED finally reversed their April 2020 zero-interest rate policy (ZIRP); this coincided with the first inversion of the -aprikos line- 2yr rate vs 10yr rate. [Note: I mostly use Swap rates instead of US Treasury (UST) rates as most business is conducted by these measures.]



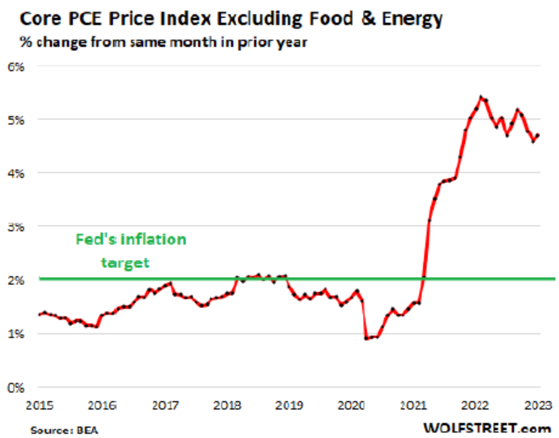
Sources – Unless noted, all charts are Credit Suisse LOCUS

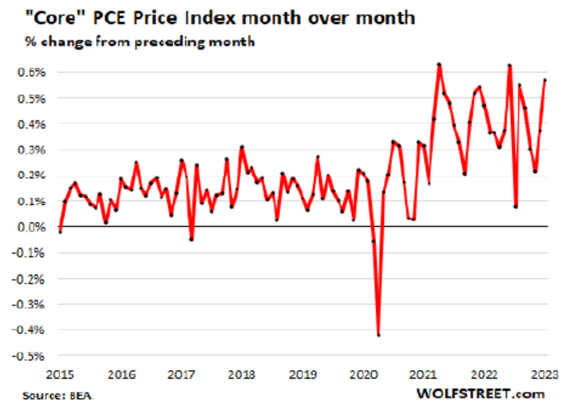
This is <u>an important market signal</u> since the Yield Curve has the best track record of anticipating recessions; and in due course the FED soon starts cutting rates as a balm to a weak economy and the concurrent increase in unemployment.

Front running the FED, the -snacka line- spread between the June 2023 and December 2023 three-month rates inverted in March 2022. In layman's terms, <u>the market was betting the FED would cut their policy rate this summe</u>r to "soft land" the economy.

A careful eye will notice that from June to October 2022 the market was pricing a 30bp reduction in the Fed Funds rate, which expanded to a 50bp cut by December.

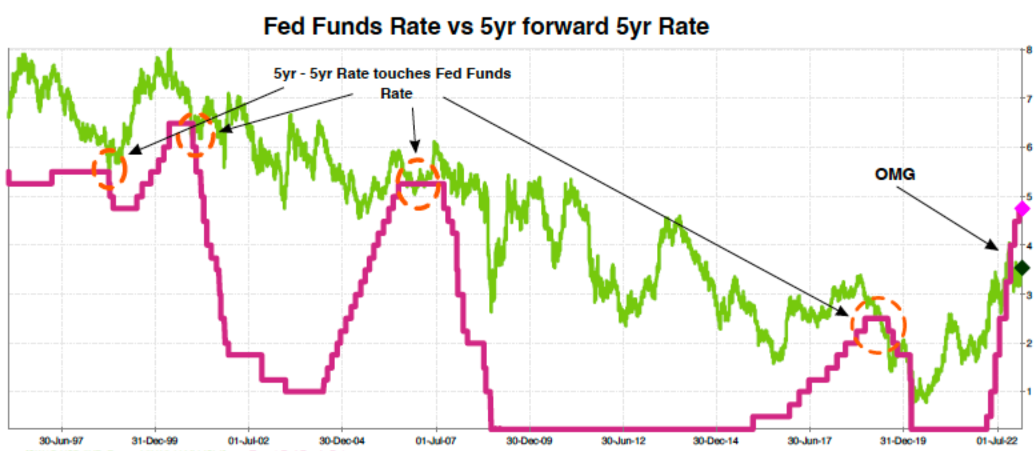
The notion that the FED would start cutting rates this summer jazzed a 16.4% rally in the S&P 500 from the October low; but this good cheer was foiled as the FED's favored measure of -jarn line- Core PCE (Personal Consumption Expenditures) continued to run at **an annualized rate of 4.75%** - both year over year and quarterly.





FED Chair Jerome Powell has been emphatic that he would rather his obituary compare him to Paul Volcker than to Arthur Burns, but the bond market refuses to listen.

Over the past thirty years the rate cutting cycles have all commenced soon after the FED's -vinrott line- policy rate touched the -kalk line- 5yr forward 5yr rate. (This is the market's "guess" as to the five-year rate starting in 2028.)



Presently the Federal Funds rate of 4.57% is 103bps above the 5yr-5yr rate of 3.54%. The FED has bet that the economy is still too strong; but anticipating an imminent "hard landing", the market is "all in" and has pushed their stack of chips onto the table.

Who owns the Casino ?

The old saying on Wall Street was that we were in the "moving business", not the "storage business". It was not my (primary) job to have an opinion, per se, but rather to facilitate transactions between parties who had a view. I was the dealer at the card table, not one of the players.

[*This is of course how Merrill Lynch imploded as our CEO Stan O'Neal had the clever idea to jump over the table and become a player by amassing $43bn in CDOs.*]

As detailed in "Dangerous Curves" – February 15, 2022: "Forwards are NOT a prediction, rather they are the simple mathematical discounting of the Spot Curve to produce an "arbitrage-free" price, no more, no less."

In a nutshell, if Grandma can buy a one-year CD at 2% or a two-year CD at 3%, she would only buy the one-year CD if she thought she could buy another one-year CD next year at 4% or higher. We would call this 4% rate the one-year rate one year forward (or the break-even rate).

This (simple) math trick can be done in all sorts of ways between two dates, and this is why the Yield Curve is so valuable; even a civilian can have a "break-even" opinion.

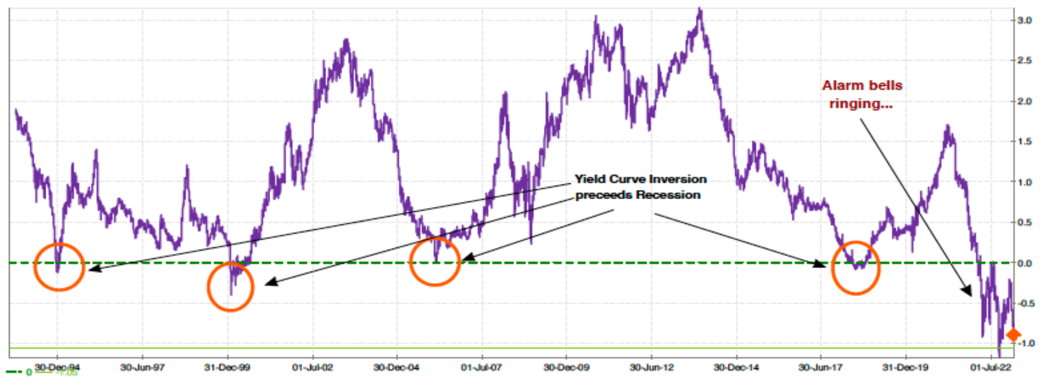
The -sparriskal line- below is the spread between the current two-year rate and the one year forward two-year rate. (Yes, this is a form of three-dimensional chess.)

The Yield Curve is presently so inverted that to make all the math work, the two-year rate must decline 88bp by next March - from 5.19% to 4.31%. [Extrapolating into USTs, that would imply a move from 4.87% to 3.99%.]

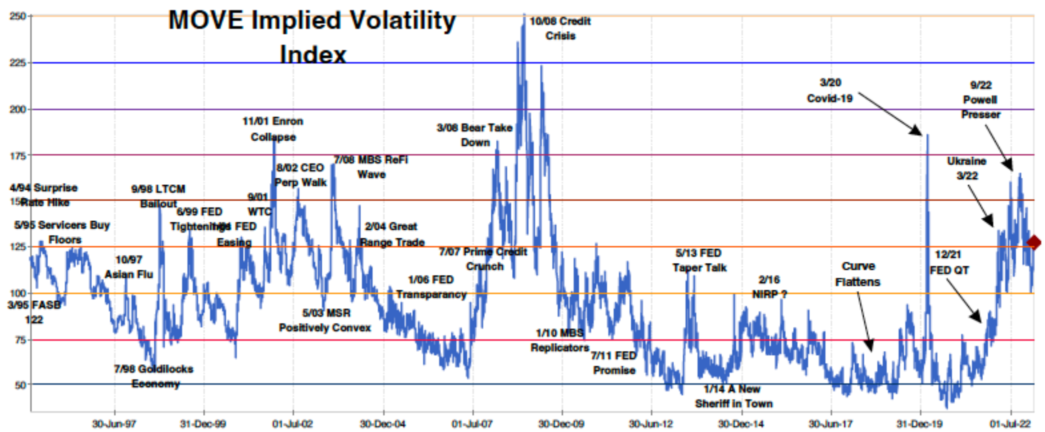
This simply begs incredulity. The FED has all but promised at least two more rate hikes over the next two meetings, so **who is taking the other side of this bet** ?

I can conjure up a zillion charts that signal an economy about to go off the rails. Ignore the vectors of the -lila line- below; just note its pure anomaly.

Yield Curve - 2yr rate vs 30yr rate; One Year Forward

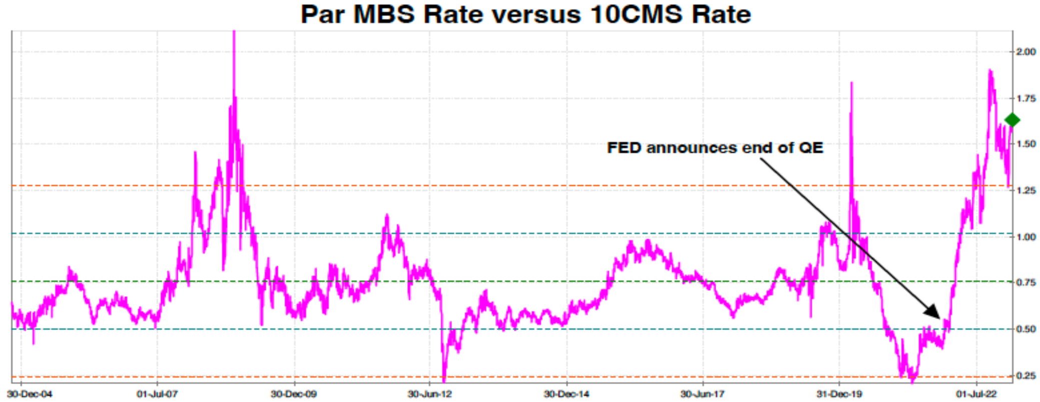


Notwithstanding a VIX well below its forever average of 21, the -himmel line- MOVE Index has been bracketing 125 for a while, foreshadowing interest rate instability.



The distress flare sent up by the Yield Curve has been noticed by the -gummi line- MBS market, where spreads have widened to levels only matched during crisis.

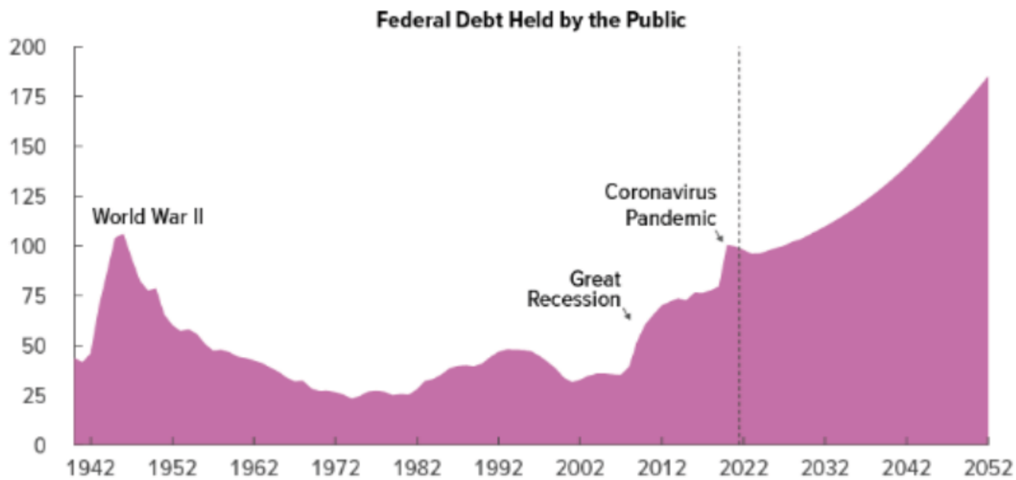
Par MBS Rate versus 10CMS Rate



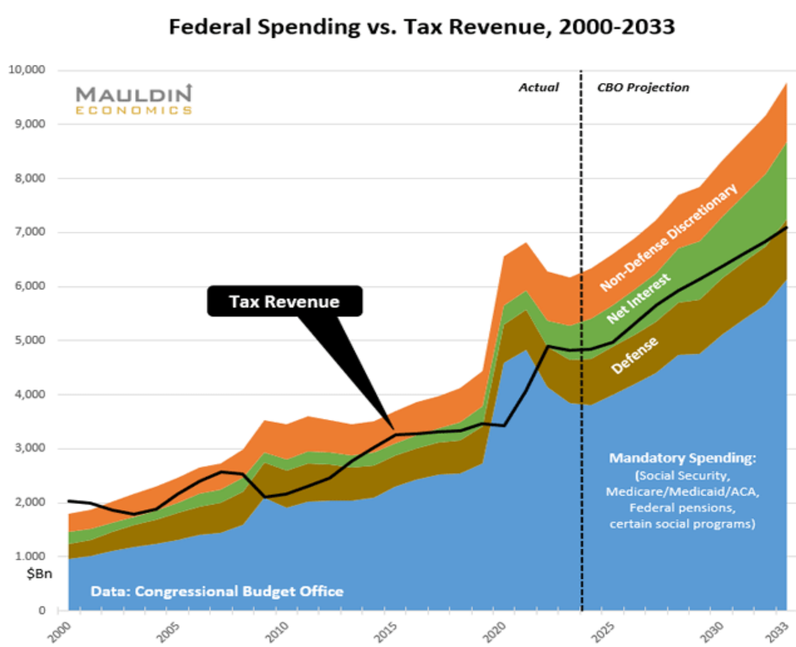
Explaining the Inexplicable

Let me go off script for a moment to suggest perhaps there are other risk vectors besides Inflation and the FED's policy response. While the rotation of the Yield Curve does offer terrific insight into the macro-economy, it can also reflect other forces.

Perhaps our rate profile has more to do with the unprecedented -gredelin shade- growth of our public debt, and less to do with the FED's next policy statement.



While it may take a decade for its denouement, I suspect the market is sniffing a "Thelma & Louise" financial hiccup on the horizon; especially since <u>the "benefit absorbing" Boomer generation will not fully reach age 65 until 2029</u>.



Dusting off the old Playbook

Us geezers know that:

1)The spread between the FED Funds rate and the UST two-year rate is about 50bps.

2) The spread between the UST two-year and the UST ten-year rate is about 100bps.

3) The FED has indicated they will stop hiking between 5.1% and 5.4%, which creates a positive real rate relative to their favored Core PCE (presently at 4.75%).

The three-month UST first crossed above the ten-year UST in November 2022, so mark the recession to start fourteen months hence in January 2024. (This is the original construction offered by Dr. Campbell Harvey in 1986.)

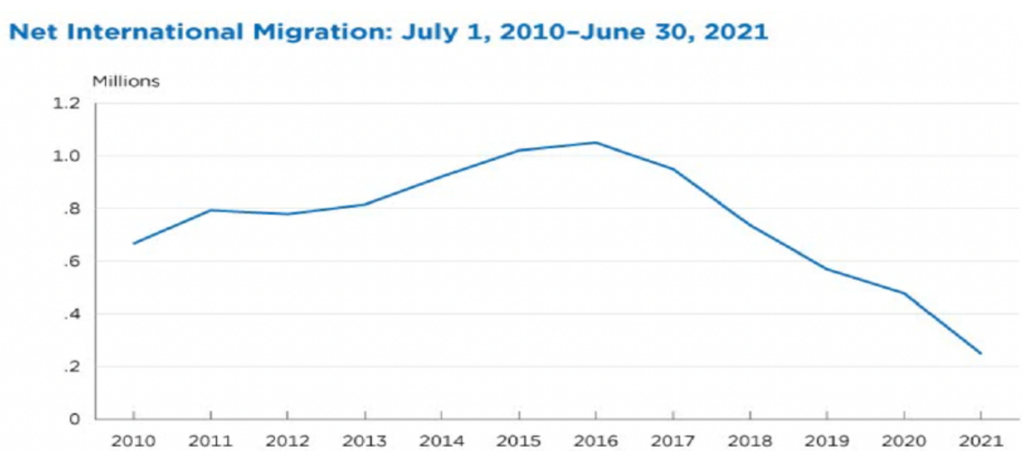
So, the FED should start cutting rates sometime in 2024 (not mid-2023).

Assuming they reduce their rate to 2.0%, flat to their target inflation rate, that would project a UST two-year rate of 2.50% and the UST ten-year rate of 3.50%.

What's the Wrong Price ?

By intent or accident, the market has bet the ranch that the US economy is going to "hard land" soon, and thus induce the FED to cut rates as early as Labor Day (September); **that is simply NOT going to happen**. While "goods" inflation is calming (used cars, really ?), "service" inflation has not pulled back.

The reason is simple: The demand for Labor cannot be met as Boomers retire from the work force for reasons of either age or a (still) plump 401k; and immigration (legal or otherwise) can no longer plug the gap. Every window I see has a "help wanted" ad.



Source: U.S. Census Bureau, Vintage 2021 Population Estimates.

The ten-year is presently near 4.00% and using our simple bond math from discounting the Yield Curve, the two year forward ten-year rate is 3.65%. From the prior page we predicted a ten-year rate of 3.50% if the FED cuts rates to 2.00%; so where is the profit of buying 10yrs ? I see a lot of risk to make a 15bp gain (about 1 point in price).

The Yield Curve is way too inverted given even optimistic inflation projections relative to the FED's stated politics and policies.

Investment Idea

Usually investors "pay" for Convexity via a loss of value (theta) or a locally reduced return (yield); but the shape of the Yield Curve offers an opportunity. If the peak FED rate is 5.1% to 5.4% (FED Dots), then that is the limit for the UST 2yr (since the 2yr only exceeds the FED rate in anticipation of continued rate hikes). Conversely, a rate reduction can certainly be much greater (50bp up vs 300bp down) offering an unbalanced return profile. This is the definition of positive Convexity.

A -ljusrod line- **Short-term Treasury Futures Strategy** can capture a positively Convex rate profile with the price performance (Duration) of the -kanel line- UST 10yr with the kicker of a 90bp static yield pick-up.

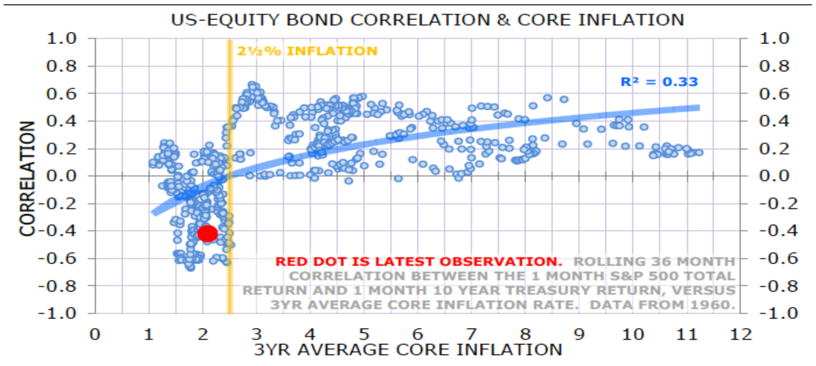
	-300	*-200*	*-100*	*-50*		*50*	*100*	*200*	*300*
	1.90%	**2.90%**	**3.90%**	**4.40%**	**4.90%**	**5.40%**	**5.90%**	**6.90%**	**7.90%**
UST 2yr	105.28	103.31	101.37	100.42	99.49	98.56	97.64	95.85	94.09
	5.8%	3.8%	1.9%	0.9%	0.0%	-0.9%	-1.9%	-3.7%	-5.4%
ST Futs Strategy	$29.94	$27.79	$25.67	$24.63	$23.59	$22.58	$21.56	$19.58	$17.62
	26.9%	17.8%	8.8%	4.4%	0.0%	-4.3%	-8.6%	-17.0%	-25.3%
	1.00%	**2.00%**	**3.00%**	**3.50%**	**4.00%**	**4.50%**	**5.00%**	**6.00%**	**7.00%**
UST 10yr	$123.62	$113.47	$104.27	$100.00	$95.93	$92.05	$88.35	$81.47	$75.22
	28.9%	18.3%	8.7%	4.2%	0.0%	-4.0%	-7.9%	-15.1%	-21.6%

Traditionally, the main reason investors are willing to take a lower yield for a longer maturity bond (Yield Curve inversion) is to pick up the greater Duration, and thus superior price performance if interest rates decline. Here this tradeoff has been curtailed via the use of listed CBOT futures contracts to gain leverage without the usual reduction in current yield.

This Strategy employs 4.8 times leverage via the inclusion of the liquid and transparent listed CBOT 2-year futures contract on a fixed quarterly ratio. Thus, one can precisely model the risk profile to best suit your portfolio.

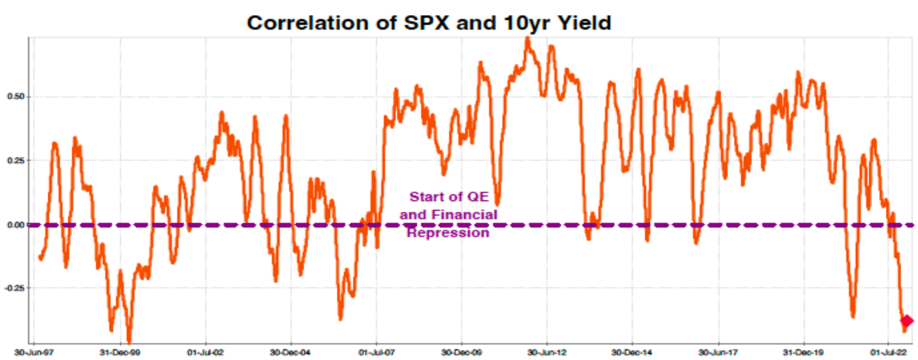
Closing Comments

Since *"Where is the Folder"* - May 5, 2020 I have warned that rising inflation would flip the correlation of Stock vs Bonds so they no longer "hedged" each other….



Source: S&P, Bloomberg-Barclays, GFD, BLS; Minack Advisors

….and this -persika line- has come to pass.



Thus, I urge caution on carrying a pure 60/40 portfolio with no diversification. Presently 30yr rates are 171bp inverted (below) 2yr rates, which is just plain nuts. Strangely, **I believe that 30yr rates could rise when the FED starts cutting** as a process to normalize the Yield Curve.

An obvious addition would be a **Payer Swaption Hedging Strategy**, which I have detailed frequently. One might also peek at a low-cost **Managed Futures Strategy**.

Remember: For most investments, sizing is more important than entry level.

Harley S. Bassman
March 7, 2023

Follow me on Twitter: **@ConvexityMaven**
Your comments are always welcome at: harley@bassman.net

If you would like to be added to my distribution, just ping me.

To become better educated on macro-economic fundamentals and policy, I urge you to connect with my partner, Michael Green, better known as @profplum99.

Special Coda: *This Commentary is particularly complex via the jamming futures contracts into Strategies for leverage that is both clever and tricky. I urge you to ping my associates who are waiting for your call to detail these strategies more fully.*

For reference literature on the financial markets - particularly about options and derivatives - I will immodestly direct you to my educational archive at:

http://www.convexitymaven.com/themavensclassroom.html

If you still have kids in the house, please take a vacation that is more interesting than the Four Seasons, Costa Rica – life is not a dress rehearsal. Turn off the Crackberry (did I just date myself ?) and explore with the family. You don't need to break the bank, rent an RV and see the U.S. We traveled with our four kids on five incredible RV trips.

http://bassman.net

Special credit to Gerard Minack, the best macro analyst on the planet.