Convexity Maven

A Commentary by Harley Bassman

December 13, 2022

"2023 Stocking Stuffers"

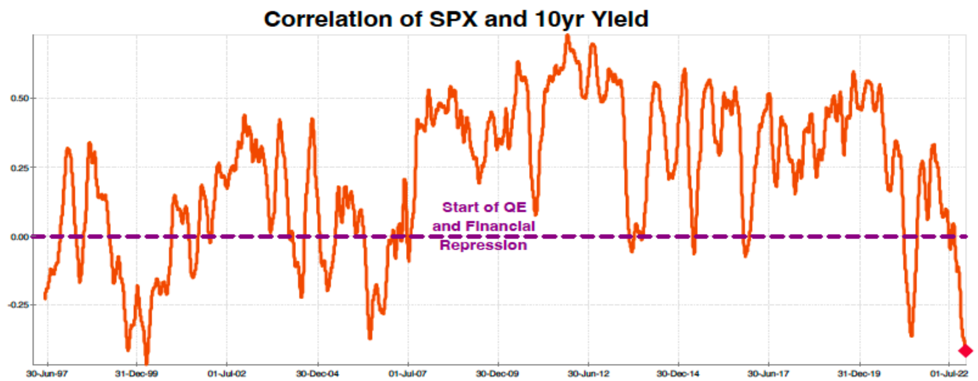
Come this time every year, I publish a list of "Investments" that I think will do well over the intermediate horizon – two to five years. These are NOT meant to be nips to blips RV trades, but rather longer-term notions that capitalize upon either my strongly held themes or the trembling hands of Sharpe Ratio focused portfolio managers.

As always, I will caution that my portfolio construction is not suitable for widows and orphans, despite the fact the last year's stocking stuffers were mostly winners; and I repeat my mantra that <u>sizing is more important than entry level</u>.

Before I detail this year's Model Portfolio; let's consider the macro-landscape.

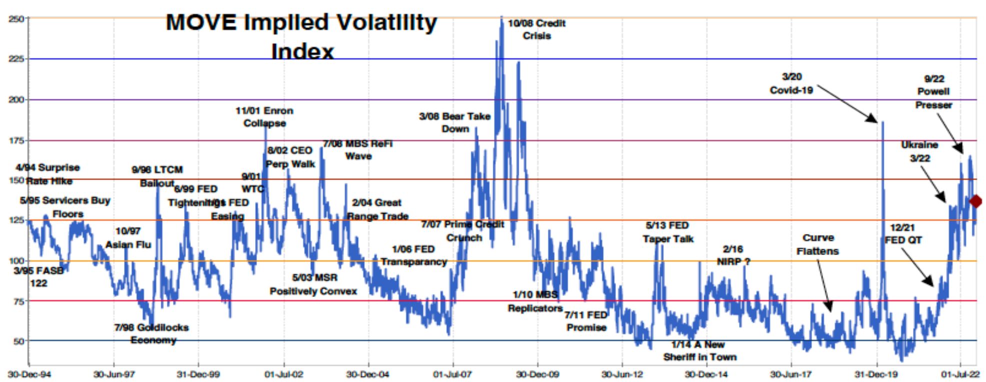
As detailed in *"Nine Meals from Anarchy"* – July 12, 2022, politics delayed a FED hiking cycle that should have started when CPI first touched 5.0% in June 2021. Instead, they waited until March 2022 when CPI was cooking at over 8%; so much for "taking away the punchbowl when the party is just starting".

A key theme this year, and the impetus for the creation of a **Payer Swaption Interest Rate Hedge Strategy**, was the concern that the 60%/40% portfolio would falter if interest rates neared 4.0%. I offered that the -naranca line- correlation between Stocks and Bonds would flip and no longer "hedge" each other; and this is exactly what has happened.



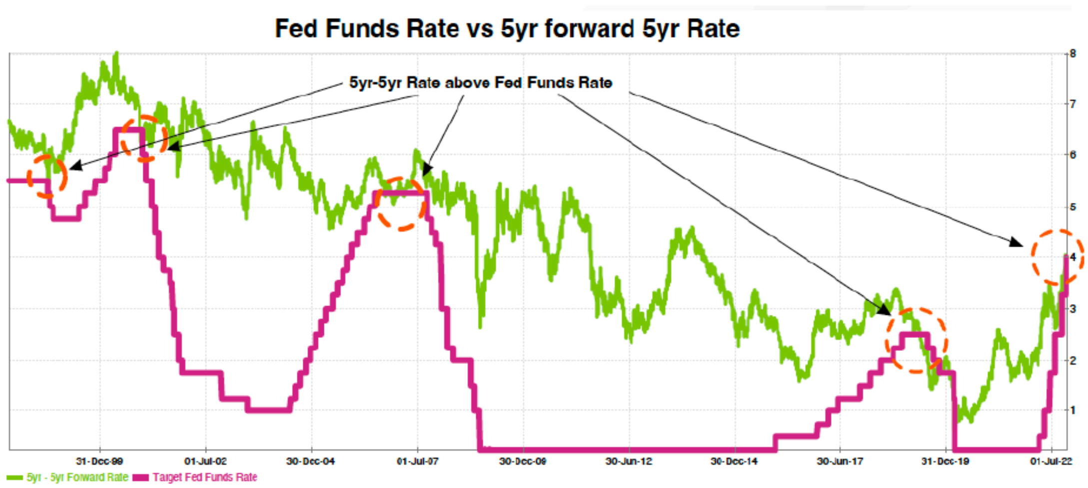
Source: Unless otherwise marked – Credit Suisse LOCUS

Implied Volatility for interest rates as measure by the -plava line- MOVE Index has jumped to levels usually reserved for a financial crisis.



The "crisis" is the -ljubicasta line- Yield Curve inversion warning of a *Thelma & Louise* off the cliff recession despite expanding Employment, Wages, and GDP.

My macro-view is that the FED will pause when their -ruzicasta line- Funds rate reaches 4.75%. At this point, the monetary brakes would be fully engaged relative to a -vapno line- Five-year forward Five-year rate now at 3.28%. This spread is well beyond the level preceding the four previous FED inflection points.



The FED blew it, so get over it. If they had started promptly in June 2021, they could have smoothly done four 50bps hikes and seven 25bps hikes and we would now be at the same place; instead, they had to play catch up. Soon enough they will need to (patiently) let the rate medicine work since both Monetary policy and CPI operate with significant lags.

What we do not know is length of the interregnum between when the hiking stops and the cutting begins.

Buy Two-year Treasuries

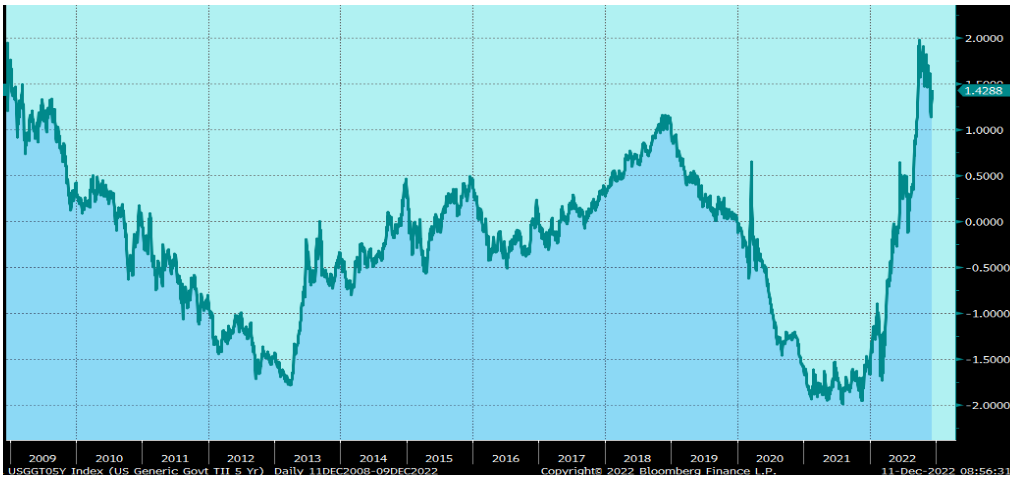
I recently suggested that the September US Treasury two-year auction, which stopped at 4.29%, would be near the peak as that aligns with my view that the FED will pause at 4.75%. Notwithstanding these bonds kissed 4.72% last month, the two-year rate has returned to near this level.

While not a sexy ticket, if you live in CA or NY, these State and Local tax-exempt notes can offer an effective pre-tax yield of 5.0%.

The kicker is the embedded optionality (positive Convexity) of this allocation. One is paid handsomely (75bps above the riskier 10yr or 30yr maturities) to have "dry powder" to engage when opportunity knocks. Perhaps the Bond Vigilantes have been munching too many edibles, but a 2s vs 10s Swap Rate of -110bp is screaming crash landing. And if a hard landing is coming, you will have ready cash to pick up the pieces at bargain prices.

Buy Five-year TIPs (Treasury Inflation Protected Securities)

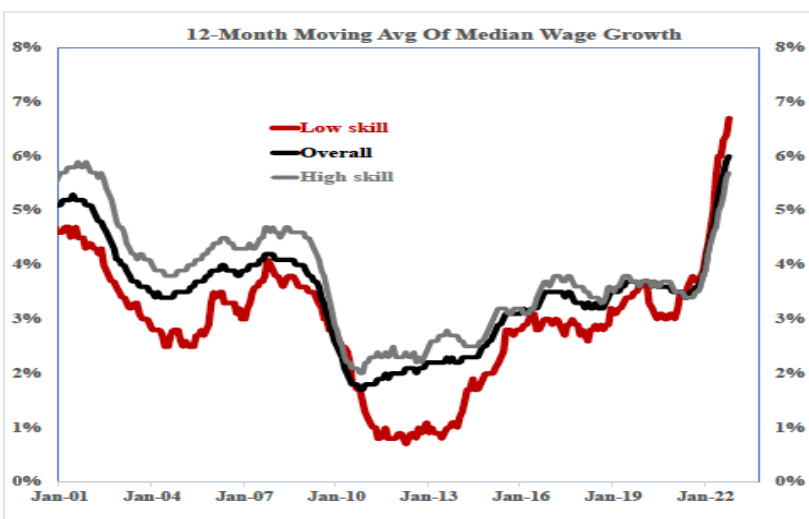
With the FEDs heavy hand finally lifted, the -tirkiz line- five-year TIPs yield has widened 345bps to levels not touched since the GFC. As reminder, this is a "real" yield of 1.45% to which published CPI inflation is then added. Thus, the nominal yield for this bond is currently about 9.0%.



Versus a current UST 5yr rate of 3.75%, the so called "breakeven" inflation rate versus a 1.45% real yield is 2.30%. This means that CPI inflation over the next five years needs to be greater than 2.30% for TIPs to be a better investment.

This should be easy…

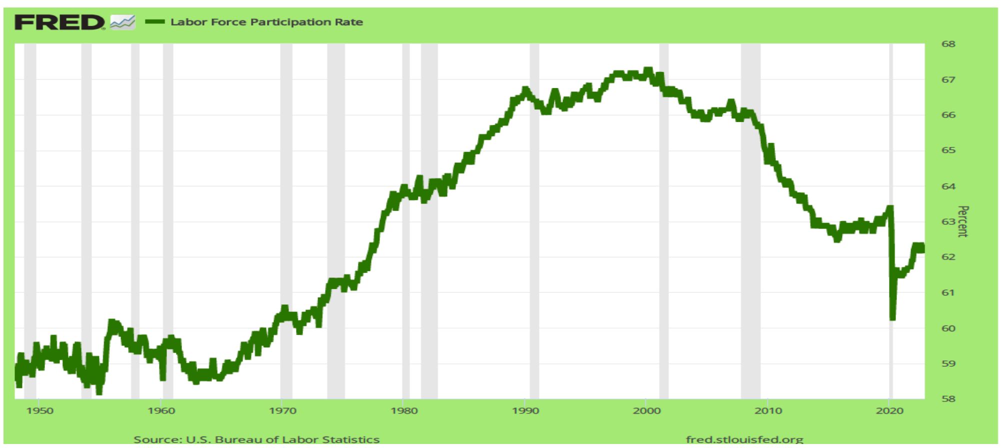
It is true that the price of oil has retreated from its January level and a more orderly supply chain should temper the price of "goods"; but we are a "service" economy whose primary input is -mjeso viti- wages.



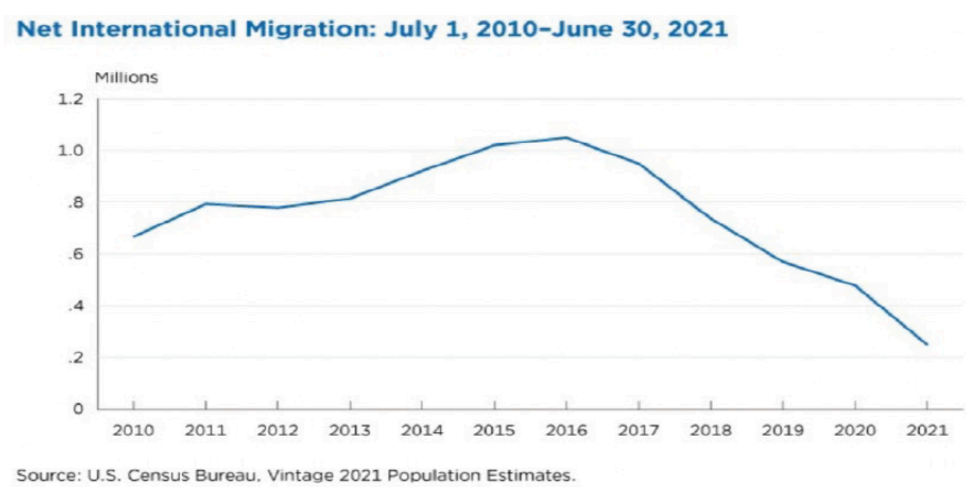
Demographics are the iceberg of the economy, its immense power is mostly invisible to the naked eye [Titanic, anyone ?]. Boomers (1946 -1964) joining the Labor Force (1970s) and demanding goods and services from the much smaller Greatest/Silent Generations drove inflation and fueled economic growth.

The so-called "great resignation" (caused by Covid) is a false narrative; rather Covid simply accelerated a demographic process that was well anticipated. The average Boomer was age 64 in 2020, their retirement should not be a surprise.

The -zelena line- Participation Rate has not recovered because FED money printing has buttressed an accelerated retirement. The economic gears are now grinding as the Millennials (1981 – 1995) enter the Labor force while the Boomers exit and the spending patterns of both are uncertain.



The Law of supply and demand is universal, including the price of labor (wages + benefits). Immigration (legal or otherwise) has tempered wage pressures, at least for lower skilled jobs. To the extent -bobica line- immigration has been reduced, one should expect either higher prices or lower GDP at the macro-level.



[Trigger warning for trolls]

I have never advocated an "open door" policy for Immigration; in fact, I have rarely advanced any policy prescriptions. However, I have noted that:

GDP ≡ NUMBER OF WORKERS * HOURS WORKED * PRODUCTIVITY

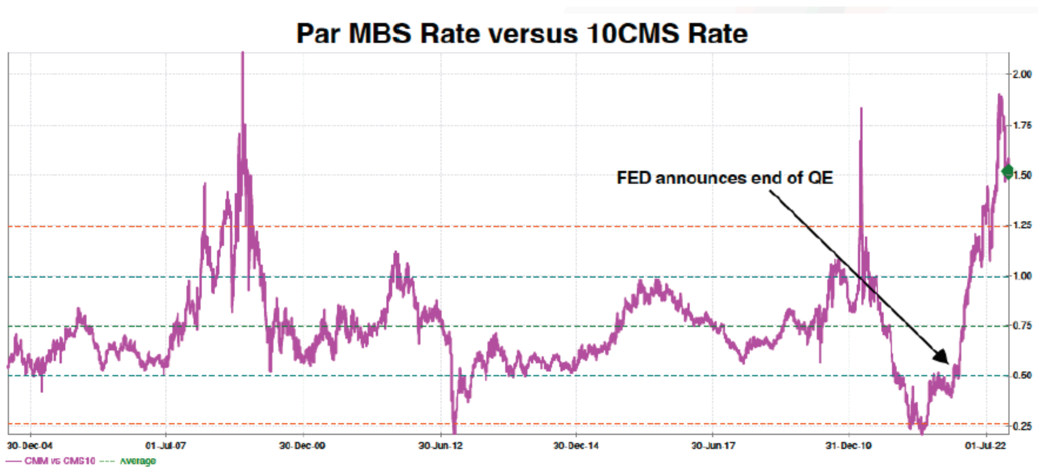
The US has been cushioned against the impact of a declining birth rate (Europe) and accelerating retirements (Japan) because of our net positive immigration - legal or otherwise. And while illegal immigrants often use social services such as education and health, they do pay taxes (sales and real estate via rentals) and commit substantially fewer crimes.

If you want to slam the immigration door shut, fine, you are entitled to your own opinion (but not your own facts); but be prepared for the consequence of higher prices and a slower economy.

Buy Mortgage-backed Securities (MBS) or Mortgage REITs

Last month I penned *"A Deep Dive into Mortgage Bonds"* where I detailed the MBS process and their various risks; I also described mortgage REITs.

Since publication, the -vinarija line- spread of MBS to 10yr rates has tightened from about 175bps to 160bps, and the two largest "vanilla" REITs have bounced from off their lows. (Perhaps I helped ?)



No matter, I still favor both assets relative to long-Duration bonds or Credit securities. The same caveats apply - if the FED does a "full Volcker" and jams rates above 6%, MBS will be hurt and mortgage REITs will be crushed.

Cautious love for quality BDCs

While I will not name tickers here, Barron's and other sources often highlight the larger listed Business Development Companies. The good ones have deep credit experience in lending to middle-market firms near the top of the capital structure. The loans are mostly floating-rate, so the rate risk is minimal. They employ leverage so gains and losses are magnified, and thus they can be volatile.

When doing your homework, check out the tangible Book Value relative to the price, and make sure their earnings cover the dividend payout. Some firms will keep their payouts fixed despite an earnings decline, which means they are paying back invested principal.

Buy AA-rated callable Municipal Bonds

Despite the bounce, highly-rated -crvena line- Municipal Bonds still offer their highest yields since 2014. I favor AA-/AA3 rated securities that mature in the mid 2040s that are callable in the late 2020s.

These callable bonds are similar to MBS such that one is short the embedded option which is now richly valued because of an elevated Implied Volatility (MOVE Index @ ~135) as well as an inverted Yield Curve (just trust me).

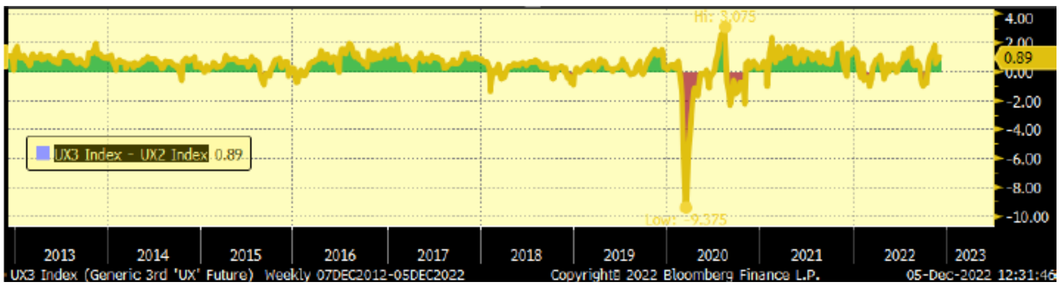
Highly rated California bonds can be bought at ~4.00% while similar New York bonds are available at ~4.15%. Local residents receive a tax equivalent yield of nearly 8.0%. [I recommend Fidelity to buy bonds without the retail mark up.]

Capture the VIX Term Surface Anomaly

One cannot "buy or sell the VIX", it's an Index that does not trade. However, one can trade the listed futures contracts which eventually cash settle at the closing value of the VIX.

These monthly futures (symbol UX) contracts are listed out nine-months with most of the volume occurring in the first three months (so one month to four months forward).

The -zuknuti line- is the spread between the first two contracts, which is generally positively sloped; that means the VIX two-months forward is usually about one point higher than the VIX one-month forward.



This <u>spread is much greater than its fundamental risk</u> but is kept wide by an exogenous supply::demand imbalance between speculative sellers of one-month options and portfolio hedgers who purchase one-year options.

An interesting income strategy is to sell the two-month VIX future, buy it back after one-month and roll it back out to the new two-month date. This ticket is a bit tricky, but fortunately there are ETF strategies available that do most of the heavy lifting, albeit still with the risk of a substantial drawdown.

The problem is that on those rare occurrences when the stock market flushes down, the VIX rises and inverts to the -vatra patch- spread.

Professionals hedge out this risk by shorting SPX futures (or SPY ETF) in some ratio, but that is too complicated for civilians. So, the better idea is to look for ETFs that use less leverage and buy deep OTM call options on the VIX as a catastrophic hedge.

Looking down from 30,000 feet, this is an insurance strategy where over the course of time it wins, but there are sporadic earthquakes that cause a drawdown. The key is to <u>size it properly</u> so one can ride out the volatility and earn the long-term expected profit.

The Payer Swaption Interest Rate Hedge Strategy

This is my creation which was first detailed in *"Fire Insurance"* – June 8, 2021, and updated in *"Fire Insurance – Revisited"* – February 1, 2022. It has performed as advertised: It closed 2021 at $37.54 when the twenty-year rate was near 1.75% and touched $88.51 in October when that rate skimmed 4.20%

20yr Rate	2.50% -100bp	3.00% -50bp	3.50% Unchanged	4.00% +50bp	4.50% +100bp	5.00% +150bp	5.50% +200bp	6.00% +250bp	6.50% +300bp
Parallel Shift	$46.26	$54.84	$67.00	$83.36	$104.39	$130.27	$160.92	$195.98	$234.88
One year hence	$44.11	$52.19	$64.10	$80.66	$102.44	$129.68	$162.84	$199.63	$241.08
One-year % change	-34.2%	-22.1%	-4.3%	20.4%	52.9%	93.6%	143.1%	198.0%	259.8%

I still suggest a 5% allocation relative to an interest rate sensitive portfolio.

Remember, you don't buy an interest rate hedge because you are bearish; you buy it because you are bullish and might be wrong.

My long-term buy and hold ETF Portfolio

Despite being retired from Corporate Wall Street for five years, I am still tortured by Compliance, and thus I cannot name tickers. That said, if you have two neurons connected by a spirochete you can make a good guess.

60% - Any broad-based vanilla Equity Index

10% - Three times leveraged 10yr futures strategy

10% - Hedged High Yield Index strategy

10% - Low-cost diversified Managed Futures strategy

5% - Low leverage VIX roll down strategy

5% - Payer Swaption Hedge Strategy

This is a quirky 60/40 portfolio that uses ETFs, some embedded with professional derivatives. The 60% Equity is easy, and 10% of 3x 10yr futures plus 10% HY is effectively a 40% allocation to Bonds. The Swaption Hedge knocks down the interest rate risk to allow for the addition of 15% leverage via VIX income and diversified Managed Futures.

My personal account is functionally similar except I include REITs, CEFs and MLPs for leverage and long-dated Muni's for Duration.

Concluding Comments

I will confess it was fun to "talk smack" to Team Transitory last year, and I was sometimes not a good winner (sorry mom). And I will confirm they are now correct that last summer's +8% CPI prints were the top, likely not to repeat.

But the real question has not changed: How long is "Transitory" ?

I have offered the snark that "life is transitory", which while true, is not helpful. A cohort of super smart experts has suggested CPI can return to ~2% by year end, and the market agrees which is why it's pricing in rate cuts next summer.

I am not so sanguine. I think CPI inflation remains above 4.0% for all 2023, and perhaps longer. Millennials are at their peak years of consumption demanding services from a declining Boomer/Immigrant cohort. This should keep upward pressure on wages (4%-5%).

I think the FED hikes to 4.75% and holds, I do NOT see a rate cut next summer.

The caveat, of course, is that the Yield Curve is right and the economy hard lands into a vicious recession. But if I am right, what does an extended 4% inflation rate mean for the markets ? It does not bode well for long-duration bonds presently near 3.50%; and commercial real estate will be toast.

Equities will be tricky since moderate inflation will pump up nominal earnings (EPS), but higher rates will offset that with a lower P/E ratio.

During the Clinton Presidency, CPI was about 3%, USTs about 6.5%, the SPX advanced 18% annually and we completely closed the budget deficit. Please remind me why everyone hated Bill and Hillary ?

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

Harley S. Bassman
December 13, 2022

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.

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

As a reminder, I am not an investment advisor, nor is this a solicitation. You should not rely upon this Commentary for accuracy, and you should seek advice from a professional. Finally, I personally own a variation of these investments.

Appendix: Special trade for the Professionals

Sell 2yr into 30yr payer swaption, K = 4.00% SOFR @ 305bp (108nv)
Buy 10yr into 30yr payer swaption, K = 4.00% SOFR @ 480bp (73nv)
Net pay 175bps

This ticket is not for the squeamish: Forward rates of 2.72% vs 2.34% make it a monster Curve steepener with massive positive carry to offset the short gamma and long duration. I own it in my P.A. *Special thanks to Jordan Brink @ MS*