Convexity Maven

A Commentary by Harley Bassman

December 12, 2023

"2024 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.

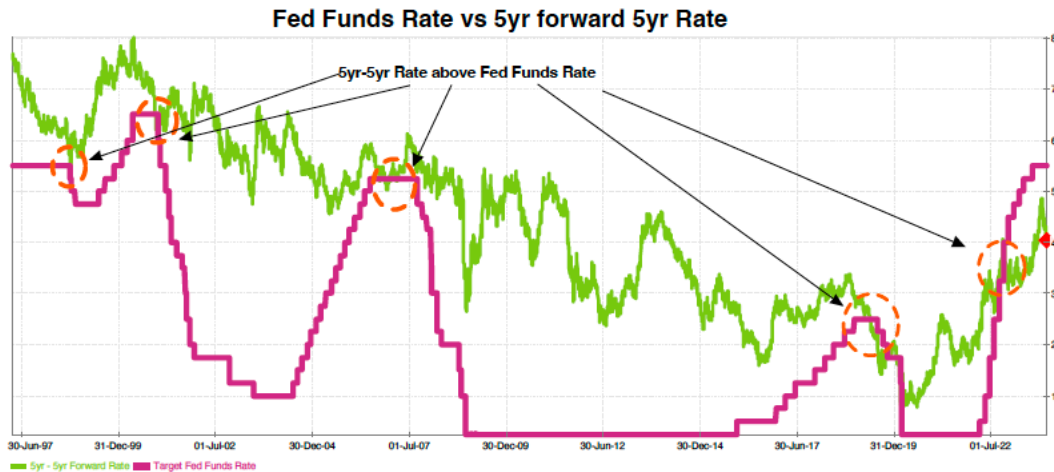
I usually caution that my portfolio construction is not suitable for widows and orphans, but this year I will describe a different menu - a buy and hold portfolio constructed for those who have a distant horizon with little desire to "trade".

As many of you know, I am the Managing Partner at a firm I cannot mention, where I create and manage financial "strategies" whose tickers I cannot name. We utilize Professional investment products (Futures, Options, Total Return Swaps, etc.) to offer civilians access to the best-in-class construction at a modest fee.

Before I detail this year's Model Portfolio let's consider the macro-landscape… and I repeat my mantra that sizing is more important than entry level.

The Macro View

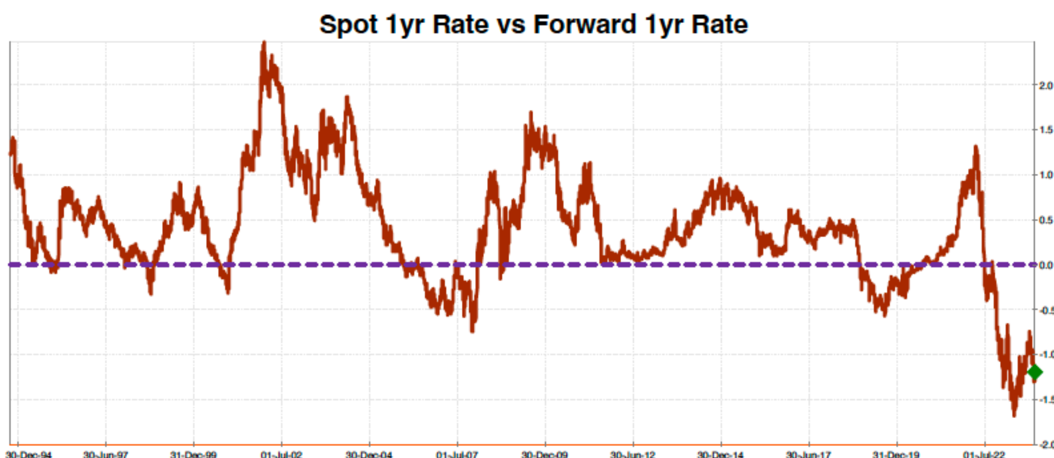
One must recall the Volcker era to find a time when the -nyekundu line- FED Funds rate was this inverted to the -kijani line- five-year forward five-year rate (the Yield Curve projected five-year rate five years from now).



Sources – Unless noted, all charts are Credit Suisse LOCUS

For good or ill (as my partner @profplum99 insists), there is no question that Fed Chairman Jerome Powell is standing on the monetary brakes in an effort to shove the inflation toothpaste back into the tube.

A few recent economic releases have cheered the markets to project that the FED will soon reduce their rate such that the -kahawia line- one-year rate will decline by nearly 125bps by next year end.



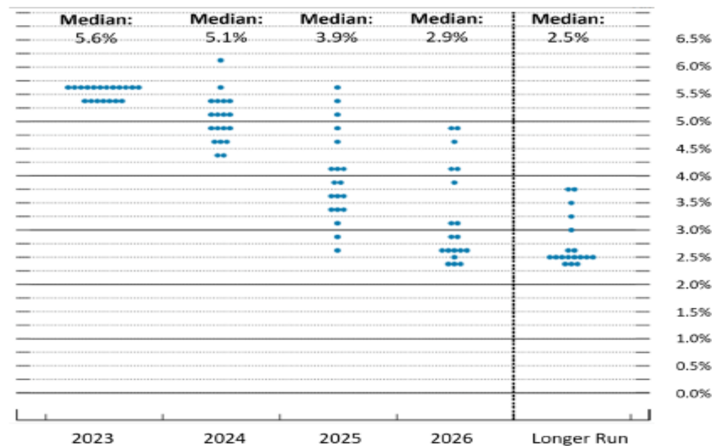
Let me say this clearly for the record: **Do not be distracted by bright shiny objects such as economic numbers.** The FED will not be cutting rates anytime soon without a COVID style catastrophe.

Aeschylus, Sophocles, and Euripides authored their Tragedies nearly 2500 years ago, yet they are still included in the Western syllabus; so too is Shakespeare 400 years past his prime – they all recognized the curse of man as Hubris (ego).

Chairman Powell is a well-educated gentleman with degrees from Princeton and Georgetown. He surely has a terrific family with a wife and three children; and his rumored net worth of $50 to $100 million offers almost every comfort.

Yet I can assure you that foremost on his mind is the epitaph that will be chiseled onto his tombstone. Will he be a latter day Arthur Burns (FED Chair 2/70 – 1/78) whose name conjures ruinous inflation, or be fitted for a Monetary policy halo alongside the sainted Paul Volcker (FED Chair 8/79 – 8/87) ?

Near the September FED meeting, the futures market guesstimated a year-end 2024 FED rate of 4.80%, not too far from the -zabibu- DOT's projection of 5.1%.



Source: FOMC September 2023 Summary of Economic Projections

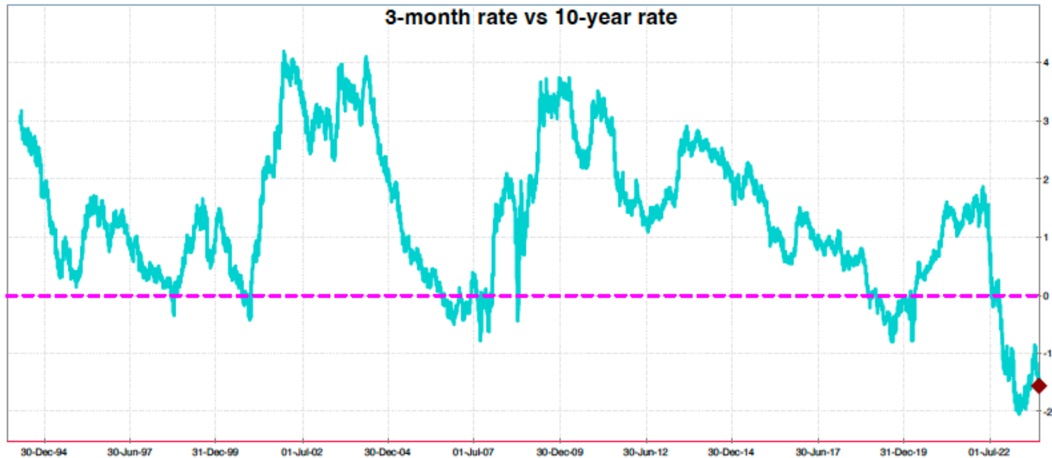
One shallow inflation-print later, with year-over-year Core PCE still cooking at 3.46%, the market rallied 70bps and priced in five FED rate reductions to 4.20%.

Brow beaten by President Richard Nixon, Burns kept rates low into the 1972 election. He tried to catch up with inflation by hiking his rate to 12% in June 1974, but soon reversed course to 5.5% in March 1975. He chased it again in late 1977, but it was too late as CPI accelerated to 14.8%, a post-war high.

Was it Burn's fault alone, nope; but he owns that legacy and thus an otherwise brilliant career in public service under five Presidents was irreparably tarnished.

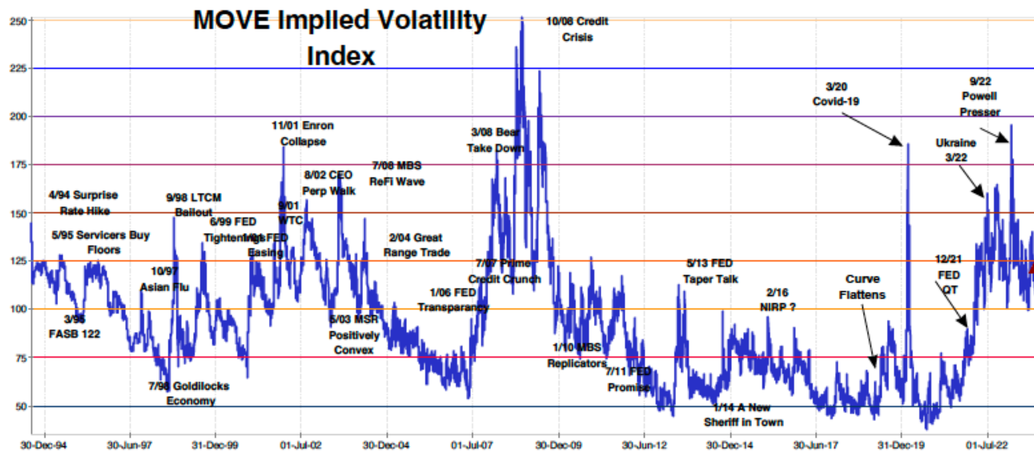
You have chewed one too many Gummies if you think Powell has not noticed. Chairman Powell is not cutting rates until he has driven a wooden stake into the heart of inflation **to secure his legacy**. I believe that means at least six months of PCE at a 2%-handle. This is a story about ego, not economic statistics.

This begs the question of how much further the bond market can rally, and my answer is - not much. Even though most pundits and traders quote the popular 2yr rate versus the 10yr rate, the renowned recession indicator is based upon the spread between the -kituruki line- 3mth rate and the 10yr rate.



After kissing a spread negative 125bps, I suspect longer-term rates have reached a local nadir, unless the FED cuts its rate well before the timeline I have suggested. While this extreme inversion is not relevant to those who hug the Index, leveraged speculators can only bleed the negative cost of carry for so long before their bosses fire them.

As such, interest rate Implied Volatility, as measured by the -bahari line- MOVE Index is likely to decline further. While it will not reach the lows touched during QE (Quantitative Easing), a "FED on hold" profile can push the MOVE to 80ish.



Finally, I think inflation will be harder to tamp down then expected for reasons of demographics and immigration, a notion I have offered in prior Commentaries.

2023 issued Mortgage-backed Securities (MBS) “strategy”

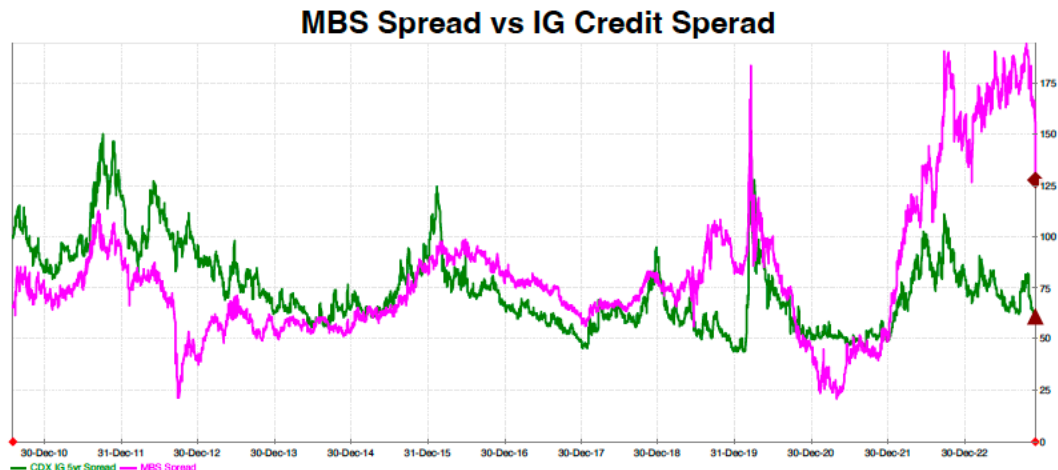
This is my best investment idea for 2024; and while the train has left the station there is still plenty to go on this ride.

Legacy MBS issued during QE with coupons between 2.0% and 3.5% make up nearly 70% of the MBS Index. As such, buyers of any product that mimics this Index are buying securities with an average coupon of 3.15% at a price of ~$85.

As detailed in “The Center Cut” – November 1, 2023, this is a lousy investment for many reasons, foremost is that its coupon distribution is about 3.7%.
Not too sharp for in “income” security.

Newly issued MBS have coupons of 6% with a distribution near that level.

Last month, newly issued -pipi line- MBS sported a yield spread over the 10yr rate of +190bps, a level touched only briefly during the 2008/09 GFC and the Covid panic in March 2020. They have rallied somewhat to about +150bps, but have no fear, they will eventually grind to their “forever average” of +75bps.



Zero-credit risk MBS are still +85bps to -kabichi line- Investment Grade (IG) corporate bonds. This is almost silly since the FED has made it clear they will use their Monetary tools to slow the economy to dampen inflation. As night follows day, such actions will cost jobs and widen credit spreads as defaults increase.

My highest conviction trade is to sell MBS Index products (legacy MBS) and buy my newly issued MBS “strategy”. Just make sure to buy back a bit of duration to balance out your rate exposure. You should also reduce (sell) credit risk and buy this strategy plus a few 10yr Treasuries.

Five times levered UST 2-year futures "strategy"

The reason the Yield Curve is inverted, where longer-term rates are lower than shorter-term rates, is that investors want "Duration". Duration is a measure of how much a bond's price moves for a 1% change (5% to 4%) in rate.

For such a change, two-year bonds move about 1.85 points, ten-year bonds about 8 points, and thirty-year bonds about 17 points. If you think rates are going to move a lot, you want to own some duration.

Because the Curve is inverted, -zambarau line- 2yr rates will move the most when the FED reverses course. What you need then is a "strategy" linked to the 2yr rate, with the duration of the 10yr rate.

Happy days, such a NYSE listed "strategy" is now available. It buys 5 dollars of the CME listed futures contract for each dollar invested. As such, a 1% decline in the 2yr rate will offer roughly a 9.25% return. [5 * 1.85 = 9.25]

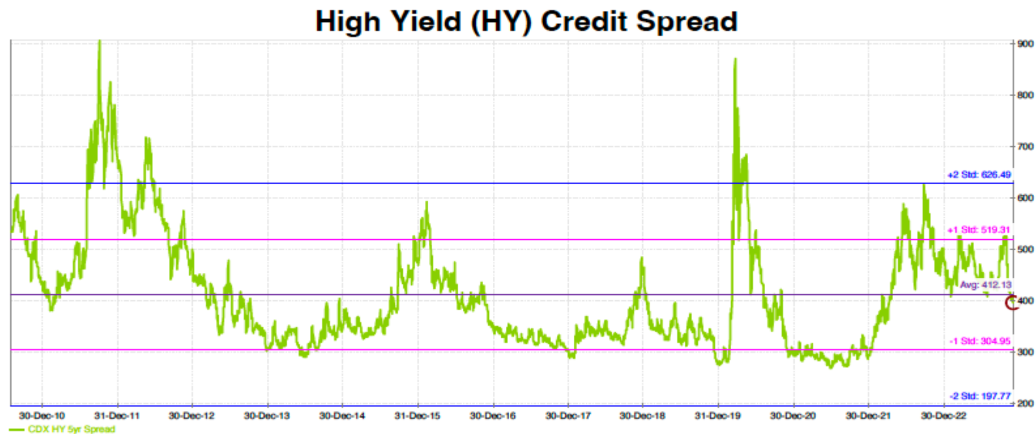
If you believe that the FED is done, or darn close to it, this strategy is functionally long convexity while earning a positive return.
[For propeller heads - long gamma and long theta.]

If the 2yr rate can only rise by 50bps back to its high of ~5.15%, but can decline by 200bps to near ~2.75%, we have an unbalanced risk::return profile, and a great example of positive Convexity.

<u>This may be the best Equity hedge available</u>. The only way to puncture the SPX rally is a hard landing, and in such a case, the FED might yank the chain and drop rates quickly. Not to zero, that will never happen again, but they could have a 1.5% rate which would pin 2yrs at 2.00%. One earns a nice positive return (unlike a decaying option) with serious duration in a crash scenario.

Better-Beta cushioned High Yield "strategy"

I do not love investing in -chokaa line- High Yield (HY - Junk) bonds at their current spread levels. In fact, I find it somewhat anomalous that FED action has created the most inverted Yield Curve since the early 1980's, yet the HY spread of ~400bps is slightly below its long-term average.



I suspect the cause is NOT investors making a fundamental statement on the economy, nor the usual "grab for yield" since one can earn 5.4% on three-month Treasury bonds. Rather it is likely the lack of supply since struggling borrowers cannot afford to lock in an elevated 8% to 10% funding rate.

All that said, it is not irrational to have a permanent allocation to HY since timing the market is a fool's errand. What you need is a strategy that is Index-linked but offers a "better beta", and such an NYSE listed "strategy" exists.

Bulge-bracket Wall Street dealers need to hedge their HY inventories, but it is prohibitive to short a single name bond. Alternatively, they "short the Index" using a professional product called a "Total Return Swap" (TRS). The dealer will pay the total return of the HY Index and receive back a rate linked to short-term rates. More often than not, the rate they receive back is at a significant discount, perhaps the 3-month Treasury bill rate less 100bps.

The strategy takes in money and invests it into 3-month bills, presently at 5.4%. The strategy receives the exact HY return, but only pays the dealer 4.4% (reflecting the 100bps discount). This strategy will fully mimic the Index, yet offers an additional return of 100bps, or whatever the spread dealers offer on the TRS roll date.

Total Return Swaps, such as this, are only available to professionals who have an ISDA agreement with Wall Street dealers. This strategy passes along the advantageous economics to civilians for a modest fee.

But wait, there is more…..

This Better-Beta HY strategy also employs another investment construction that too is only available to professionals.

The strategy enters another Total Return Swap where it receives the net income from a portfolio that buys about 100 "Quality" names and sells about 100 "Junk" names, plus a small equity adjustment.

This popular Hedge Fund construction is known as the Quality-Junk TRS.

The math is a bit complicated, but ultimately it creates a synthetic put option on the HY Index for a low cost.

Managed Futures "strategy"

I am not going to try and sell you on a "managed futures strategy", which is more commonly known as actively managed trend following.

You either believe or you don't. These trend following strategies are all rather similar, except some have a greater focus on commodities rather than equities.

The main features of this "strategy":

1) Diversification from the standard 60%/40%
2) No lock ups, as it is listed on the NYSE
3) A significantly lower fee of 75bps rather than 2%/20%

Multi-QIS Alternative "strategy"

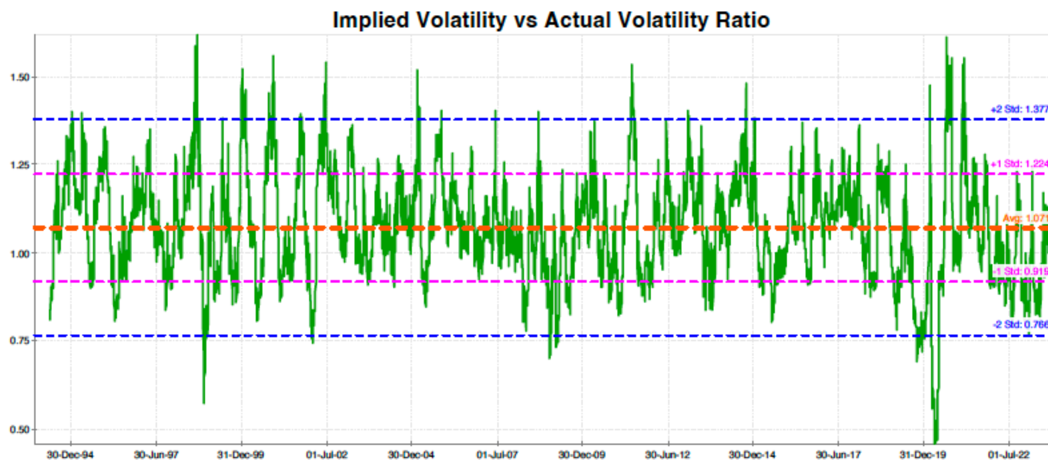
Quantitative Investment Strategies, or QIS, is central to how the largest Hedge Fund managers earn their profits and can afford their condos at 220 Central Park South. These are computer-driven systematic investments where perhaps a few dozen are grouped together such that their volatility is reduced relative to their return profile (Sharpe ratio).

Again, using a professional ISDA the "strategy" buys 3-month USTs and enters into a selection of Total Return Swaps that complement each other.

The value propositions are identical to the managed futures "strategy". Both offer professional products to civilians as listed strategies with a low fee.

VIX Income roll-down "strategy"

Generally, the short-term -aspargun line- Implied Volatility on liquid assets (Bonds, Stocks, and Commodities) trades about 8% above their Actual Volatility.



There are many reasons for this, but primarily it is driven by the fact that risk preference is not neutral, i.e., the pain of losing a dollar is greater than the pleasure of making a dollar.

This 8% risk premium can be modeled as an insurance profit, but in fact it is closer to the net income of a casino where a slight mathematical edge can fund glittering chandeliers, a Celine Dion residency, and a $5 steak and egg buffet.

This is why some of the largest Hedge Funds employ a strategy of systematically selling one-month options and "delta hedging" every day at the close.

This puts downward pressure on the short-dated options (VIX, MOVE, etc.)

Orthogonally, there is significant upward pressure on longer-dated options as various entities need to purchase more stable risk protection.

In the Equity market, insurance companies that offer Variable Rate Annuities need to purchase one-year to three-year expiry options on the SPX to hedge the risks embedded in these products. Hedging of this sort is effectively required by State Regulators that monitor their risk management procedures.

In the Bond market, entities that own MBS on a levered basis, such as Hedge Funds and Mortgage Real Estate Investment Trusts (mREITs) buy three-year expiry interest rate options as this maturity most closely resembles the modeled risk profile of the embedded MBS prepayment option.

The juxtaposition of short-term option selling versus longer-term option buying is manifest on the -njano letter- VIX term surface. Notice the upward slope from the December 2023 VIX contract at 13.75 to the July 2024 contract at 18.62.

VIX Index | Export

CBOE Volatility Index Future

Source: Cboe Futures Exchange

Exchange Symbol: VIX,VX49,VX

Aggr Vol: 70,129 | Aggr Open

Futures | Spreads

Show: Weekly | Monthly | Quart

Description	Last
1) Spot	12.9200
▸ Weekly	
▾ Monthly	
2) Dec23 Monthly	13.7500
3) Jan24 Monthly	15.5000
4) Feb24 Monthly	16.4200
5) Mar24 Monthly	17.1500
6) Apr24 Monthly	17.6900
7) May24 Monthly	18.0000
8) Jun24 Monthly	18.3500
9) Jul24 Monthly	18.6200

Drilling down further, the -nyasi splatter- is the price rolling spread between the second VIX futures contract (UX2 - presently January 2024) and the first VIX futures contract (UX1 - presently December 2023). Rarely over the past decade has this spread been negative.

The persistent positive spread between the first and second VIX futures is wider than their economic fundamentals support, exaggerated by conflicting forces of income sellers and hedging by regulated buyers at different expiry points.

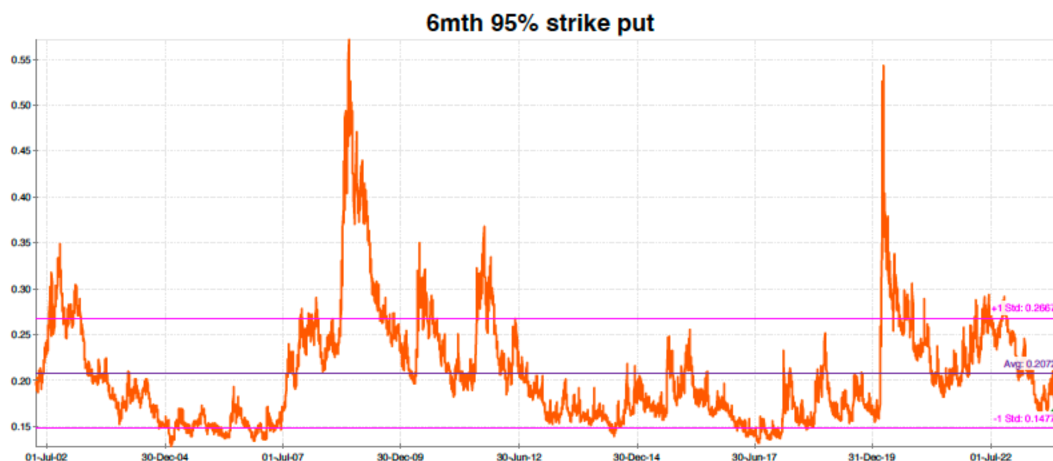
As such, a clever "strategy" is to sell the second contract until it becomes the first contract in thirty days, and then roll the exposure by covering the now front contract and re-selling it into the second contract – lather, rinse and repeat.

Since this strategy is similar to an insurance company's exposure to a hurricane, so too can the market experience a real "crash" and cause the VIX to jump significantly. To mitigate this drawdown risk, the strategy purchases call options on the VIX. While such hedges reduce the strategy's income, it nearly eliminates the risk of a 2018 XIV calamity.

Out-of-the-money SPX put options

I don't love this trade. In fact, my advice for risk management is to properly size your trades since SPX options tend to be over-priced.

But if you use leverage, or do not want to realize a taxable gain by paring back a position, presently -machungwa line- six-month expiry, 5% out-of-the-money SPX put options are trading at nearly the lowest dollar price in twenty years.



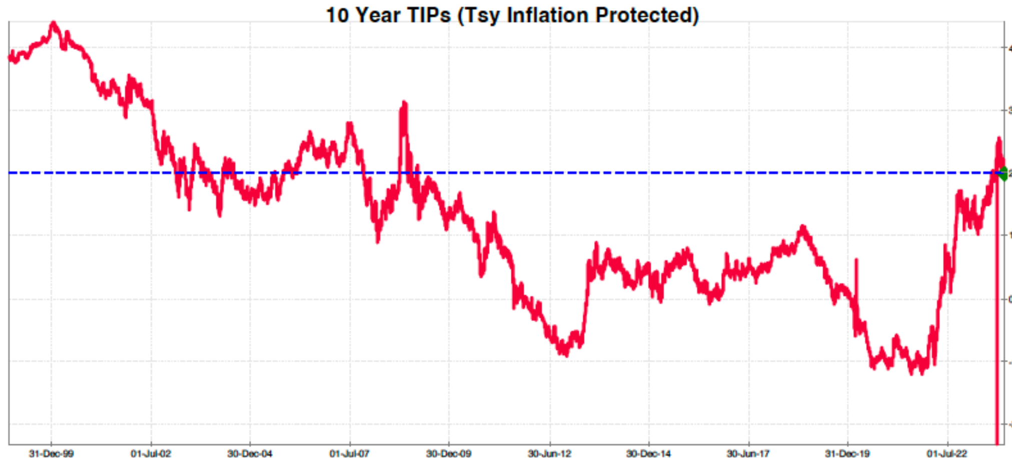
Long-time readers of these Commentaries will recall how the FED's and ECB's zero interest rate policies (ZIRP) made call options extremely cheap, on both outright basis, as well as relative to put options.

Conversely, the FED jamming rates up by over 500bps has massively cheapened put options. This is not a market comment on risk projections; rather it is simply the sausage-making result from the Black-Scholes option pricing model.

Lightening Round Potpourri

Ten-year TIPs (Treasury Inflation Protected Securities)

Buying bonds is always tough, because ultimately you are paid back in nominal dollars at Par (100). Thus, there is risk your deferred spending (savings) may buy fewer loaves of bread in the future. TIPs -damu line- at a 2.00% real yield (inflation plus 2.0%) is an easy addition to any portfolio.



Derivative-enhanced Aggregate Bond "strategy"

Derivatives became a "dirty word" after the 2008/09 Great Financial Crisis (GFC). But most derivatives are rather boring, they just don't require immediate cash.

Professional investors use derivatives for a variety of reasons, but mostly because derivatives often offer a "better-beta" than a standard investment. Better-beta means one receives a higher absolute return, the same return with less volatility, or both, over simply buying the vanilla version of the asset.

Year-to-date 2023 our "strategy" has beaten the AGG Index by almost 300bps.

Interest Rate Hedge "Strategy"

Of course, I am going to remind you of my favorite creation, that received numerous kudos for being up over 200% from January 2022 to October 2023.

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

Concluding Comments

Demographics are the iceberg of the economy; its immense power is mostly invisible to the naked eye. 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.

My general proposition is that Boomers are retiring sooner than anticipated as their (nominal) net worth has increased sufficiently due to expansionary FED policies. In contrast to prior economic studies, spending will not decrease with age, in fact, it may well increase since "you can't take it with you".

Millennials are forming households later than Boomers, perhaps by five years. Millennials are now entering their peak spending years as they have children and outfit a home. This notion is supported by the solid bid for housing, despite much higher mortgage rates.

To support the struggling Millennials, Boomers are transferring some of their inflated assets – notice that 33.4% of home purchases in April were "all cash".

The labor supply is tightening as productive Boomers retire while Millennial spending ramps up - not exactly a recipe for softening wage growth, the key driver of Service Sector inflation.

I am not predicting a 1970s style inflation, but I think the notion that inflation will quickly dip below 2% is a fantasy. The ultimate train wreck will be funding Social Security and Medicare for the giant Boomers cohort, which seems almost mathematically impossible under the current policy (tax and spending) structure.

But that is a story for another Commentary.

NOTE: Not mentioned here is an allocation to a diverse Equity Index, which should be 40% to 60%, with the remaining spread from the above as suits.

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

Harley S. Bassman
December 12, 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.

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.

The Convexity Maven ("CM") is a publisher, not a registered investment advisor, and nothing in CM's Commentary is intended, and it should not be construed, to be investment advice. CM's Commentary is for informational and entertainment use only. Any mention in CM's commentary of a particular security, index, derivative, or other instrument is neither a recommendation by CM to buy, sell, or hold that security, index, derivative, or other instrument, nor does it constitute an opinion of CM as to the suitability of that security, index, derivative, or other instrument for any particular purpose. CM is not in the business of giving investment advice or advice regarding the suitability for any purpose of any security, index, derivative, other instrument or trading strategy, and nothing in CM's Commentary should be so used or relied upon.

CM hereby expressly disclaims any and all representations and warranties that: (a) the content of its commentaries are correct, accurate, complete, or reliable; (b) any of its commentaries will be available at any particular time or place, or in any particular medium; and (c) that any omission or error in any of its commentaries will be corrected.

Although from time-to-time CM's commentaries may link to or promote others' websites or services, CM is not responsible for and does not control those websites or services.

CM's Commentary is published and distributed in accordance with applicable United States and foreign copyright and other laws.

For the record, the Convexity Maven publishes commentaries and maintains a website as an exercise of the unlimited right to offer non-commercial speech and publication under the First Amendment of the United States Constitution; notwithstanding our current President.

At any given time, CM's principals may or may not have a financial interest in any or all of the securities and instruments discussed herein.

x