The Convexity Maven

at

Simplify Asset Management

A Commentary by Harley Bassman

February 15, 2022

"Dangerous Curves Ahead"

In the world of medicine, the surgeon receives all the glory. They work in an open theater with Puccini playing in the background. In front of the cameras, they describe how they miraculously saved the day dissecting a cancer from a sheath of nerves.

All the while the shlumpy four-eyed radiologist, laboring in the dark, receives zero credit for identifying the mysterious lump in the first place.

As a parallel in the world of finance, the stock jockeys always headline the news. The financial report first notes the Dow or S&P 500 and may toss in the price Gold or Oil; but us bond geeks are given short shrift.

This is a disrespectful anomaly since the interest rate market is the single best forecaster of the economy, and presently it is flashing: WARNING !

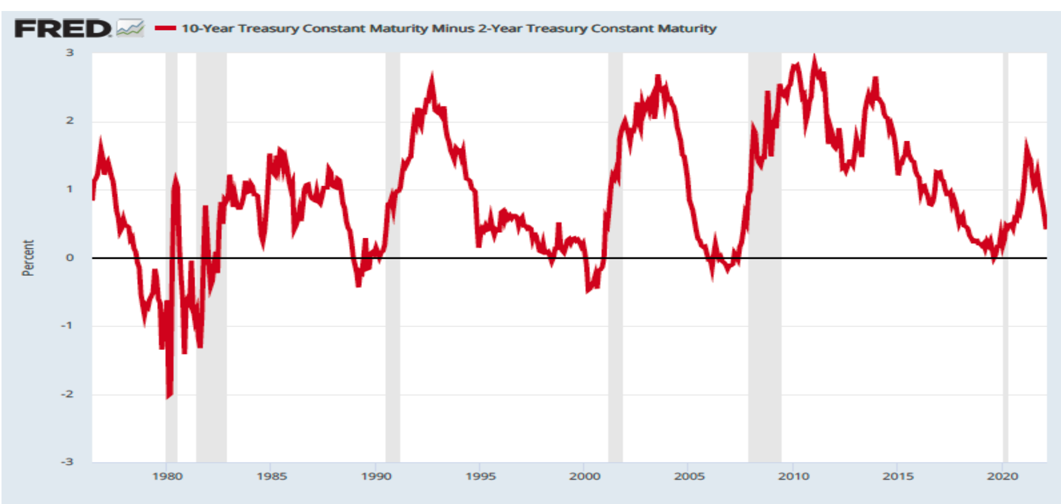
Under a thin veneer of civility, some Wall Street fixed-income (bond) traders, frequently sporting advanced degrees in Physics and Engineering, consider their street-smart equity (stock) market counterparts knuckle-draggers who occasionally catch a 50-bagger that launches them to stardom.

A so-called "Gentle(wo)man's size" interest rate trade is $50mm, with billion-dollar tickets being quite common. In contrast, a $50mm principal equity trade would likely require a nervous call to the boss.

The only time us bond geeks ever received any respect was when Bill Clinton's political adviser James Carville said in 1994: "I used to think that if there was reincarnation, I wanted to come back as the president or the pope or as a .400 baseball hitter. But now I would like to come back as the bond market; you can intimidate everybody."

Carville was referring to the old notion of "bond vigilantes", a concept that is well past its sell date. But his larger concept is still valid as it is <u>the interest rate Yield Curve that is the best predictor of the economy</u>.

The Yield Curve is the graphical measure of interest rates by maturity, with short-term rates on the left and long-term rates on the right. It is most often quoted as the difference between the two-year and the ten-year rates, but it can be almost any combination. Other popular relationships can be the three-month versus the ten-year rates, or the five-year versus the thirty-year rates.

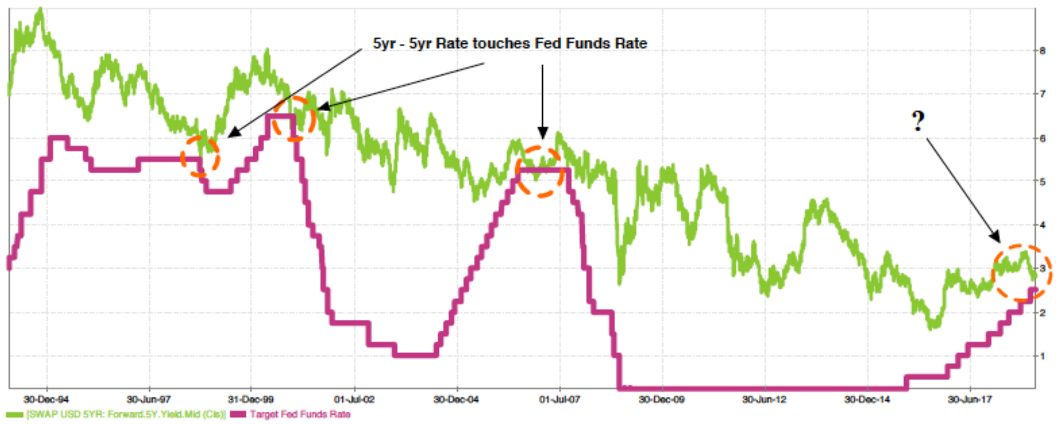


What is eye-catching in the chart above is how the -hemoglobin line- 2yr vs 10yr spread dips below zero (inverts) like clockwork soon before the -dust shading- of a recession. While there is no precise rule, on average a recession will be declared about 16 months after the Yield Curve inverts.

Such was the case that I noted in my November 15, 2018, Commentary that while there was not a cloud in the financial sky, the shape of the Yield Curve was "consistent with a recession in early 2020".

On February 6, 2019, I offered the chart below where the -kratom line- five-year forward five-year interest rate touched the -agaric line- Fed Funds rate with a further warning of economic hardship.

Fed Funds Rate vs 5yr forward 5yr Rate



Source – Unless noted, all charts are Credit Suisse LOCUS

While I will not claim I predicted COVID, the recession did arrive "on time", and the Yield Curve (interest rates) was again prescient.

With chest-thumping arrogance, many are pointing to the recent -pulp line- compression (flattening) of the 5yr vs 30yr Yield Curve as a precursor to yet another recession; this one induced by an overly aggressive Federal Reserve (FED) that has signaled rate hikes and balance sheet reduction starting in March.

Yield Curve - 5yr rate vs 30yr rate

However, this "Spot" spread has not yet inverted as it closed at a positive 8 basis points last week. Coincident with the Olympics, many pundits are jumping the gate by quoting the –Rhone line- "Forward" rate spread by claiming this is the market's best "prediction".

Let me say this emphatically…Forward rates are NOT a prediction.

This is an important topic that market pundits frequently (actually, almost always) misconstrue.

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; Forwards rates are not the market's best guess of future interest rates.

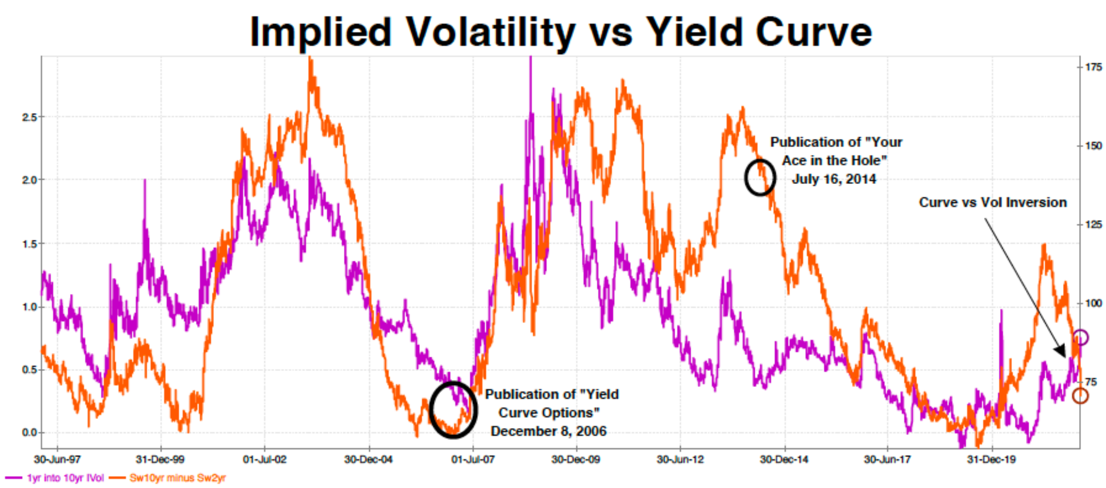
That said, I will concede that the Spot Curve does contain information about how market participants value risk, so considering the shape of the Forward surface is not without merit.

To review this concept in a bit more detail for interest rate civilians, let's examine the classic investment conundrum faced by widows and orphans.

If Grandma can either buy a one-year CD at 2% or a two-year CD at 3% annually, what should she do ? Ignoring compounding, she would only buy the one-year CD if she was certain she could roll-over this investment for the second year at a rate of at least 4%. [2% for the first year plus 4% for the second year equals an average 3% rate for the entire two-year investment period.]

This 4% breakeven rate is known as the *one-year rate, one year forward*. Since Wall Street derivative professionals can easily buy and sell these Forward rates, a Spot surface of 2% and 3% must create a 4% Forward rate or arbitrage opportunities will exist. (This is how the traders in "Liar's Poker" became rich.)

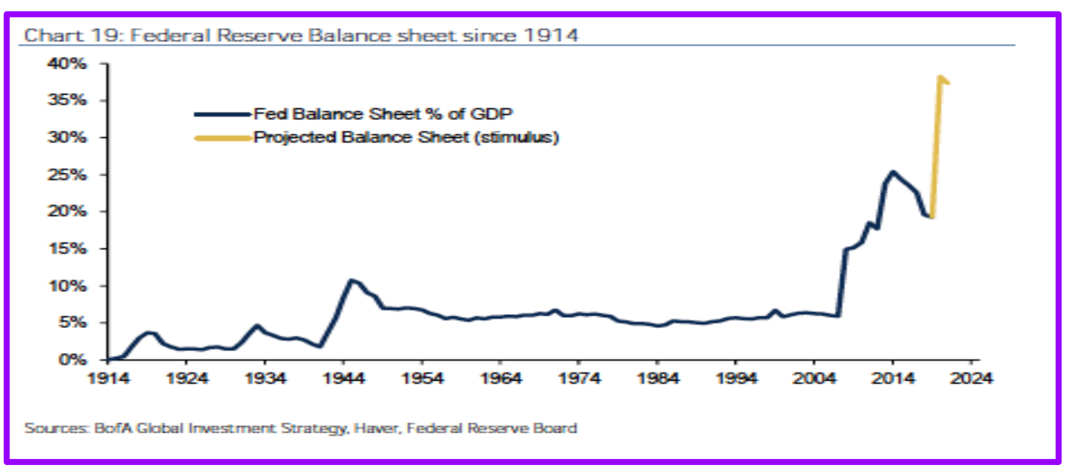
Ipso facto, the steeper the Yield Curve, the greater the distance between the Spot rate and the Forward rate; and this underpins the fundamental logic for my favorite chart: The relationship between the -Cointreau line- shape of the Yield Curve and the -zinfandel line- level of Implied Volatility.



Until Brian Greene can locate a wormhole into the Multiverse, time can only travel forward; as such, the future must become the present. With no consideration of whether the Forward grinds to the Spot or a Spot price heads to its Forward, a larger spread necessarily implies a greater uncertainty of the outcome. And since Implied Volatility is a function of uncertainty (risk), option prices tend to rise in conjunction with a steeper Yield Curve.

Warning Signs

I am not going to switch horses and say "this time is different"; however, it does seem foolish to ignore that the FED has placed a heavy -myrtille line- thumb on the scale with <u>the expressed intention of reducing both Rates and Volatility</u>.

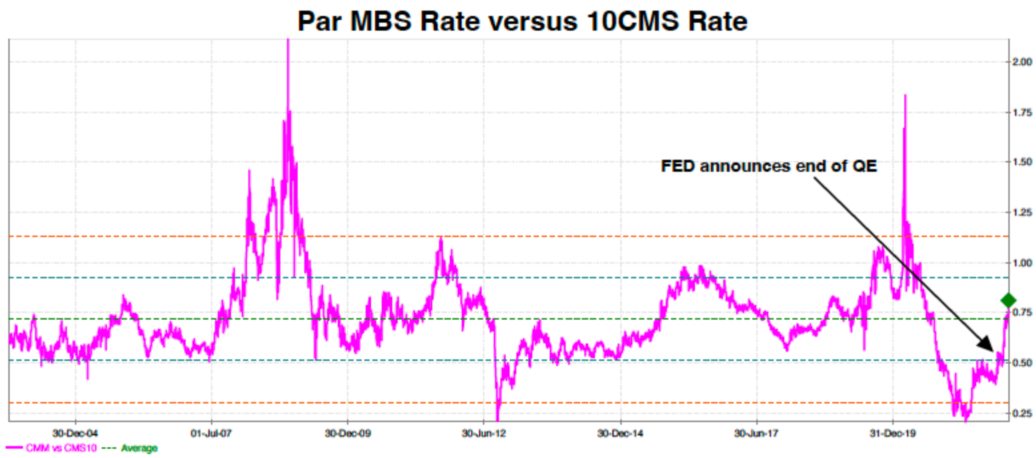


While I will not deny there have been economic benefits to flooding the system with liquidity, the downside has been an increase in Moral Hazard as both policy makers and investment managers cannot see a roadway glazed in financial fog.

We simply do not yet know the equilibrium levels of Rates, Credit spreads, and Implied Volatility once this version of Yield Curve Control (YCC) is removed.

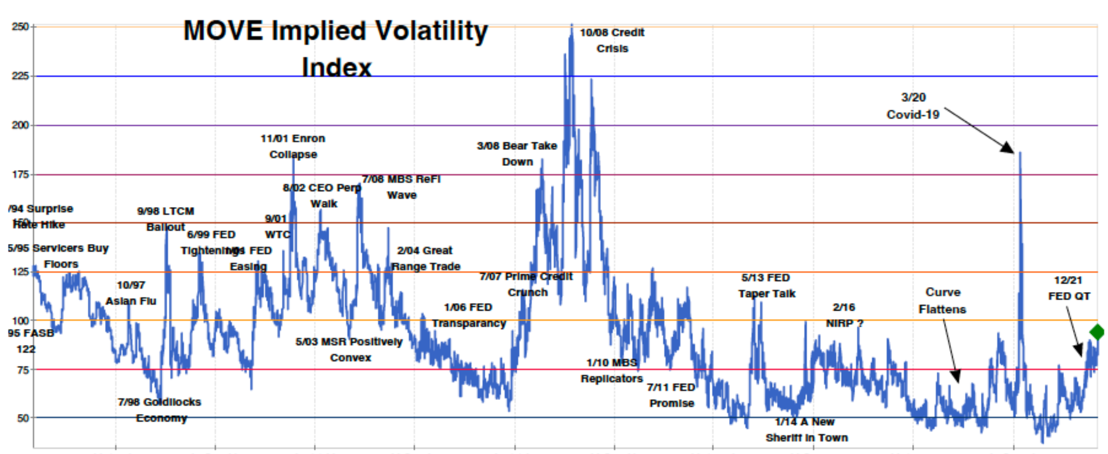
That said, there are a few indications the Yield Curve is artificially flat.

My favorite measure of Mortgage-backed Securities (MBS) is the -gariguette line- yield spread between MBS and the ten-year rate. Notice how this spread has doubled to 85bps since the FED signaled an end to Quantitative Easing (QE).



Similarly, the -Fossile line- MOVE Index (the VIX for bonds) recently reached 94; except for COVID, this is the highest close since the Taper Tantrum in 2013.

Both increases are **inconsistent with a flattening Yield Curve**.



While my memory is indeed growing cobwebs, I cannot quickly recall a flattening of the Yield Curve BEFORE the first interest rate hike by the FED. Usually, the FED starts hiking until something breaks and then long-term interest rates decline in anticipation of a recession and resulting reversal of FED policy.

Even more strange is that Yield Curve flattening usually arrives with short-term rates rising a lot, and long-term rates rising less. So, for example, the two-year rate may rise by 100bps while long-term rates rise by only 50bps; thus, compressing the Yield Curve.

This time, despite a raging increase in CPI inflation, in contrast to asset inflation, **the Yield Curve has rotated** with short-term rates rising and long-term rates declining.

Curve rotation is a late-stage event that should not occur before the first hike.

Macro Comments

In late 2018 I cautioned a recession may be coming as the Yield Curve flattened; but this was after seven FED rate hikes, with one more still in the pipeline. The current flattening is occurring before the FED has even pulled the trigger once. At the close of 2018 the annual CPI clocked in at 2.2%; last week we notched 7.5%, the highest in 40 years; and housing inflation has yet to be fully included.

Lacy Hunt was a recent guest on our Keeping it Simple webinar; he cautioned of a recession with a prediction of much lower interest rates. While I will not suggest he crossed state lines to Oklahoma (where there are nearly three times as many licensed dispensaries as California), I cannot connect the dots between a 12.2% Producer Price Index (PPI) and lower long-term rates.

Us University of Chicago monetarists have been warning for a decade that the FEDs helicopter money would someday have consequences; the truth will be revealed soon after the FEDs March 17 meeting when they offer if/how they plan to reduce their balance sheet, thus **finally removing their heavy hand**.

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

Harley S. Bassman
February 15, 2022

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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

Program Note: As noted in my title page, I have joined Simplify Asset Management [https://www.simplify.us/investment-philosophy]

I will not become a corporate shill, and I will continue to write independently; that said, Simplify has an investment philosophy that mirrors mine. Moreover, they presently offer a suite of ETFs with embedded options.

Careful readers will recall that I have hinted at finding a platform to offer my best ideas to the non-professional (civilians)…. **this is it.**

If you want to torture the GME shorts on Robinhood, have at it; but don't bother me. If you want to build a long-term investment portfolio that accelerates the gains and dampens the losses with a low fee structure, then ping Simplify.

I am placing my name on Simplify – That is a statement by itself.

"I'm looking for a hedge against my hedge funds."
Robert Mankoff – The New Yorke