Convexity Maven

A Commentary by Harley Bassman

September 24, 2019

"The Opposite of Bad is Worse"

Unconfirmed attribution to Winston Churchill

The kids are out of the house and I am back in Laguna Beach; thus I have no interest in mimicking the pundits pretending to be Howard Beale in *"Network"* who scream: "I'm mad as hell, and I'm not going to take it anymore."

As an aside, I will note that if there is any shouting to be offered, it should be that locking up Bryan Cranston in last season's Broadway version of this dated show likely precluded him from reprising his stellar performance as LBJ in the Tony award winning play *"All the Way"* in the new production *"The Great Society"*. While Brian Cox will certainly be terrific, Cranston's performance created one of the best shows ever (and I have seen quite a few).

Notwithstanding the above, a generous serving of opprobrium has been earned by the Western Central Bankers (CB) who continue to believe that negative interest rates have a place in a civilized society. I will not call this policy madness, but expecting a different result from a repeated failure is Einstein's definition of insanity.

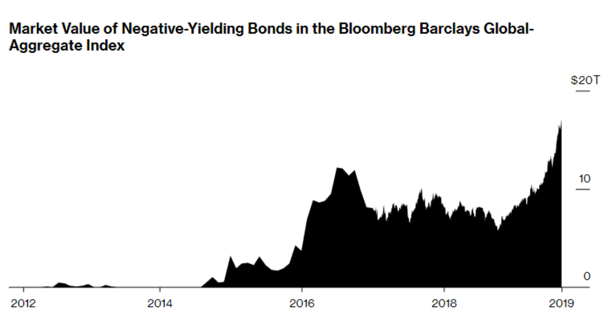
This is not to say that negative interest rates can never be justified, in fact, there are many times when they are rational:

1) At times of great domestic distress where a negative rate effectively includes the price of insuring your assets. Negative Treasury bill rates occurred in both the 1930's and at the outset of the Great Financial Crisis (GFC) when for a time banks were no longer deemed a safe haven.
2) Similar to the above, Gold can be considered an alternate currency (See *"Rumpelstiltskin at the Fed"* – April 19, 2016) which sports a negative interest rate once one includes the cost of storage. Using listed futures contracts as a reference, Gold presently has a yield of negative 2.00% from December 2019 to December 2020.
3) There is actual deflation where the real cost of living (not the Government manipulated CPI) declines over time; thus, the time value of money is negative, and a dollar today is worth less than a dollar in the future.
4) There is a demographic preference to delay consumption, perhaps because one desires to retire well in advance of their expected demise.

This final point is an interesting concept that should be more fully explored, especially in Europe. As a public policy parlor game, consider that if the 1935 Social Security Act was adjusted to reflect our current life span, the legal retirement age would advance to near 84 years. Financial planning for nearly two decades of retirement is one of the key reasons that demographics is a significant driver of interest rates and why I continue to opine that the Treasury ten-year rate cannot exceed 3.5% until past 2023.

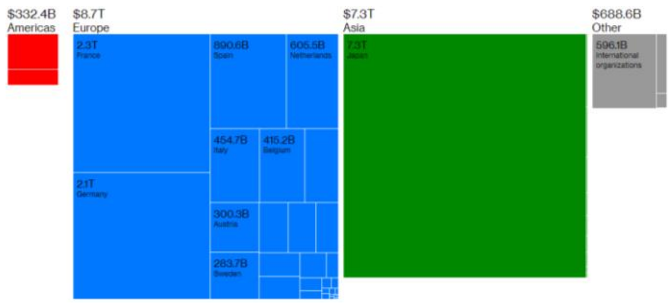
But none of the above is presently relevant. The U.S. financial system is in terrific shape, in no small part because the To-Big-To-Fail (TBTF) banks are effectively Government regulated public utilities. (I am almost surprised the name Consolidated Edison National Bank has not been trademarked.)

Moreover, despite the fact that inflation may be running below CB targets, top line U.S. inflation (CPI) is expected to be 1.8% in 2019 and 2.0% in 2020; respectively 1.5% and 1.6% in Europe; 0.7% and 1.0% in Japan; and 2.4% and 2.3% in China. (Source - Bloomberg)



While some short-term sovereign interest rates did dip into negative territory at the nadir of the GFC, as measured by the -eigengrau contour- above, there is little doubt that the negative yield on $17 trillion of debt securities has been manufactured by Central Bank policies.

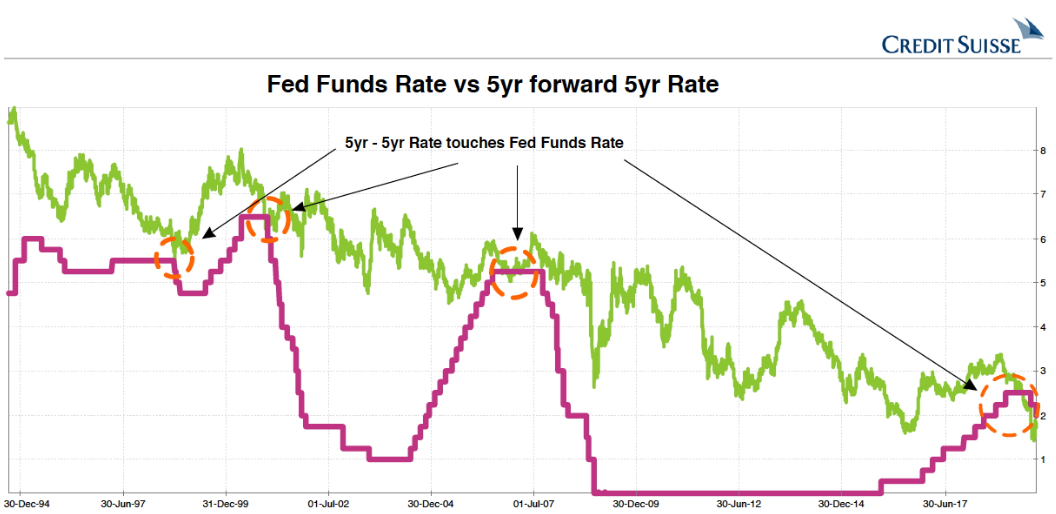
The vast majority of these securities are in the -delft box- of Europe and the -pickle box- of Asia where CB policy rates are mandated below zero.



Source: Above, prior & p6 - Bloomberg

In past commentaries I have noted that it is "never different this time", and that a Yield Curve inversion (long-term rates lower than short-term rates) usually precedes a recession by eighteen months. Thus, a repeat of history would indicate that the first inversion in December 2018 may lead to a recession sometime in the summer of 2020.

Many analysts dismiss this indicator since massive bond purchases by the CB's (Quantitative Easing or QE) has likely distorted the Yield Curve. In reply, I have charted the market price of the -parakeet line- five-year interest rate in five years (5yr into 5yr rate) versus the -thulian line- Federal Funds rate as a way to tease out a few clean tea leaves; I am using a rate implied by the shape of the Yield Curve as opposed to a spot rate that has been reduced by the CBs.



Despite my mantra, it is hard to envision a recession since so many economic indicators (admittedly backward looking) are optimistic. Terrific employment data, low inflation, and a stock market about to kiss its forever peak.

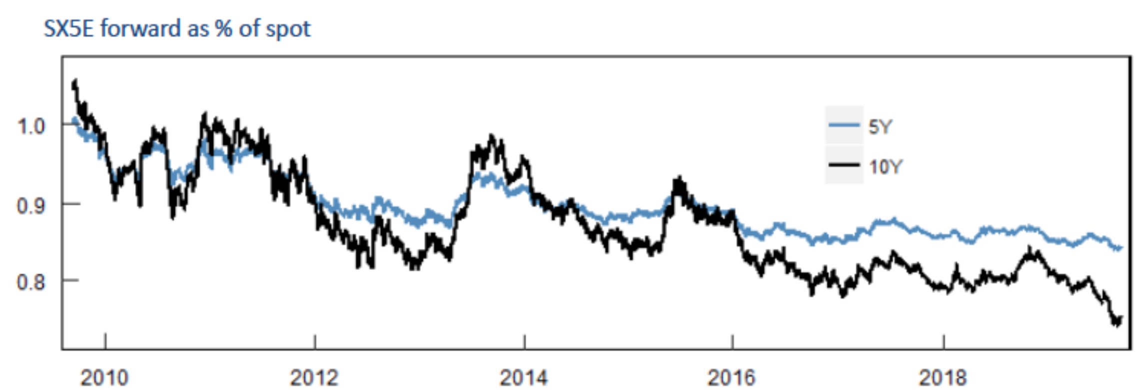
But the most likely reason we may avoid a recession is not the anticipated easing of Monetary policy, but rather the recognition that Fiscal policy may finally take center stage. A "helicopter money drop" via Modern Monetary Theory (MMT) is on the horizon, as it has been cleared for take-off by the political class.

MMT may arrive on the cat's paws of infra-structure spending or the naked policy of Universal Basic Income (UBI). But rest assured, as the under-saved Baby Boomer demographic reaches retirement age, there is no politically viable alternative to MMT. The average Boomer will turn 65 in 2020, and this entire generation will reach legal retirement in 2029; <u>massive fiscal expansion will occur within this window</u>.

While this may be disheartening to free-market capitalists, longer-term investors may well have another opinion as such policies can create unintended opportunities – "Yes, Virginia, there is a Santa Claus" (September 21, 1897)

As detailed in *"Forwards are NOT a Prediction"* – August 12, 2013, the price of a financial asset that settles in the future is not the market's best guess of what will happen, but rather the price where there is no free money available; it is said to be 'arbitrage free'. As a reminder, a forward/future is a transaction where one buys/sells an asset today but does not pay for it (settle) until sometime in the future.

While the math to calculate a forward price is not simple, ultimately it boils down to summing up a bunch of borrowing and lending costs into a single price. Since the cost of money is a key input, <u>the heavy hand of Central Bank rate manipulations can be quite impactful when compounded over many years</u>.



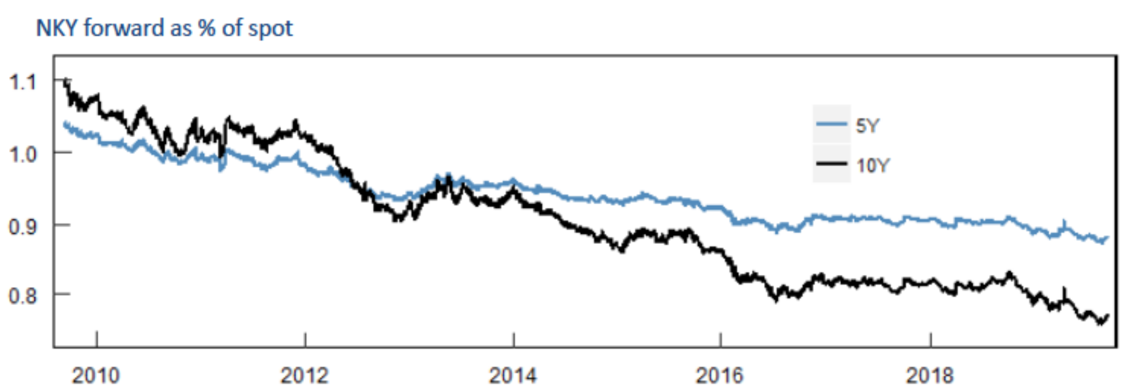
Source: Above and next - JPMorgan

The -picotee line- above is the five-year forward price of the European Dow Jones 50 (SX5E) relative to its current (spot) price, while the -licorice line- is the similar ten-year forward price.

Of course, it is absurd that sovereign interest rates are negative in much of Europe, but that does not alter the fact that one can borrow and lend at such rates. So, when one tosses the current price of this index into the mixer and adds in the expected dividends and other various borrowing and lending rates, a sophisticated investor can actually buy the SX5E five years forward at about a 15% discount and ten years forward at almost a 25% discount to its spot price.

Presently, what is more interesting to me is how the Bank of Japan's (BOJ) Monetary policy has distorted market prices. The main Japanese stock index, the Nikkei 225 (NKY), recently closed at 22,000 yen. On a Price to Earnings basis, this is the cheapest of the major indices with a P/E of 15.67. Below, the -smoke line- is the ten-year forward price of roughly 17,160, a 22% discount.

To repeat from above, <u>this is not the market's prediction of where the NKY will settle in 2029</u>, rather it is purely the mathematical result from discounting cash flows at a (CB suppressed) negative rate over a decade.



Japan has the worst demographic of the G-7 countries; and has been the most aggressive in its Monetary policy. The BOJ owns about 43% of Government bonds (JGB) issued and nearly 77% of the ETF market. There is little doubt they will expand these programs, perhaps to include buying single name equities. Such an expansion of liquidity will surely increase the nominal price of the NKY.

Thus, this sort of zero-cost long-term investment can be structured:

Buy 100 NKY call; Expiry ten years; Strike = 24,000 (9.1% out-of-the-money)
Sell 100 NKY put; Expiry ten years; Strike = 13,750 (37.5% out-of-the-money)

The low close since January 2014 is 13,885 and last year's high was 24,448.

Another unintended investment opportunity sourced from the heavy hand of G-7 Central Banks can be found in the Foreign Exchange markets.

In *"Grabbing the Wrong Tail"* – February 14, 2012, I detailed the notion of buying ten-year options on the USD / JPY exchange rate. And indeed, I executed this trade for myself.

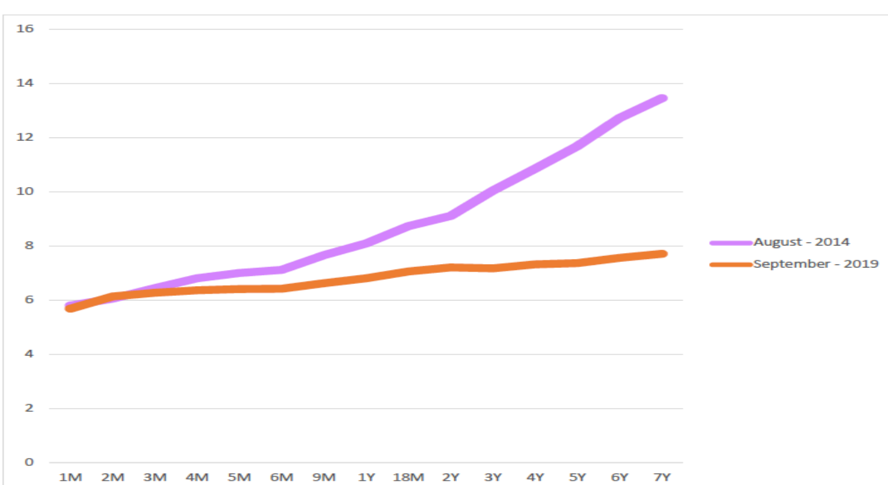
Time has passed and this option will expire in a few years. I still love the idea since <u>I am a true believer that the wild printing of fiat currency can only end in tears</u>. That said, this trade will take a bit longer to cook. Happily, the BOJ has suppressed Japanese financial markets such that with spot at 108.0 I could:

Sell 100 USD/JPY call option; Expiry = two years; Strike = 100; Px = 5.75%
Buy 100 USD/JPY call option; Expiry = seven years; Strike = 100; Px = 3.75%

Indeed, you read this correctly, the seven-year option costs 35% less (two percentage points) than the two-year option. To end the suspense, it is the seven-year option that is the 'wrong price' at 3.75%.

While the negative Japanese money market rate has similarly depressed the forward price of this currency pair, it is the BOJ's Yield Curve Control (YCC) program of that aims to keep its ten-year JGB within a band of -0.20% to +0.20% that has crushed the cost of options (Implied Volatility).

The -helio line- is the August 2014 Implied Volatility term surface (one-month to seven-year expiry options) while the -creamsicle line- is the current Volatility term surface. Note that there has been little change in short-dated option values, but longer-dated options have cheapened significantly. This is just plain cuckoo. The options market has placed scant probability on a financial or economic 'bump", despite the fact that the BOJ has indicated it plans to spin unlimited fiat Yen out of Monopoly money.



Before you ask, indeed it seems that these two tickets are orthogonal since the NKY trade is bullish and the JPY is bearish. On the contrary, the NKY is a claim on real assets, as such, this stock index should advance quicker than the JPY depreciates, similar to how German stocks rallied during the Weimar inflation.

The post-war Baby Boomer demographic (1946 to 1964) is the 'Pig in the Python' that is overwhelming public policy makers. Thankfully this cohort, across the entire G-7, was supremely creative and productive. Not only did they greatly expand the wealth of their societies, but also their global spending lifted billions of others out of poverty.

Presently they are entering retirement faster than the Millennials are forming households, thus the suppression of the Labor Force Growth rate which limits economic expansion. And if you follow this thread, you will appreciate that a significant restriction of U.S. immigration policy will only be more stifling.

The initial Global Central Bank response (QE-1 in the US) saved the system; but while well intended, QE-2 to QE~ have not been as effective, and in fact, I would propose they have actually hurt the economy. These policies have distorted market signals to the private sector; and have hand-cuffed the Adam Smith's "invisible hand".

The investment ideas offered here (they clearly are not "trades") exist for two reasons. First, overweening Central Bankers are loath to admit that Monetary Policy has reached its limits. Second, and this is a preview for my next Commentary, investment managers (and their clients) are overly reliant upon financial metrics that equate daily mark-to-market volatility with the likelihood that an investment will reach its ex ante expected return (think Sharpe ratios).

Notwithstanding the title of this Commentary, the world is not that bad. Western politics may be a tad dyspeptic, but 1968 was a lot worse than 2019. As a 1960s unwoke parent might have said: "Let me give you something to cry about…."

Sizing is more important than entry level. Well-intended Central Bank policies have created some delicious investment opportunities; but by their nature they will be volatile on a mark-to-market basis. Barbell your risk profile, keep some assets in the low volatility bucket, but also make sure you allocate enough to the 'elephant hunter' trades to move the 'needle' on your portfolio.

Your comments are always welcome at: harley@bassman.net
If you would like to be added to my distribution, just ping me.

Harley S. Bassman
September 24, 2019

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 of 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