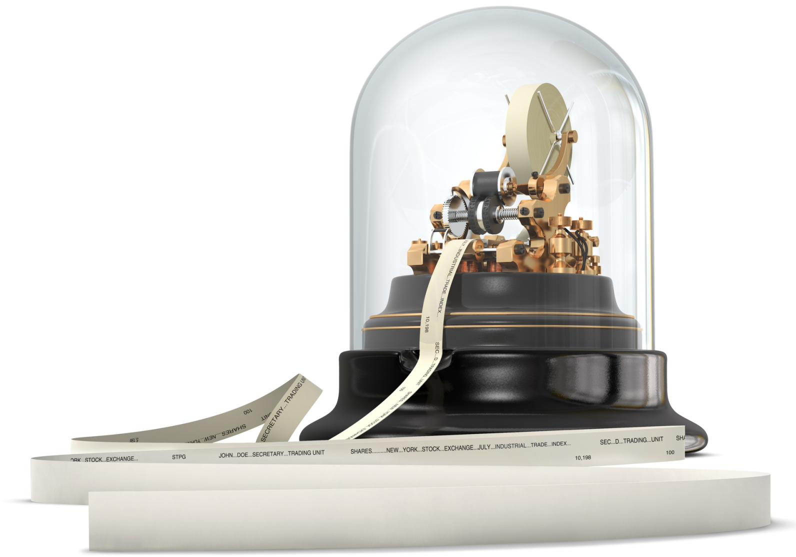
Convexity Maven

A Commentary by Harley Bassman

May 30, 2018

"2018 Mid-year Update"



"When the facts change, I change my mind; What do you do, sir ?"
Attributed (?): John Maynard Keynes – 1940

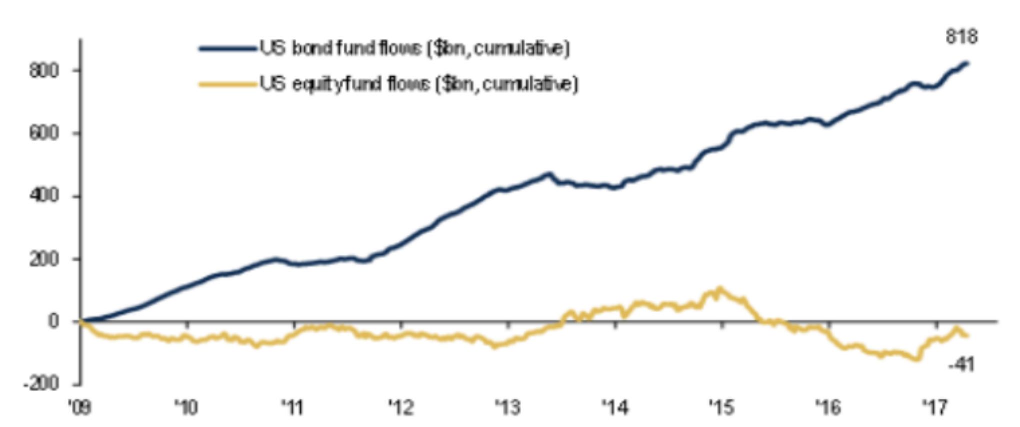
Frequent readers know that I do NOT 'trade', but rather that I 'invest' in the financial markets. My Model Portfolios **http://www.convexitymaven.com/themodelportfolios.html** seek out anomalies and opportunities with a two- to five-year horizon. I use the word "investment" purposefully as I have little interest in nips-to-blips Relative Value trades; rather I filter for clever constructions of macro ideas often sourced from panic-stricken counterparties who lack the courage of their convictions. And full disclosure: I offer the caveat that these investments have the potential to drawdown by more than the usual 6% Hedge Fund proscription.

Today's Commentary is not investment advice, but rather a brief overview of investments I have closed, modified, or initiated in my personal account over the past few months. (see *"The 2017 Model Portfolio"* – December 2, 2016)

While it does make good copy for pundits to offer their subscription service readers *Tales from the Dark Side*, I am not a "risk-off" bear. In fact, I think many equity markets are only on the high side of fair; and that long USD rates are closer to a buy than a sell. [As noted in previous Commentaries, I think demographics will not allow the T10yr to exceed 3.50% until 2023.]

However, there are a few clouds on the horizon that could darken.

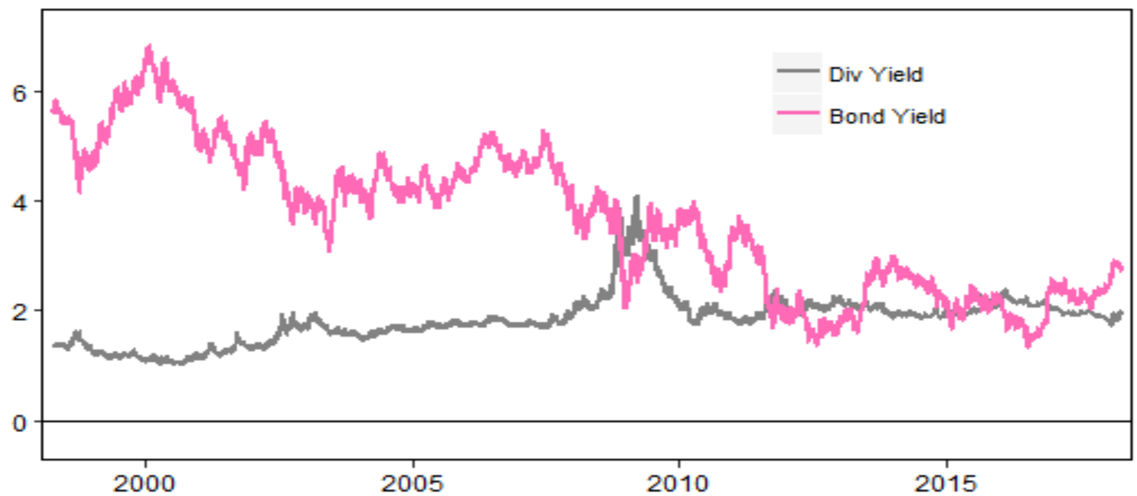
Foremost of concern should be the FED's well-advertised program of increasing interest rates. Since late 2015, the FED has hiked their overnight-rate six times from nearly zero to 1.70%. Justifiably, most investors are focused on to the flattening of the Yield Curve, the best precursor of a recession. However, my greater worry is that higher Interest Rates will dampen stock buy-backs by Corporations, who have been the ONLY buyers of Equities since the Great Financial Crisis. Shown below, Fund investors have channeled most all assets into –sodalite line- Bonds with nary a penny directed towards –barite line- Equities.



Source: BofA Merrill Lynch Global Investment Strategy, S&P Global, EPFR Global

While I know of no closed-form solution for how Corporations decide to adjust their capital structure to balance between Debt versus Equity, surely the cost of borrowing is one of the key drivers; and perhaps this rate relative to the dividend rate they pay their shareholders could be a component as it captures the opportunity cost of money.

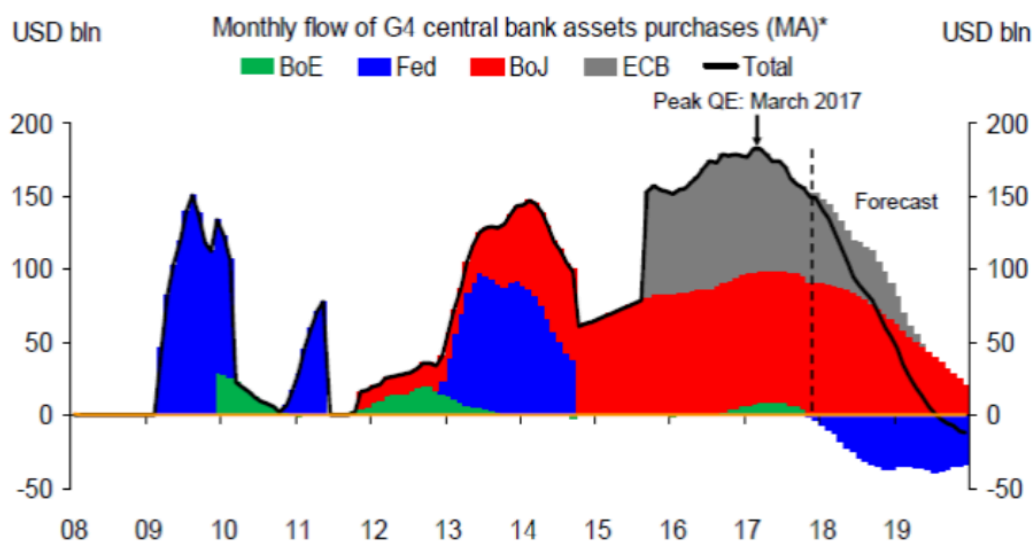
In support of this worry (on the next page), I offer the –rhodochrosite line- Dividend Yield of the SPX, presently at 1.90%, versus the -celestite line- T10yr rate at 3.07%. This spread at 127bps is a local wide.



Source: J.P. Morgan Equity Derivatives Strategy

As noted, I have no proof a relationship exists between the Dividend rate and the Interest rate; and since the US tax code encourages Corporations to return profits via buy-backs instead of dividends, I will not defend it with much vigor.

However, I will fully support the notion that G-4 Quantitative Easing (sometimes known as Lt. Col. Bill Kilgore-style Helicopter Money) drove up asset prices; and that the removal of such money-printing will have a deleterious effect on financial assets. Thus, it will soon be only the fundamentals that support asset prices since the technical of QE is expected to end sometime in the first quarter of 2019 (below).



*Note and assumptions: ECB & Fed data is 6m MA, others are 12m MA, Between Apr-2013 to October 2014 BoJ purchase of JGBs assumed to be around 7-7.5 trln Yen per month and Post November 2014, BoJs monthly purchase of JGBs assumed to be 10 trln Yen per month. Assumptions: Fed will redeem maturing assets as per the announced cap during the September decision. ECB will cut buying to EUR 30 billion per month from January 2018 and reduce to EUR 10 billion for October, November and December 2018 and eventually cut to zero in 2019. BoE assumed to remain the same as the Asset Purchase Facility to end in February 2017. BoJ to cut buying by Yen 3.79 trillion from January 2018.

Source: Fed, BoJ, ECB, BoE, Haver Analytics, DB Global Markets Research

My third worry is political, of course; but here the blame can be well shared. As offered previously, I believe there is the significant risk of unintended consequences from legal changes in Tax, Trade, and Immigration. While D.C. experts can quickly tabulate the impact of Tax and Trade policies, projecting the economic path from changes in Immigration law will be more nuanced.

The bottom line is:

$$GDP = Workers * Hours * Productivity$$

<u>To the extent we reduce the flow of immigrants</u> (legal or otherwise), or even more extreme, reverse the flow of immigration (a.k.a. deportation), <u>the GDP growth rate will decline</u> without an offset of more hours worked or greater productivity. I appreciate the public policy arguments on both sides, and I will not try to sway your views; I will only state that there are economic consequences to these decisions that can be significant.

This combination of forces has prompted a few portfolio adjustments; what follows is an outline of the modifications I have executed recently.

Closed positions:

As detailed in the table below, the SX5E dividend future for December 2020 (DEDZ-20 *listed on EUX-Eurex*) could be purchased in late 2016 at a 17.1% discount to the (front) 2016 future. This was in contrast to the sharply positive term structure of the SPX and NKY dividend futures.

Closing Prices

	SPX	NKY	SX5E
2016	45.50	325.80	118.50
2017	47.20	330.00	114.10
2018	48.15	337.50	111.10
2019	48.50	337.50	103.40
2020	49.15	343.10	98.20
2021	50.10	343.90	92.40
2022	50.90	345.40	87.40
2023	51.60	349.50	82.70

Normalized to 2016

	SPX: Current	NKY: Current	SX5E: Current
2016	100.0	100.0	100.0
2017	103.7	101.3	96.3
2018	105.8	103.6	93.8
2019	106.6	103.6	87.3
2020	108.0	105.3	82.9
2021	110.1	105.6	78.0
2022	111.9	106.0	73.8
2023	113.4	107.3	69.8

This was a silly anomaly driven by the hedging activity of Wall Street dealers who issued long-dated equity Structured Notes to retail investors.

Over the past two years, the SX5E Index has rallied by about 17%, while the (theoretically) less volatile DEDZ-20 has improved by over 30%. Certainly, a higher Index should presage increased dividend payouts, but the greater driver was the convexity charged unwinding of these hedges.

Below is an updated version of the prior table. Notice that the 2020 future now trades ABOVE the front (2018) contract; and adjusting for the passage of time (a constant fifth contract), even the 2022 future trades at barely a 1% discount.

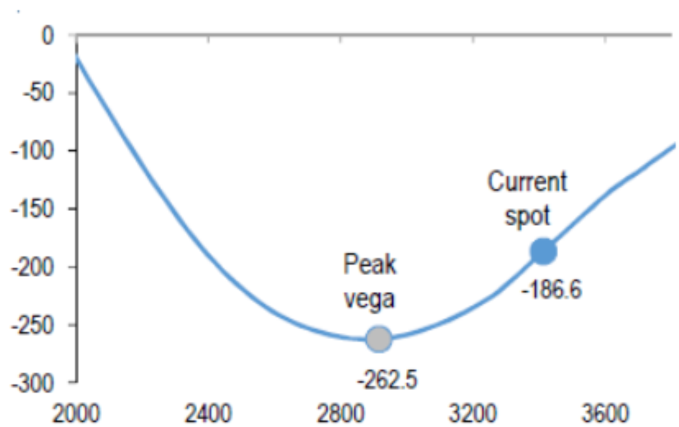
	Closing Prices		
	SPX	**NKY**	**SX5E**
2018	53.90	430.1	126.1
2019	56.75	470.1	126.2
2020	59.35	485.7	129.7
2021	61.60	497.7	127.5
2022	63.65	504.8	124.6
2023	65.65	514.3	121.8
2024	67.85	516.5	119.1
2025	69.75	516.2	116.8

	Normalized to 2018		
	SPX: Current	**NKY: Current**	**SX5E: Current**
2018	100.0	100.0	100.0
2019	105.3	109.3	100.1
2020	110.1	112.9	102.9
2021	114.3	115.7	101.1
2022	118.1	117.4	98.8
2023	121.8	119.6	96.6
2024	125.9	120.1	94.4
2025	129.4	120.0	92.6

There is likely still upside in the DEDZ complex as the 2020 contract is projected (by Wall Street) to realize nearly 140 at expiry. However, these contracts will now exhibit a negatively convex profile (they will decline faster than they rise for equal changes in the Index) because of the risk dynamics embedded in the Structured Notes whose hedging dominates trading of these futures.

The –lapis line- estimates the embedded Index optionality given an Index level; please note the increase (more negative) in Vega if the Index turns south. Thus, I have closed out my favorite trade not because I am bearish, but rather because the risk/return profile has turned sharply negative. I will re-establish a position on any meaningful retreat that pushes the fifth contract close to 110.

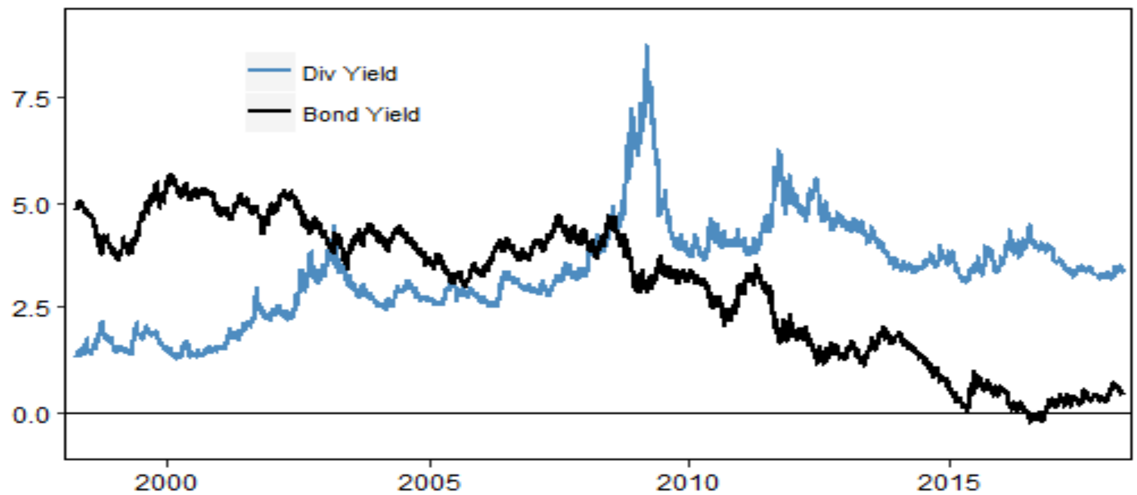
Euro STOXX 50 vega vs. spot profile of outstanding products (€ Mn)



Source: J.P. Morgan Equity Derivatives Strategy.

Modified Positions:

I still like the SX5E Index, but it has lagged the SPX and NKY over the post-GFC QE propelled rally. Critically, there is still a huge ECB manufactured spread between the –afghanite line- SX5E Dividend Yield and the –axinite line- German 10yr rate.



Source: J.P. Morgan Equity Derivatives Strategy

Notwithstanding firm Central Bank support, if the US stumbles, Europe may follow in sympathy. Moreover, the current 3575 on the SX5E Index is bumping up against the –beryl line- of 3643, the 50% mark between the year 2000 high and the year 2009 low and a location that has halted past rallies.

SX5E Index: 1998 to 2018

Source: Bloomberg

To thread this needle, I have executed a (*listed EUX-Frankfurt)* trade similar to:

Sell SX5E Dec-2021 K = 3000 call @ 515 IVvol = 17.75% Delta = 57%
Buy SX5E Dec-2021 K = 3600 call @ 260 IVvol = 17.00% Delta = 37%
Sell SX5E Dec-2021 K = 2600 put @ 175 IVvol = 19.00% Delta = 20%

The close-out the in-the-money K=3000 net takes out 430 points of cash;
The delta is unchanged from the original 3000-call vs 2200-put package;
The new K=2600 put is struck under the –grey line- Fibonacci level (above);
However, I am still short a trailing 2200 put from the initial trade.

This modification allows for full participation in a further rally while locking in a sizable profit if the Index falters. If you are fearful of a pullback of greater than 40% that would 'wake-up' the K=2200 puts, then this modification is not for you. That said, the 2200 put has a favorable decay pattern and I anticipate closing it before Q-1 2019 (see comments on page 3).

New Position:

Since Donald Trump received the Republican nomination for President, the MXN currency has depreciated about 10% versus the USD; and that is a nice recovery from the knee-jerk 18% decline shortly after he won the election. Of course, both events are mostly related to his not-so-kind words about NAFTA.

And after nearly a full retracement in Q-1, the MXN is back in the tank after the drumbeat of various trade-wars rumbled. I say bull-hooey. Indeed we have issues with China, both from an imbalance in trade as well as insufficient legal protections, but this is NOT the case with Mexico (and Canada).

	Imports	Exports	Total	Imports % Total
China	$462.8	$115.8	$579	**79.9%**
Canada	$278.1	$266.8	$545	**51.0%**
Mexico	$294.1	**$230.9**	$525	**56.2%**
Japan	$132.2	$63.2	$195	**67.8%**
Germany	$114.2	$49.3	$163	**70.1%**
South Korea	$69.9	$42.3	$112	**62.4%**
UK	$54.3	$55.4	$109	**49.8%**
France	$46.7	$30.9	$78	**60.1%**
India	$46.0	$21.7	$67	**68.7%**
Taiwan	$39.3	$26.1	$65	**61.4%**

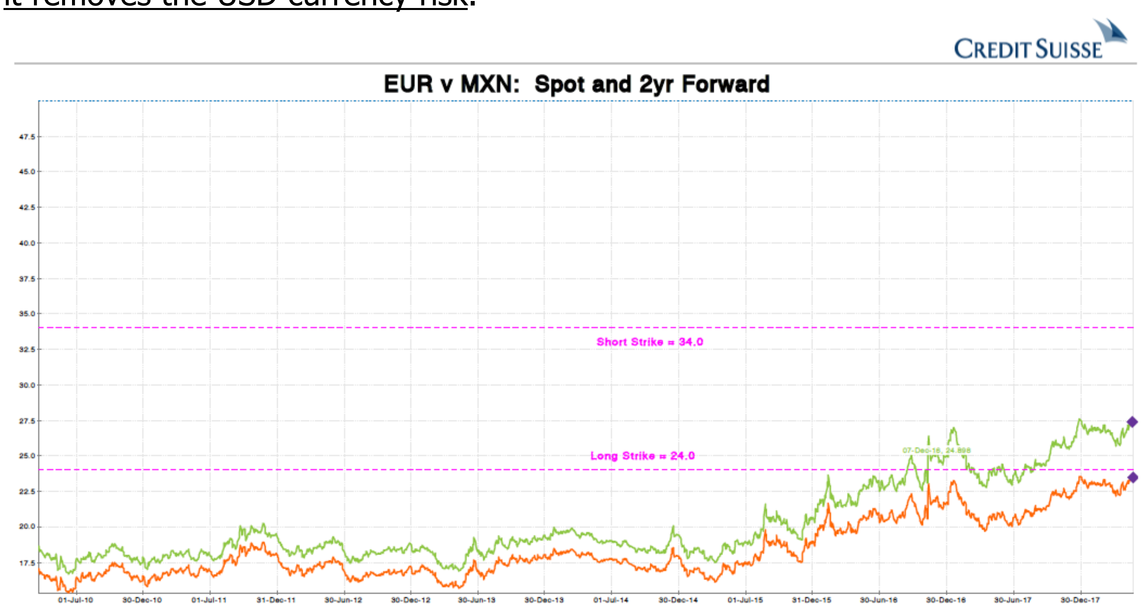
Source: 2017 - US Commerce Department

As detailed above, while China is our largest trading partner, Mexico is not far behind. In fact, Mexico's trade with the US almost equals the combined total of Japan, Germany, South Korea and Great Britain. More salient, Mexico's trade with the US is mostly in balance, which underpins the notion that twenty years of NAFTA has created a unified supply chain from Ellesmere Island to Tapachula.

For all the cries of "it's different this time", President Trump likely will follow the same path as most politicians: He will make bold pronouncements, declare victory and depart; irrespective of the actual result. (Think Nixon and Vietnam.) The tax legislation skewered the Blue State elite, a win for the President. However, a NAFTA collapse with the concomitant risk to our $231bn in exports to Mexico would damage Red State folk; as such, this will not happen.

The trade:
EUR/MXN spot = 23.31
EUR/MXN 2-year forward = 27.65 [MXN rate = +8.70%, EUR rate = -0.39%]
Sell EUR/MXN call K = 34.0; Ivol = 16.25%;   Delta = 19.2%   *versus*
Buy EUR/MXN put K = 24.0; Ivol = 13.75%;   Delta = 23.1%   @ Costless

The –citrive line- is the spot price and the –apatite line- is the two-year forward price of this currency pair; which has widened via the rate differential.
The –cookeite lines- shows the strikes. The trade is slightly long convexity.
I love the idea of buying an in-the-money spot option; it's a win if nothing happens. This pairing monetizes the negative EUR yield; but most important, <u>it removes the USD currency risk</u>.



I am entering this trade at the point of maximum uncertainty as both the Mexican election and the fate of NAFTA are in flux; but I think it is fully priced.

Other Adjustments:

I think Closed-End Funds are still too cheap; that is if one is willing to sell liquidity and mark-to-market volatility in exchange for a plump yield. One can still build a diversified portfolio with a cash flow yield of 8% to 9%.

I have been:
Selling Credit, such as HYT, NHS and ACP
Buying a lot of MLPs, such as NTG, FEN, MIE and CEN
Adding REIT and BDC, such as TWO, ARCC and SLD
Holding dry powder for Muni, such as NAN, MYN and BYM
I also like some PIMCO and Doubleline funds.

Fair warning, these are NOT recommendations; and I filter in a rather eclectic manner. If you want "best in class" funds, you should seek a CEF professional.

Coda:

As offered in my April 19th https://www.macrovoices.com podcast, when the market does turn it will not crash; rather it will simmer at a slow boil.
As such, my best advice: **"Sizing is more important the entry level"**

It is ALWAYS about character – full stop
http://www.convexitymaven.com/themavenmantra.html

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Your comments are always welcome at: harley@bassman.net

Harley S. Bassman
May 30, 2018