Convexity Maven

A Commentary by Harley Bassman

October 13, 2020

"War and Peace"

Special Inspiration Credit to LB Leo and Sonya Tolstoy – 1910

"The strongest of all warriors are these two – Time and Patience"

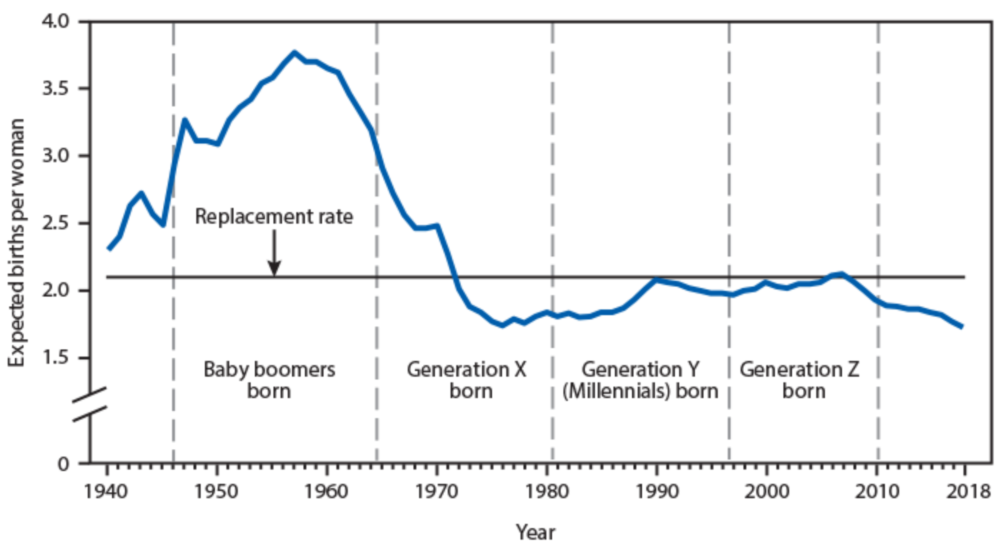
"War and Peace" – 1869

Such is the parlor game of alternate history that can be so entertaining. Would we have gone to war in Iraq if Al Gore had claimed a few more hanging chads ? Would German be the common tongue if the isolationist Wendell Willkie had denied Franklin Roosevelt a third term ? Do the nation states of Europe owe their independence to Napoleon's defeat of the Holy Roman Empire ?

The point here is that perhaps the Zeitgeist of our time matters more for history, and investing, than who sits in the White House or the Federal Reserve Bank.

Borrowed whole cloth from the Egyptian mathematician Ptolemy (AD 100 – 170) who theorized that the Earth was the center of the Universe about which all other planets and stars revolved; Baby Boomers too analyze the world from a similar stance of hubris.

This is not without reason since the -plumbago line- U.S. birthrate expanded massively between 1946 to 1964 creating a huge bulge in our population distribution.



Source - CDC; Mark Leach

This growth of the boomer-driven -delphinium line- Labor Force created a so-called Pig in the Python that first drove -ranunculus line- interest rates higher before they collapsed synchronously with the Generation X baby bust.

Source – Gerard Minack; Minack Advisors

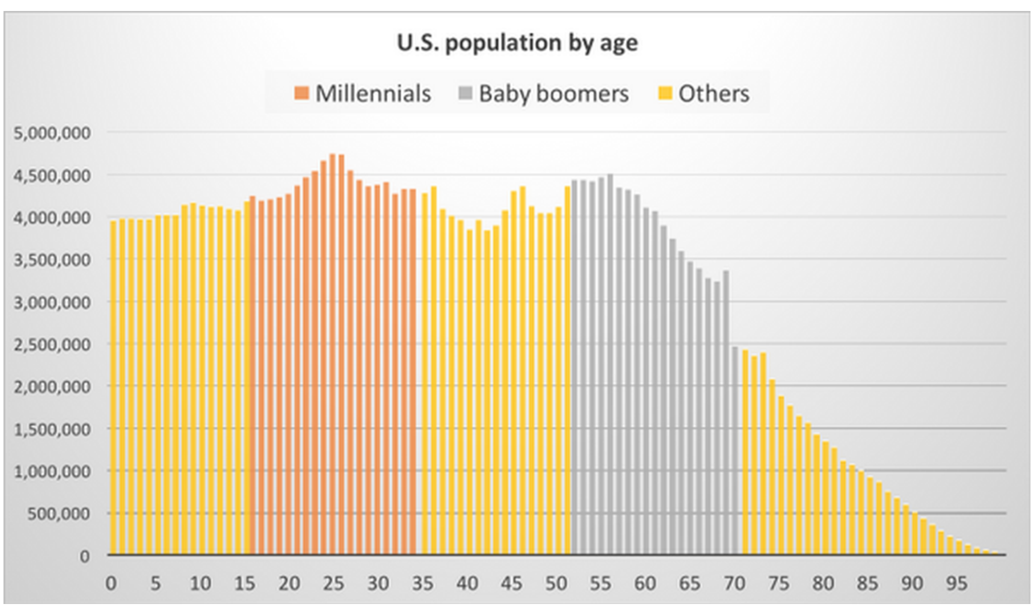
Thus, I might propose it is possible that interest rates were going to follow a pattern that was only loosely linked to who slept in the White House.

After roughly 5% of the world's population perished in a violent and unnatural manner during the short period of 1914 to 1945, it is likely the next generation might view life differently from their parents. Two global wars sandwiching a decade long economic depression leaves a mark. Thus, the Boomers may well have "turned on, tuned in and dropped out" whether Richard Nixon continued Dwight Eisenhower's bromidic policies, or John Kennedy invigorated Camelot.

Pulling on this thread, perhaps the elevated divisiveness we are witnessing – such as unmasked marches paired with congested rallies – is not caused by our politics, but rather our politics are a reflection of our collective mood.

Does it matter if Donald Trump may be a proto-fascist or Joe Biden turns out to be an AOC-type socialist ? Just as an iceberg is 90% underwater, so too is it likely the core driver of our anxiety is not our bloviating leaders, but rather the grinding transition of power from the Baby Boomers to the Millennials.

Notwithstanding that the -salvia line- Boomer generation was conceived via a record birth rate, the -crocosmia line- Millennial generation has always been larger in absolute size and is still growing its advantage on a relative basis as the former population returns to dust.



Source - U.S. Census; Cleveland.com

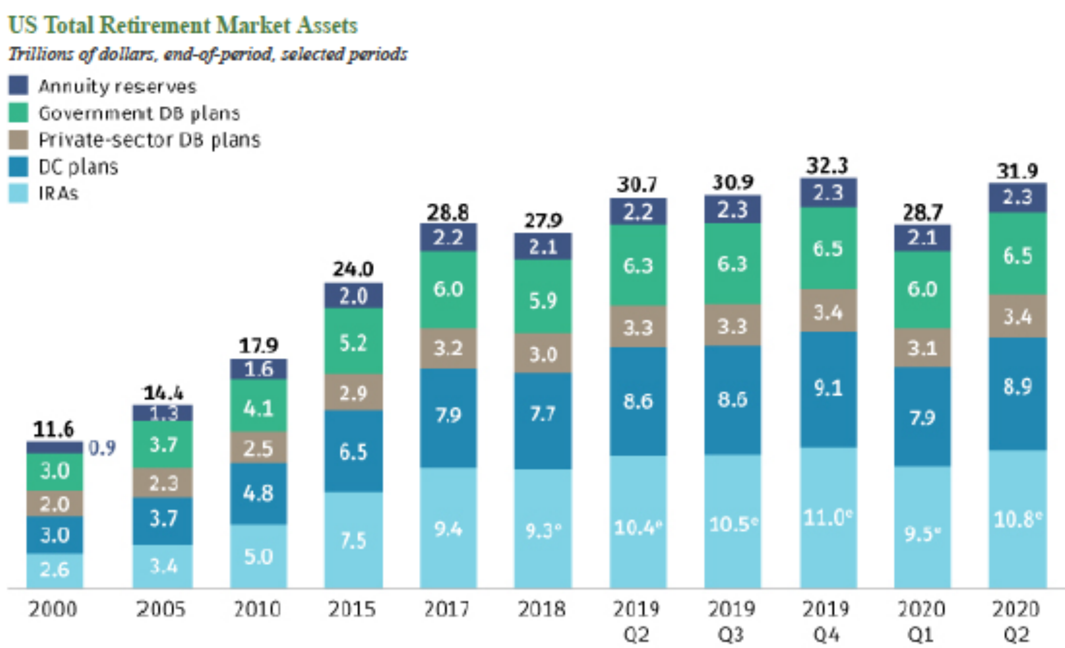
With this thought in mind, perhaps we have placed the cart before the horse, and it is not coincidence that our politics became disruptive in 2011 when Congress flipped parties the same year the first Boomers turned 65.

What I am proposing is that our current strong-worded political narratives are only providing surface cover for the real struggle which is between our two largest population cohorts as to how we will divvy up power and resources.

I would not call this notion original since Christopher Buckley (William F's son) wrote the brilliant satire *"Boomstown"* in 2007 which focused on this dilemma.

While it is above my paygrade to anticipate the ultimate resolution at the ballot box, no matter the winner a few underlying facts will not change.

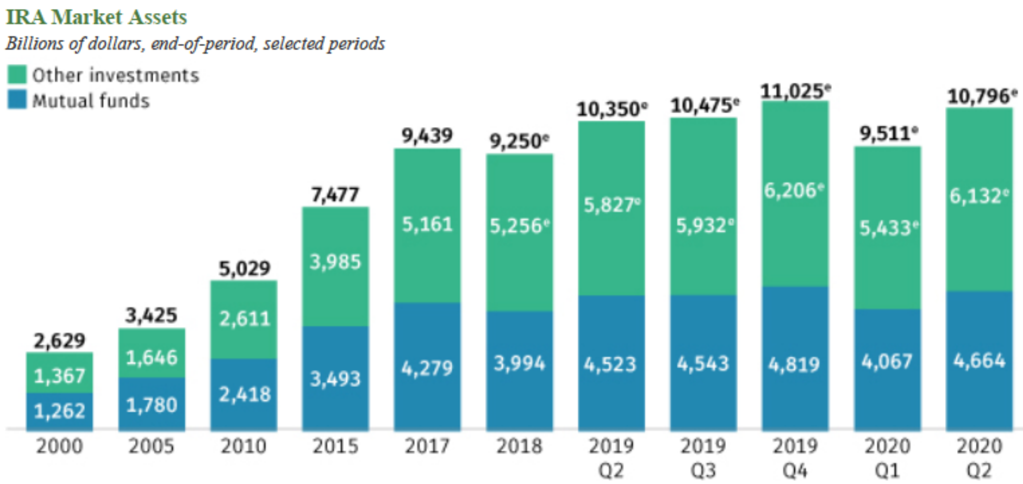
Detailed below is the distribution of Total Us Retirement Assets. Please focus on the -brunnera bar- IRAs, totally nearly $11 Trillion at mid-2020. What is unique about IRAs is that by Federal law they are subject to a Required Minimum Distribution (RMD) once one reaches the age of 70½ to 72. I will save you the math and offer that at least $75bn of these IRA assets must be sold this year, rising to about $250bn in 2030. This must occur whether one needs the funds or not.



Source – Investment Company Institute

On the next page it is known that most of the -clematis bar- mutual funds have equity characteristics, and that is it likely the -dianthus bar- of other investments have a similar risk distribution. So, I will make the leap of faith that the majority of IRAs assets are Equities, either direct or Hybrid.

I will also suggest that when these aging Baby Boomers liquidate their more volatile equity holdings, funds that are not absorbed as living expenses will be re-invested into less risky fixed-income assets to generate cash flow.



Source – Investment Company Institute

While they could invest in Government bonds, this is unlikely since they produce almost no income; as such, it is likely these retirees will look for income assets, that while not principle protected, are priced to a sufficient margin of safety.

Mortgage REITs

I first wrote about Mortgage REITs in *"I Picked the Wrong Week"* – March 23, 2020; and followed up in *"Send in the Snakes"* – April 14, 2020.

The only time I buy at the bottom is when I am desperate to sell, and I hit the "buy" button by mistake. And while I did nibble a few mREIT names to support my recommendation in April, I will confess that I own the bulk of my position from prior times at much higher prices.

But do not despair, for now is actually a better time to invest in this asset class.

In late spring there was little transparency into the FED's master plan, liquidity was low, and the corner loan-shark offered better funding terms. Moreover, dividend pay-outs were being reduced and the book value was a game of darts.

Presently, a portfolio of brand name Mortgage mREITs yields about 10.50% and trades about 15% below their June book value. It is likely borrowing costs will remain low until 2023 as the FED has indicated it expects rates to be stable.

With the FED supporting the mortgage market via Quantitative Easing (QE), hedging costs should be reduced which should presage a compression of the BV discount, and perhaps lead to an increased pay-out. I have used the "gift" of the FED supporting "junk" credit to cycle into this asset class – I am swapping default risk for leverage risk.

Municipal Bond Closed-end Funds

As per the table below, this well-rated San Diego School District bond traded last February at 117.25 for a yield to call of 1.52%. This was less than both the Tsy10yr rate (1.59%) and the Tsy30yr rate (2.04%).

San Diego School Dist			February 18, 2020	October 9, 2020	Change
Coupon	4.00%	Price	117.25	112.75	-4.50
Maturity	July 1, 2047	Yield to Maturity	3.06%	3.28%	
First Call	July 1, 2027	Yield to Call	1.52%	1.97%	0.45%
Rating	AAA/AA2	Tsy10yr	1.56%	0.78%	-0.78%
Cusip	7973555X8	Spread	-0.04%	1.19%	1.23%
		Tsy30yr	2.01%	1.57%	-0.44%
		Spread	-0.49%	0.40%	0.89%

After dipping below par (100) in March, it has now recovered to 112.75 to yield 1.97%. This yield is 119bp and 40bp above the T10yr and T30yr respectively. And this is before the tax-advantage which can boost the effective yield above 3.00% for generic US taxpayers, and close to 4.00% for California residents.

This bond is trading five points lower than pre-COVID times, while the similar maturity US Treasury bonds are seven to ten points higher in price. This is strange unless you believe the San Diego School District may default.

Now take this fancy, and relatively safe, yield and lever it up 35% by borrowing funds at a FED suppressed rate. Finally, place these bonds into a listed Closed-end Fund (CEF) at a price of 104ish (reflecting the 8% Net Asset Value discount).

This is the process of how a Municipal Bond CEF can sport a tax-free yield above 4.00% - and upwards of 7.00% on a pre-tax equivalent basis.

No Free Lunch.....

I have quoted a Yield to Call in the above San Diego bond. This assumes it will be "called" at 100-00 in July 2027. However, this will only occur if the issuer can borrow out to the final maturity of 2047 at a rate below the coupon (4.00%).

Thus, it is tricky to properly value this bond since it is unknown if it is a 7-year maturity, a 27-year maturity, or something in between. The buyer of this bond is short an 'option' to the issuer (San Diego School District).

This is IMPORTANT since if this bond is a 7-year it will move about 6 points for each 1% change in rate while if it is a 27-year it will move about 17 points for each 1% change in rate. This call feature means it will inch up like a 7-year and tumble down like a 27-year....Yikes.

Most Municipal bonds are callable, so Wall Street builds fancy models to evaluate this 'option' to create an apples-to-apples method of comparing bonds with different features. This is known as Option Adjusted Spread (OAS) analysis.

When one buys a CEF, with its usual ~35% leverage, its price will move about 35% more than the bonds in the portfolio. So, if this San Diego bond moves up in price by 1 point, the CEF would move by ~1.35 points and similarly if the bond moves down by a point.

When one combines the two preceding concepts, this is the risk of owning a Municipal bond CEF – it is a leveraged portfolio of callable (negatively convex) securities.

Should you care, perhaps not. If you currently own single-name Municipal bonds (either directly or via a manager), or in an ordinary (open-end) Mutual Fund, you already have this negative convexity risk. The advantage of a buying via a CEF:

1) Diversified portfolio;
2) Can borrow (for the leverage) at a cheaper institutional rate;
3) Can buy the entire portfolio at perhaps an 8% discount;
4) Since it is listed, it can often be more liquid to trade.

Similar to the closing thought on Mortgage REITs, a projected low borrowing rate until 2023 combined with the volatility reducing support of the FED should slowly elevate Municipal bonds, with the kicker of compressing the discount.

Tolstoy's epic novel "War and Peace" (1869) offers the notion that a country's Zeitgeist flows in waves and drives history; and the putative leader at the time claims credit by mere coincidence. Speaking of Napoleon from page 1264…

"Along comes a man with no convictions, no customs, no traditions, no name, not even a Frenchman, and he works his way – seemingly by a series of curious chances – through the ferment of party conflict in France, and ends up in a prominent position without attaching himself to any particular party."

You know my rejoinder: "It's never different this time."

Harley S. Bassman
October 13, 2020

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

Bonus Section:

Opportunity is knocking for those who are willing to purchase an ultra-long dated option to pair with callable Municipal bonds, either single name or buried into a Closed-end Fund.

Hark back to *"Pigs Can Fly"* – January 28, 2020 where I detailed ten-year options on the twenty-year swap rate.

Since that time, interest rate hedging structures are a bit less expensive due to the combination of lower rates and cheaper Implied Volatility (MOVE Index). The slight offset has been a steeper Yield Curve.

There were many highly rated 4.00% coupon 30-year Municipal bonds, with a 10-year call feature, issued in 2017. These bonds will likely be called in seven years. Many of them that traded between 117 and 120 last February, now trade near 113, likely because of default fears. This concern should lift with the introduction of a vaccine, as well as a Federal fiscal package that includes funds directed to the States.

The greater risk to owning these bonds is 'extension' if 20-year Municipal rates increase beyond 4.00% and they are not called.

Buy this payer swaption (functionally a put option on a bond) as a terrific hedge:
Expiry – October 13, 2027
Underly Swap – 20-year rate, October 13, 2047 maturity
Strike – 3.50%
Price - $25,000 per million one-time upfront fee (~$3,570 per year)

Pencil to paper:
$1mm of San Diego bond net yield to call income - $19,700 / year
After cost of hedge, net - $16,130 / year (Federal tax free)
or
$1mm Closed-end Fund with 4.00% yield creates income - $40,000
Buy $1.35mm (to account for leverage), net - $35,180 (Federal tax free)

There are a number of technical reasons I chose to strike the option at 3.50% when the call feature is located at 4.00%, just trust me for now.

Question: This option requires an ISDA, which is rare among two-legged investors. If I developed a path for accredited investors to purchase this option, (for any hedge/speculative purpose, not just paired with a Muni bond portfolio) do you think there would be sufficient demand ? Would you or your clients have an interest ? For the record, this is NOT a solicitation, it is a survey.

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

If you are an institutional investor, I can highly recommend:
Hunter Davis at BNP and Jordan Brink at Morgan Stanley

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