The Damped Spring Report

"Shifts in growth, inflation, risk premium and positioning all lead to opportunities in markets"

07/10/2023

We have been lonely here on Higherer for Longerer island as those who expected an imminent recession bid up bonds and those that expected a soft landing bid up equities, credit and smashed equity volatility. Our view here is that Jay has failed to do what it takes to kill inflation and Janet has muted the necessary impact of the Fed QT tool by issuing bills.

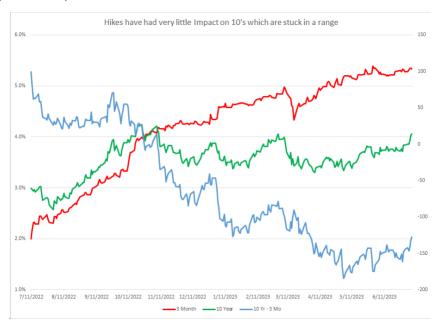
The economy has responded as one might expect. Inflation is sticky, GDP is strong, labor markets are tight, and except the very front end of the yield curve all assets remain well bid. In this DSR we write a script which we think must play out for the Fed to kill inflation. The script requires certain policy decisions to be made. If those decisions are not made, Act One of our drama will last far longer than anyone could imagine. The first act is set in a world in which the yield curve inverts even farther and long end bond yields starved for supply stay stimulative and stocks stay bid. We expect the first act will last a long time, until Fed and Treasury Policy shift. We see no drumbeats of a coming shift but are focused on important events which could mark the start of Act Two. Our play is titled "The only way to kill inflation" Its basic premise is that companies won't fire workers until their share prices fall. Their share prices won't fall until long end yields rise. Long end yields won't rise until either policy makers shift policy or a couple of large holders of bonds must sell. Hikes will not get the job done.

The Script "The only way to kill inflation."

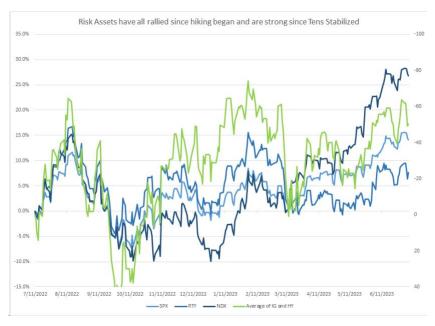
- Act 1. Higherer for Longerer Island Hikes continue and don't achieve goal.
- Act 2. Long end yields rise to new highs Requires a supply catalyst.
- Act 3. Multiple compression Higher yields take the legs out of equity rally.
- Act 4. Earnings contraction The tightening of Act 2 and Act 3 hit demand.
- Act 5. Recession Island Finally. as equities sell off, companies fire workers.

Act 1 - Higherer for Longerer Island

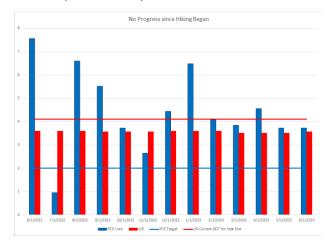
The post Covid tightening cycle began in earnest a year ago. Since then, 3-month rates are up over 300 bp and yet 10-year bond yields have remained stuck in a narrow range below 4% for most of the past 12 months. Low long term interest rates have supported risky asset markets and left borrowing costs for most non-financial corporates quite low.



Risk assets have all rallied substantially. Rates have remained supportive during 2023. NDX has rallied 30%, SPX almost 15% and Russell 2000 over 5%. Credit spreads have also tightened aggressively.



Not surprisingly the most important gauges of economic conditions have made little progress toward achieving the goals of the Federal Reserve. After the transitory effects of supply chain disruptions evaporated core inflation remains quite high.



We have written several Damped Spring Reports describing the H4L environment and why it is likely to persist. In this report we drill down into the mechanics, timing, and necessary policy decisions that need to be made in order to get inflation near target. We are sure that the script needs to play out as we have written but are less sure whether policymakers will pull the needed levers to achieve their goals.

The preferred path of the Federal Reserve has been to hike interest rates. So far that has been largely unsuccessful in cutting demand. The reason it has failed to cut demand is twofold.

- Asset prices have remained buoyant and that has both provided increased wealth for consumers to tap and emboldened corporations to hoard workers instead of cutting payrolls.
- Buoyant stock prices provide no incentive to fire workers thus labor remains far too tight and that has led to continued strong nominal spending based on wage growth.

We believe that the labor market will remain tight until equity markets fall. It is just simply not likely that corporations will fire workers when their stocks are doing great. In addition, the demand side driven by wealth effects will keep nominal GDP high and corporate profits robust. Why are stocks doing well? Nominal long term discount rates are stuck below 4% across most of the curve. Why are nominal bonds bid. In absence of bond supply there is no reason for bonds to trade lower in price. The only negative to owning long term bonds is the inverted yield curve. Lack of supply has been a policy choice by both the Fed who is reducing their balance sheet slowly and has provided banks with a financing plan (BTFP) and has refused to increase quantitative tightening, and the Treasury who due to debt ceiling spent down the entire TGA effectively offsetting the anemic QT flows and now has starved the market for duration and issued bills in lieu of duration to refill the TGA.

Act 1 will only end when supply of long-term treasuries reappears and pushes long term bond yields higher in both an absolute yield and term premium sense. Without that supply Act 1 will remain in place with further short-term rate hikes, further inversion, economic strength counter to Fed goals and bid up equity markets with corporate officers refusing to risk further growth by proactively firing workers. If policy makers move to target the long end of the yield curve by shifting issuance or making outright sales of SOMA holdings yields can rise, Equity prices can begin falling, wealth effect can slow demand and perhaps the labor market tightness can begin to ease. The play must go on.

Act 2 - Bond yields rise.

Why are long term bond yields so low? Firstly, let's put bond valuations in perspective. The measure we focus on for all asset valuations is risk premium. In the bond market curve inversion shows the desire to buy long term bonds despite historic negative carry vs cash. Another way to observe bond relative valuations vs cash is using term premium models. The Fed's own model shows a steep negative term premium. What that implies is that bond yields offer a negative expected return over time vs cash. In other words, investors are buying bonds which have price risk while getting a negative expected return vs. riskless cash. The natural level for adequate risk adjusted return for bonds is 55bp higher yield.



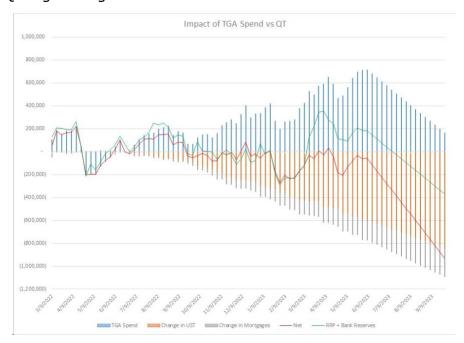
The negative risk premium on bonds is of course arbitraged across all asset markets. We sold an "all asset portfolio" in mid-June. So far it has begun to fade a bit indicative of some of the risk premium expansion seen in the above graph but unlikely to be a large trend without a supply catalyst.



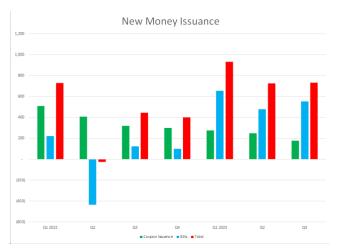
Why are risk premiums on assets so low? It could be strong demand or inadequate supply. We track many investor types and there are pockets of unlevered demand for bonds. But the biggest most important bond investors and policy making bond market participants are not sellers. US Banks have been aggressive sellers since QT was announced. Over the last year they have sold 500BN of bonds and agency securities. However, in the last two months they have sold very little. Now that the BTFP program allows borrowing without stigma from the Fed to raise cash Banks have cut back their selling. Regulations are likely to take time to be put in place and for now there is no catalyst for banks to aggressively sell bonds despite the poor funding that deposit cost increase generate.



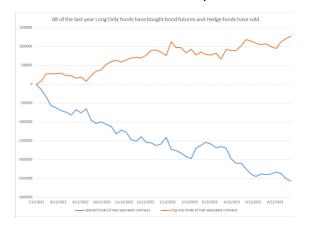
The US Treasury has had the biggest impact on the supply and demand of treasury bonds this year by far. Until the beginning of June and the debt ceiling resolution the spend down of the TGA completely offset the impact of QT. Lately the RRP+Reserves has begun falling as we have predicted. But that funding has been done with large T-Bill issuance and has not created any supply of duration to transmit the QT Tightening.



The Treasury has continually reduced the amount of coupon bond issuance since QE ended. The last big treasury coupon issuance was in Q1 2022 as the Fed was still actively buying.



Without a major catalyst from the biggest bond market participants the long-term bond market is going to trade in a range marked by a drift to higher yields dragged up by the ongoing hikes by the Fed. The normal back and forth around data points where the relatively extended positioning of Long only funds long bonds and Hedge funds short bonds will create chop in a range. We wouldn't bet on either side of this chop playing out with a major move and would sell rallies on bonds given our long-term outlook. We are looking for clarity regarding the major players before orienting our portfolio for the second half of the year.



The potential supply catalysts that will generate a more permanent expansion of term premium and transmit to other asset risk premiums will have to come from major non investor flows.

- More quantitative tightening including outright sales by the Fed.
- Defensive moves by China and Japan to stem currency weakness.
- Regulatory requirements on banks forcing a deleveraging of duration exposures.
- A shift from bills to bond issuance by the Treasury

QT

The Fed has shown no signs of increasing the pace of QT while also being clear that it will go on for many years. The next data point is the FOMC meeting and press conference on July 26th. We do not expect a change but will be paying attention for any hints.

China and Japan

Weakening economic conditions in China and continued underperformance of the Japanese economy has led to marked depreciation in their currencies vs USD. We expect the trend to continue and accelerate but at any time the MOF and PBOC could intervene in the currency markets to stabilize their currencies. If so that does generate bonds for sale. Hard to plan on but that is on our radar screen.

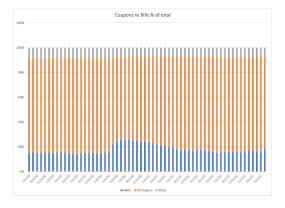
Bank Regulation

While bank regulation is an overhang to the bond market, the bureaucratic path to regulation and the existence of the BTFP program likely doesn't generate any near term forced selling by banks.

QRA

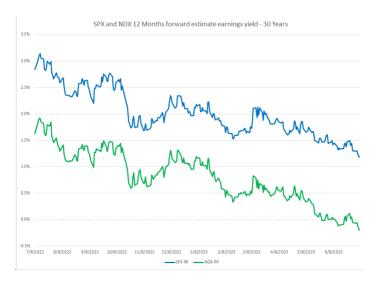
The big deal news of the summer will be announced on 7/31 and 8/2. On 7/31 the amount of new money issuance will be announced. Based on a TGA that is kept steady at the new desired level of 600BN, QT Runoff of 180BN, and a deficit funding need of 360BN we expect the New Money needs will be 540BN.

On 8/2 the composition will be announced. This quarter 178BN of bonds are being issued and tremendous amount of bills to fill the TGA. With the TGA filled and the RRP shrinking to around 1.4TN the Treasury has some flexibility in issuance. We expect a bond issuance of 225BN-250BN of new money. That will be absorbed by the market without a major disruption. However, if the bond issuance is less than 180BN or greater than 300BN this will create a big move up or down respectively in assets. The current percentage of total outstanding is 18% bills and 82% duration. If the Treasury sought 20% bills outstanding there will be no bond issuance. If the Treasury sticks to the current fraction of Bills outstanding there will be 440BN of bond issuance. Stay tuned to this as this news alone will likely impact whether Act 2 begins, or we remain in H4L infinity in Act 1.

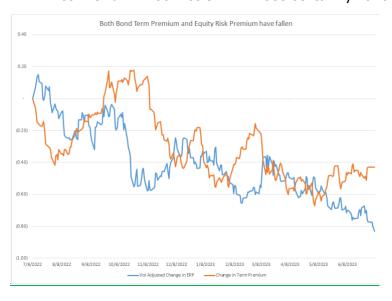


Act 3 – Equity multiple contraction

Here we are in Act 3. Remember that in order to get here Act 1 must end with bond issuance and a bear steepening that occurs as described in Act 2 as supply causes an expansion of term premium. Act 3 is about equity valuations fading. Currently earnings yield minus 30-year bond yields are at a 1 year low and are negative for NDX. Clearly equities are vulnerable for any change in 30-year bond yields as a rise in bond yields will result in a multiple compression.



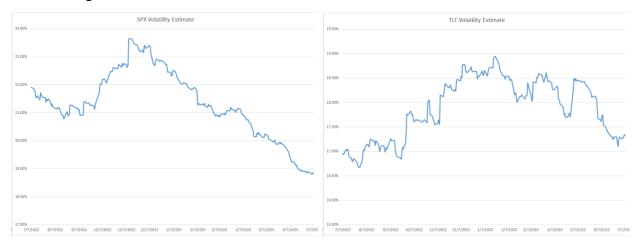
But perhaps more importantly, a rise in term premium would do two things. It would cause the yield of bonds to rise but also would be consistent with financial conditions tightening. Bond term premiums are arbitraged across all assets, and it should come as no surprise that the drop in term premiums on bonds has been arbitraged and driven equity risk premiums lower as well. A combination of higher nominal yields and expanding term premiums would cut multiples more severely. Will Act 3 occur? Will Act 1 end? If so Act 3 will most certainly follow Act 2.



Before Act 3 ends it also makes sense to look at the other driver of risk premiums. The Damped Spring Risk Premium Framework has two drivers of risk premium.

- The availability of money and credit for financial asset purchases vs the supply of assets
- The level of expected portfolio risk which itself is composed of individual portfolio asset volatilities and portfolio diversification benefits.

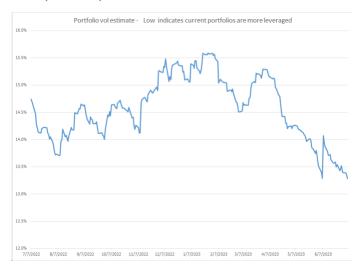
Damped Spring models the estimates that are used by asset allocators and volatility targeting portfolios in order to determine the likely leverage factors being used by these investors. Currently, these estimates for individual asset volatilities are making new lows for the last twelve months.



Diversification benefit is choppier but the last two months have significantly reduced investors forward estimate of bond equity correlation and thus increased expectations for diversification benefit.



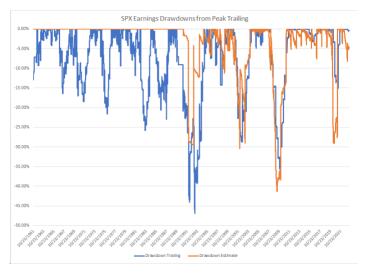
The combination of low individual asset volatilities and high diversification benefit (negative asset correlations) has driven the expected portfolio risk down substantially. Investors confident in low volatility high portfolio diversification benefits have levered up their portfolios.



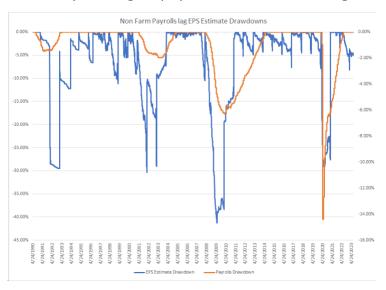
Act 3 will be characterized by risk premium expansion and increased portfolio volatility driven by falling diversification benefit and rising single asset volatilities. King Cash is the featured character.

Act 4 – Tightening impacts demand and earnings contract

Act 4 – Earnings Contract - can only occur if we get the catalyst to end Act 1. We will see. Act 4 is both long and painful. As we enter the scene, unemployment has not yet reacted to the fall in asset prices of Acts 2 and 3. But by the end of Act 4 we will know the depths of the downturn. It all depends on earnings. We know that the wealth effect will be in play from Act 3. That will have some impact on earnings. In past cycles it is typical for earnings to fall by 20-30%. Realized earnings have not begun to drawdown but estimates have turned lower. In Act 4 wealth effect demand destruction will result in earnings declines which along with risk premium expansion will generate substantial equity market weakness.



The final scenes of Act 4 occur as falling asset prices and rising risk premiums result in job loss and a negative cycle of job losses leading to earnings declines and further job losses. Job losses require asset price declines and demand destruction. While only a recent history the lag of payrolls drawdowns is logical.



Act 5 - Recession Island

The play ends with a trip to Recession Island. The severity of the recession is unknown, and we will leave it a bit of a cliff hanger. The big question to ponder will be whether this script has sufficiently killed inflation or whether a few forces remain that will require continued central bank tightness before a pivot.

These forces include:

- Has adequate liquidity come out of the financial system, in particular have RRP + Bank reserves fallen to a point where QE is even an option?
- As economic activity falls, tax receipts fall, and deficits rise. Will the government spend less or more, tax less or more?
- Will the cyclical shift to deglobalization become secular?
- Is ZIRP a politically viable option for the Fed and the world's central banks.
- What of AI and its potential deflationary force?

We have more questions than answers and are not even sure we will get out of Act 1 in the immediate future. Nonetheless if we get through Act 1, we don't think this process will be rapid. Strap in for a long slog.

<u>Implications for markets</u>

- Act 1 Waiting for Godot Version No supply catalyst
 - Short Twos and Fives
 - Sell 10's on a rally
 - Cover SPX on a dip
- Act 1 Ends with Supply Catalyst
 - Cover twos as hikes take a back seat back-end supply

- Short 10's and 30's
- Remain Short Equities
- Act 2 Bond Supply
 - Press Bond shorts
- Act 3 Risk premium expansion
 - Press Equity shorts
 - Short all assets
- Act 4 Earnings contraction
 - Cover Bond shorts
 - Buy two-year bonds
- Act 5 Recession Island
 - Buy 10-year bonds
 - Cover all assets
 - Cover equity shorts

In Synthesis, "The Only Way to Kill Inflation" is a play which will come to the stage sometime in the next year. When it will premier is entirely in the hands of policy makers. Janet can pull the lever to open the show on 8/2 with the quarterly refunding composition announcement or Jay can pull the lever by starting to beat the outright sales QT drum. But without those levers being played we will likely remain in a period of higher than desired inflation and moderate growth. In the interim equities will remain bid and curves will further invert.

Current Portfolio and Performance

Assumed Portfolio size LTD P/L	\$	100,000,000 50,124,170							
Total Return	Ş	50,124,170		VTI) Return			4.82%	
Today's Date		7/9/2023			tfolio Created			4/15/2019	
Today S Date		1/3/2023		PUI	tiono createu			4/13/2019	
Date Position		Entry Price	Amount	Wc	rst case loss	MTM		D/I	Open/Close
10/20/2022 CLZ23 95/105 Call Spread		2.1	476		1,000,000	0.05	Ś	(976,190)	
5/25/2023 NDX August 13000 Put		250.00	60		1,500,000	28	Ś	(1,332,000)	
6/9/2023 SPX Call Spread August 4320/4400		48.00	-250		2,000,000	60		(300,000)	
6/9/2023 SPX August 4185 Put		48.00	250		-	21	Ś	(675,000)	•
2/1/2023 SFRZ4 ShortTwos and Spoos		97.085	-1600	\$	2,000,000	95.82	\$	5,060,000	
7/5/2023 ZF Sept for August expiry 106.5/105.5		0.359375	5565	\$	2,000,000	0.44	\$	434,783	Open
7/6/2024 SFRZ4 ShortTwos and Spoos (partial unwind)		95.63	400	\$	(500,000)	95.82	\$	190,000	Open .
5/17/2023 NVDA 280/300 Call Spread		11	-111	\$	100,000	19.95	\$	(99,444)	Open
5/17/2023 AAPL 160/175 Call Spread		9.8	-192	\$	100,000	15.58	\$	(111,154)	Open
5/17/2023 AMZN 105/115 Call Spread		6.42	-279	\$	100,000	9.02	\$	(72,626)	Open
5/17/2023 GOOG 110/120 Call Spread		6.57	-292	\$	100,000	7.23	\$	(19,242)	Open
5/17/2023 META 230/245 Call Spread		8.4	-152	\$	100,000	12.16	\$	(56,970)	Open
5/17/2023 MSFT 300/315 Call Spread		9.47	-181	\$	100,000	13.39	\$	(70,886)	Open
6/15/2023 DS Beta Short Component GLD		181.87	(5,498)			178.64	\$	17,760	Open
6/15/2023 DS Beta Short Component SPY		443.13	(5,642)	\$	500,000	438.55	\$	25,839	Open
6/15/2023 DS Beta Short Component TIP		107.905	(23,169)			105.85	\$	47,611	Open
6/15/2023 DS Beta Short Component GSG		19.7547	(50,621)			19.9	\$	(7,355)	Open
6/15/2023 DS Beta Short Component TLT		102.825	(29,176)			99.08	\$	109,263	Open