The Damped Spring Report

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

10/28/2023

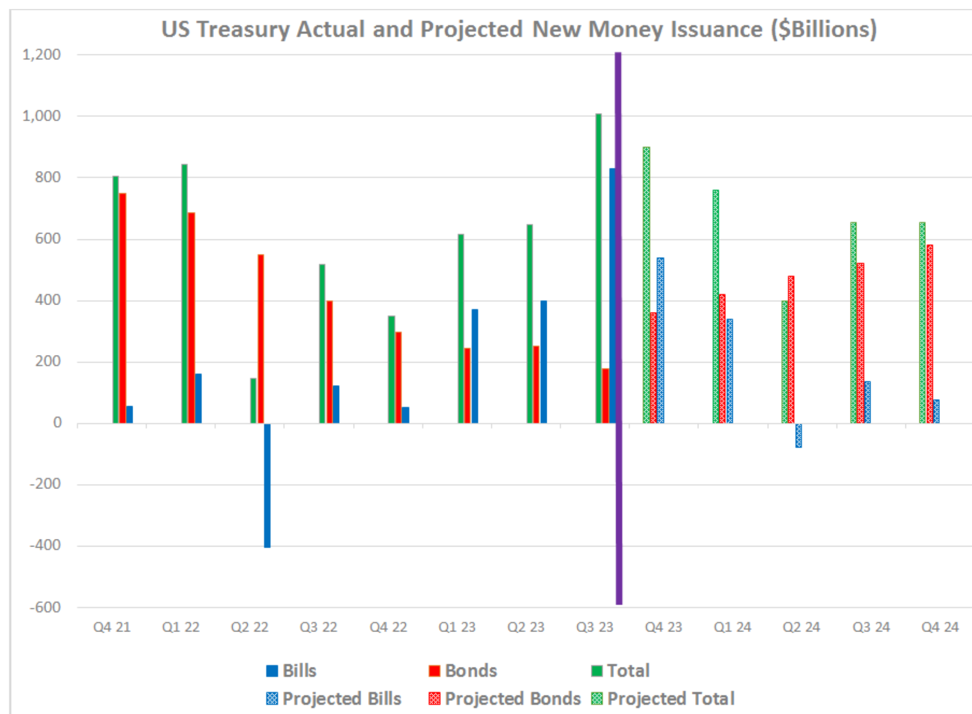
The Quarterly Refunding Announcement on July 31st resulted in a huge selloff in bonds immediately and equities have begun to catch down. The QRA next week will almost certainly be less dramatic. Regardless of the specific news, the big picture is that coupon supply will be growing every quarter in 2024 and the concession paid to investors at current yields is woefully inadequate to create demand to meet supply. This supply pressure will weigh on asset prices of all sorts. Rallies in bonds should be sold.

On Monday at 3:00 PM the Treasury will announce the estimate of financing needs for the first quarter of 2024. On Wednesday at 8:30 AM they will announce the composition of the issuance. We expect the coupon issuance to climb for both the current quarter and the first quarter of 2024. We believe that the Treasury is stuck in a box which will force them to continually and substantially raise coupon issuance amounts. Term premiums remain only slightly above zero and need to rise to a sufficient level for demand to build to offset the supply coming from Treasury. By the summer of 2024 we expect term premiums to return to the Pre QE Era average of 125bp. This headwind will impact all assets until "The Script" that we have described plays out.

The increase in term premiums will not likely transmit directly to 100bp higher long term bond yields as we expect the fourth and fifth act of the script will result in the falling of the expected path of interest rates to counterbalance the rise in risk premiums. However, the ordering matters and a **10-year bond yield of over 5.5% is highly likely over the next few months**.

Our base case for QRA.

We don't think there is much value in accurately predicting the QRA outcome. We plan on interpreting the outcome based on what happens and reacting accordingly. We will provide that interpretation real time with notes to clients. Regardless of the announcement details the trend will be obvious.



We expect an increase in coupon issuance for the current quarter of roughly 30BN and a further increase for of 60BN for each of the next 4 quarters. The rate of change in the last quarter was 160BN. **With a lower rate of change in issuance the impact of this issuance announcement will be lower but remain sizable**. This increase in coupon issuance and the clear trend will result in a further increase in bond term premiums and yields. In this DSR we will

- Estimate the financing needs of the Treasury and issuance composition.
- Look forward to future quarters.
- Estimate the term premium impact of the issuance.
- Assess the demand for bonds across cohorts.
- Discuss the differences between QT financing and Deficit Financing
- Recognize the impact of positive carry to generate eventual demand.

Estimate of financing need released on 10/30.

The factors that determine the net new financing need of the US Government are.

- Size of the Fiscal deficit
- Runoff of Fed balance sheet
- Change in the Treasury General Account

The Fiscal Deficit

Clearly the fiscal deficit has some significant volatility as Congress is in disarray, The Administration is requesting an additional 100BN in spending, and the path of the economy could radically shift over the year. We are starting with a baseline assumption for the 2024 Fiscal deficit of $1.6 Trillion. Seasonality of tax and spending flows suggest the front loading of issuance in Q1. In aggregate we estimate the deficit funding need at **$480BN for Q1.** We see very little chance of a lower need and a fair amount of upside to the number.

Runoff

QT is fixed at **180BN per quarter.**

TGA

Treasury policy states that the TGA is designed to fund the government for all expenditures and debt maturities for a week to ensure that the government can honor its obligations even if the issuance market is disrupted. Projecting weekly expenditures and debt maturities for the next year sets the minimum TGA at $850BN which is $100BN higher than the current target for Q4. In addition, we assume that the Treasury has little choice in the near term but to issue more bills than they would otherwise prefer which places additional pressure on the TGA to be further increased. For our estimate we assume that the Q4 target remains unchanged at 750BN and Q1 is raised to 850BN resulting in an additional **100BN of new money financing**. However, the QRA may push that increase into this quarter which simply brings some issuance supply forward.

Range of Financing need estimates

Those three factors add up to a central case Q1 financing need of $760BN. The TGA is a wildcard, and this central case prediction is based on the TGA rising in Q1. It is possible that the TGA will be increased in the remaining months of Q4 but in both cases its going up. Besides the timing issue for TGA, which should have no net effect whichever side of year end it occurs, the variable is the budget deficit. We think both Q4 and Q1 budget estimates have upside risk and limited downside risk. **Our range for the Q1 Financing needs is 700BN – 850BN.**

Potential implications for markets on Monday

Because the financing needs will be released first without composition and the coupon issuance is the key piece of data it is possible that the market may extrapolate the amount of coupons from the quantity headline. Our range of bills to total issuance is from 30% - 50% bills Applying the high percentage to the low financing need would generate our worst-case bond issuance estimate. Of course, we could be wrong, so we have a table to quickly look at the Financing estimate and imply a bond issuance amount. Assuming the estimate of financing needs is within the range in which composition is relevant, the proportion of coupons to bills issuance will determine the impact on markets.

Remember the first step before applying this headline is to see the TGA and where the increase, if any, occurred. Then using the headline for Q1 the implication for asset prices can be determined. Coupons less than Q4 would be bullish assets. Coupons modestly higher would be neutral and coupons above 400BN are bearish assets.

Q1 Financing Estimate		
Headline	Coupons (BN) with 30% Bills Issuance	Coupons (BN) with 50% Bills Issuance
560	392	280
660	462	330
760	532	380
860	602	430
960	672	480

Our central case of $760BN for the 10/30 Q1 Financing need and is likely bearish assets but we may need to wait until the 8:30 Composition data on Wednesday.

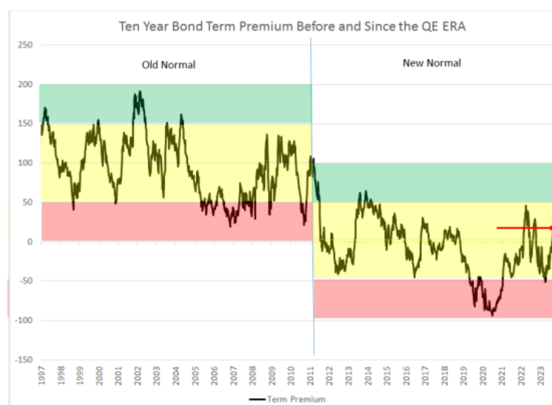
TBAC Recommended Financing Schedule 11/1.

Once the quantity of financing needs is known the next piece of data will be released Wednesday morning. The amount of coupon issuance will be the key. The amount of bills used to raise the needed financing is the lever the Treasury has to limit bond issuance. We believe the Treasury will increase bond issuance significantly because.

- Term premiums are very low.
- Bills outstanding are high.
- Choosing Bills delays the inevitable and requires higher TGA balances.

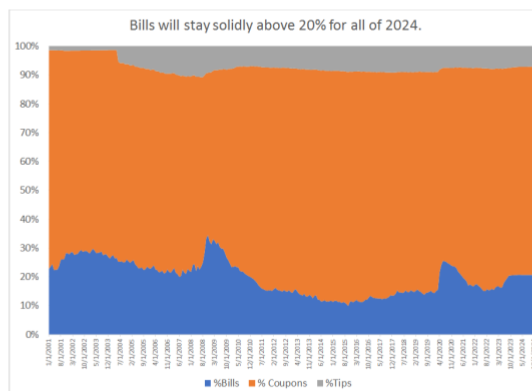
Term premium levels suggest coupons over bills.

Since the QRA in August term premiums have gone from negative to positive. Nonetheless the term premium is below Pre QE era levels and is barely positive. As term premium is the price that Treasury pays to compensate investors for taking on price volatility when purchasing coupon treasuries over bills, we believe that current levels of term premium are a great deal for the US taxpayer to pay. Treasury uses a term premium model for issuance and so are conscious of this attractive financing level.



Bills outstanding are rising and will likely rise further.

Given the high deficit, the slow and predictable increase in coupon issuance, and the continued Fed runoff it is simply impossible for the Treasury to make much progress in reducing T-Bills outstanding percentages in 2024. However, that simply results in further overhang of coupons in 2025 as quarterly bills share moving back to less than 20% of issuance would be required to make a dent on current outstanding.



Choosing bills delays the inevitable extension of the debt.

By late 2024 the bills issuance will likely drop each quarter to below 20% per quarter but with significant deficits and another year of QT coupon issuance will likely continue to grow at 50-75BN per quarter until deficits come down and or QT is ended. Perhaps this quarter the full implications of the duration issuance will begin to be front run. However, frontrunning 1.5TN of QT and the necessary. duration extension is simply too large. Eventually the supply will come to market and term premiums will rise.

What to look for on the 11/1 TBAC Tables?

It is fairly likely that the 10/30 Financing Estimate will lack adequate clarity and the TBAC table will be necessary to evaluate. Our base case is an increase of

- 30BN in bond issuance in Q4 (some of which has already occurred)
- 60BN increase for Q1 or roughly 420BN of net new coupon issuance.

The simple thing to do is to add the Net Coupon Issuance from the Q4 and Q1 TBAC tables and follow this chart.

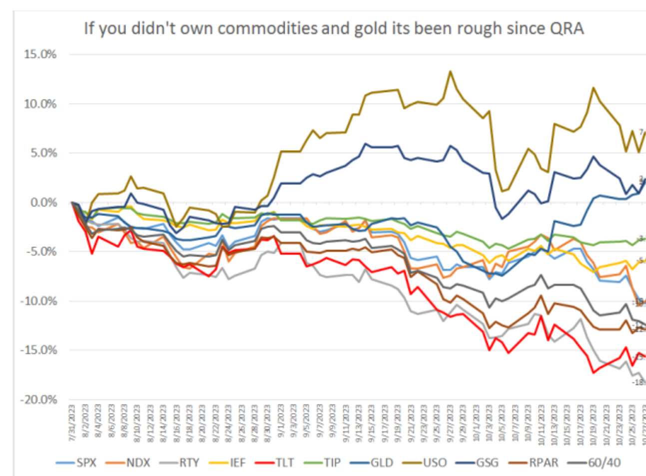
Sum of Q4+Q1 New Coupon Financing Estimate		
Headline	Probability	Action
676	Low	Buy Assets
688	Low	Buy Assets
730	Medium	Neutral
760	Medium	Sell Assets
780	High	Sell Assets
820	Low	Aggressive Sell

What does this mean for markets?

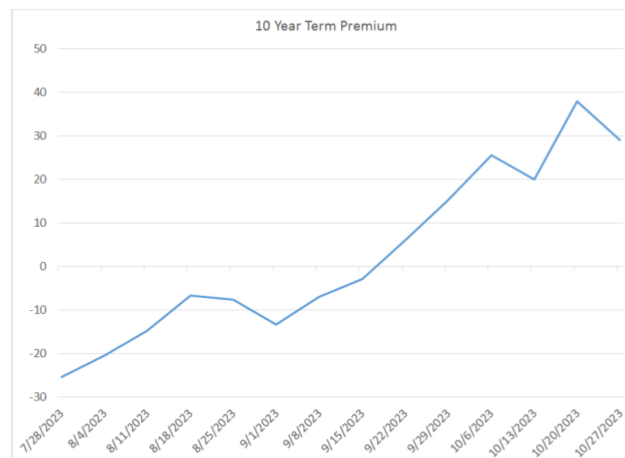
In a world without QE, Fed Balance Sheet runoff (QT), debt ceilings, radical shifts in the Treasury General Account, and most importantly radical shifts in bills/bonds composition, the issuance to fund deficit spending has a nuanced impact on term premium and asset valuation. We will discuss why the issuance impact on asset prices in "Normal" environments is much less than in the post Covid period later in the report. Today, the combination of 720BN of annualized Fed balance sheet rundown, and the need to extend the duration of the composition of the Treasury obligations outstanding places significant pressure on asset prices.

Sensitivity analysis

The last QRA had a major impact on asset prices and term premiums. Asset markets other than gold and oil fell significantly.



Term premiums moved by 54bp.



The last QRA caught the market in a very vulnerable position. Negative term premiums and high multiples created asymmetric conditions. In addition, the TGA build post debt ceiling resolution and the sheer magnitude of the change in bond issuance was a major change in supply.

To understand the dynamic at work regarding any data announcement and the sensitivity to market prices of such an announcement it is useful to step back to a framework. When an announcement is made regarding a future action that may have impact on the market a variety of forces impact the market.

- What was priced into markets before the announcement of a future action?
- The expected equilibrium price post future action is estimated by market participants today which goes into their investment decisions.
- Frontrunning by market participants prior to the future action to get ahead of the new equilibrium price and benefit when that price is realized.
- The actual impact of the future action
- Extrapolating the future action to further future action and front running those extrapolations.

At the last QRA the announcement was of 160BN in increase supply of Treasuries in Q4 vs Q3. That was a large rate of change. Given that negative term premium was priced into markets at the time and markets had poorly estimated the impact on the equilibrium price the immediate impact was large. Frontrunners like the DS Alpha portfolio cleaned up in acting on the news. Then in October the actual issuance created another leg up in term premium and another leg down in equity multiples and prices.

It is our observation that the impact of issuance was not fully front run. The level of attention to the QRA has jumped significantly but market participants are yet to fully understand the mechanism at play and have also not extrapolated their analysis to the 1.5TN of Fed balance sheet runoff in front of us. Nonetheless we expect a more modest response by frontrunners for this report for a number of reasons.

- Term premiums have risen. While still very low by historical standards as we have shown going from negative 25 to positive 25 takes less issuance work than the next 50bp.
- Our estimate of the rate of change of coupon issuance will be 40% of the increase in this quarter.
- While it’s not evident to us in other triangulated data its certainly possible some are short bonds ahead of the coming QRA.
- We don’t believe the full extent of the supply problem is likely to be front run as market participants are just building their understanding. But more practically the scale of the actual volume of QT runoff financing is simply too large for investors to fully front run. We believe that like QT in 2022 the front running will have an impact and then the actual flow (and its sudden muting in 1H2022 by the debt ceiling) will take time.

Our estimate of the impact of issuance, if we are correct on coupon issuance of 360BN in Q4 and $420BN in Q, will drive term premiums 10-15bp higher taking 10 year and 30-year bonds solidly above 5%. Assuming market participants fully grasp the extent of the 1.5TN to come that would generate a 75bp increase in term premium in the next 12 months.

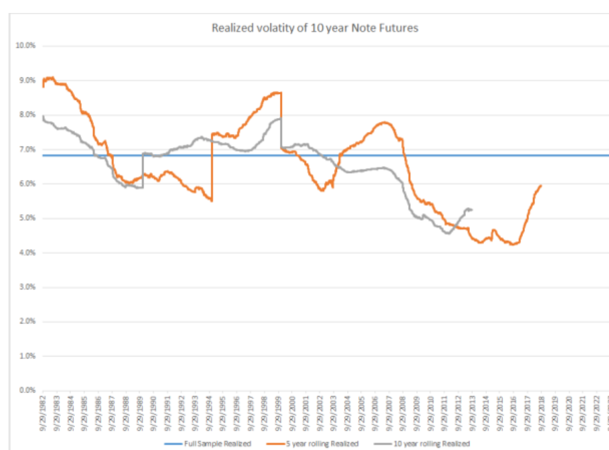
Outcomes and impact

As mentioned, we expect bond yields to make new cycle high yields post QRA. We don't expect the Fed to hike again if the yield curve continues to do the tightening. The impact on asset prices should push down prices of diversified portfolios by 2-4%. **Equities will continue to follow Act 3 of "The Script" and the SPX should fall to 3900 by year end and NDX should fall to 13,000.** Of course, the Treasury may once again issue bills instead of bonds or the deficit could magically fall requiring less issuance in general. But QT will continue and any short-term outcome which generates low coupon issuance will be short lived. Our view on the QRA announcement has been and will continue to be a selling opportunity for bonds. We will look at what gets announced instead of trading ahead of the announcement and act according to what we see.

Who will buy the bonds? – Do term premiums grow to the sky?

Like a tree, term premiums don't grow to the sky. The increase in term premiums is the literal motivation for investors to part with cash savings and invest. Nonetheless the current term premium torturing the metaphor further looks like a young sapling compared to a full-grown tree.

The long-term risk adjust return on assets in excess of cash has been well documented as about .25 Sharpe ratio. The long term realized volatility of ten-year notes is 6.8%. During the QE Era 10 year rolling and 5 year rolling realized volatility bottomed a bit north of 4%. Assuming a highly conservative 4% supports the idea that Ten Year notes need at least a **100bp** excess return over cash (term premium) to generate an acceptable long-term Sharpe ratio of .25.

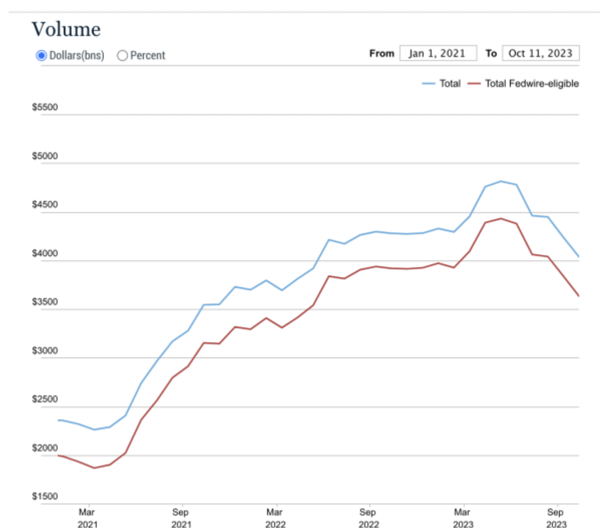


So, it makes sense to us to assess the various cohorts of bond buyers to identify at what price the supply will meet meaningful demand. We think at 150bp of term premium the various cohorts will find bonds adequately attractive to purchase for long term with cash and if financing is available with leverage.

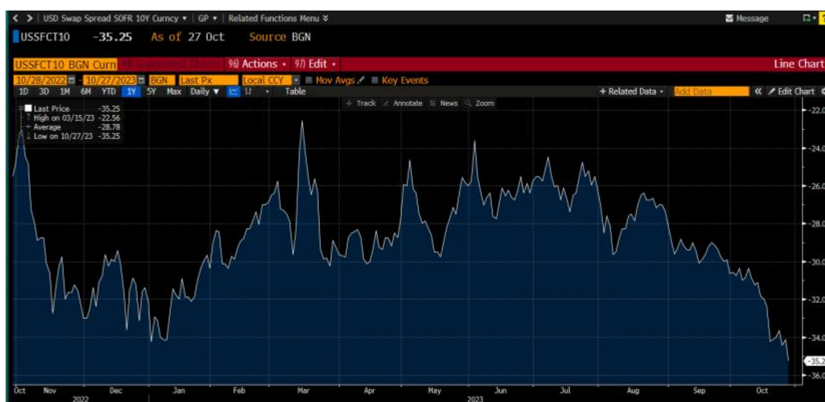
RRP + Reserves and private sector repo.

Before we look at investors who will take duration risk, it's important to look at the availability of leverage for investors willing to hold US Treasuries on their balance sheet hedged with either futures or swaps to neutralize and pass on the duration exposure to other buyers. At this moment O/N RRP and Bank Reserves remain ample but QT and further TGA build will reduce this liquidity available for private sector repo by 800BN over the next year and 1.5TN over two years

The supply of cash treasury bonds has impacted term premiums but some of the demand for duration has come with less willingness to buy that duration via unlevered cash investment. That has caused a rapid rise in private sector repo investment. That repo has allowed banks and hedge funds to build on balance sheet inventory in bonds and transfer the duration to bond investors willing to hold duration but not use balance sheet. Private sector repo, shown below, doubled since QT started but as of late has been coming down. Capacity at the moment seems fine but as O/N RRP drains that creates a possible constraint.



Private sector repo providers have also begun to demand additional compensation to provide balance sheets. Ten-year swap spreads have widened by 8 bp.



While none of this is cause for alarm yet, in order to facilitate the supply of cash bonds and the shifting around of duration risk a healthy financing market is necessary. While many market commentators hyperventilate regarding the risk of the basis trade and suggest it should be limited or more regulated, cooler heads at the Fed recognize it as a necessary part of financial market risk transfer yet needs monitoring to ensure financial stability. The Fed's recent paper.

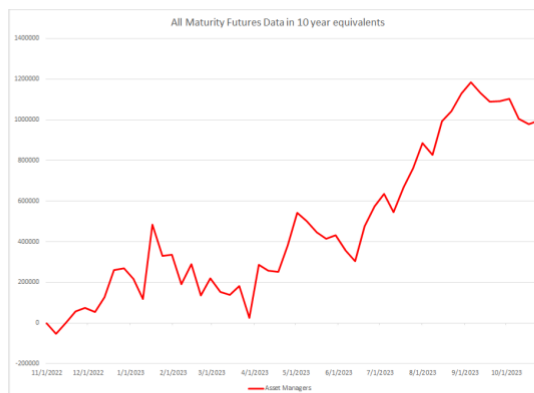
> Should these positions represent basis trades, sustained large exposures by hedge funds present a financial stability vulnerability. While the contribution of sales from the basis trade to March 2020 Treasury market liquidity remains debated, several papers suggest that absent prompt intervention by the Federal Reserve, the situation may have been far worse. At present, measures suggest the Treasury market remains volatile, with the MOVE index still at levels comparable to the peak of March 2020. Consequently, cash-futures basis positions could again be exposed to stress during broader market corrections. With these risks in mind, the trade warrants continued and diligent monitoring.

As the amount of cash coupon bonds issued rises, and O/N RRP get drained the burden will fall on private sector repo and balance sheet to add basis risk vs reduce.

A quick scan of various bond buying cohorts.

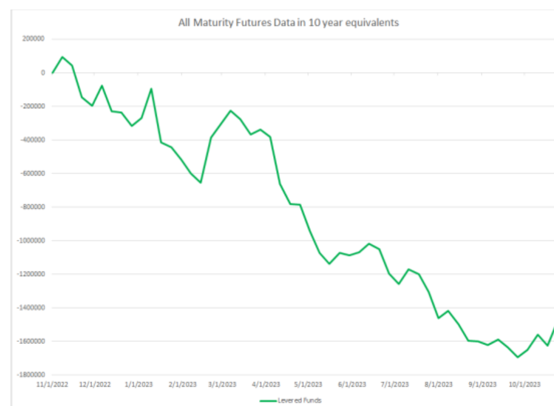
Unlevered longs

Real money has been buying bonds futures all year. However, since the QRA they have begun reducing exposure in bond futures. We are concerned that there will be meaningful tax loss harvesting from this cohort in Q4.



Hedge Funds

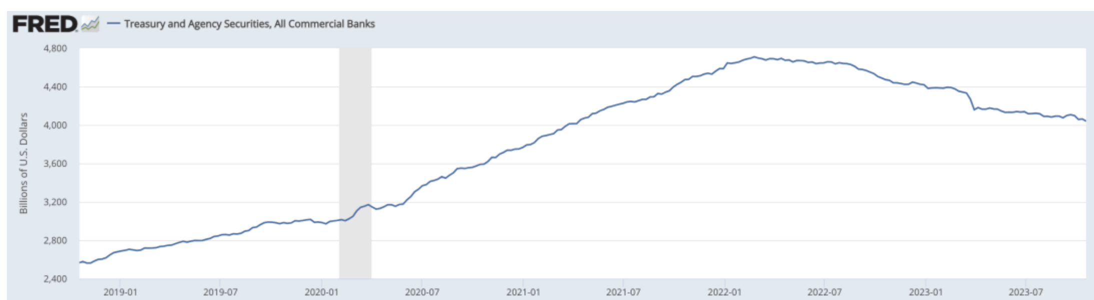
As mentioned above levered funds are heavily invested in the basis trade. This is duration hedged and doesn't represent demand for duration.



Hedge funds have demonstrated insatiable appetite for carry trades over their long-term history. We call this leveraged beta they often call it alpha. At some level of term premium and/or and adequate positive carry the basis trade could turn into a carry trade. However, a flat Treasury curve with a slightly positive term premium attracts only the most cautious hedge fund investors. What is notable is that at an adequate positive carry, adequate term premium, and high confidence balance sheet renting availability levered investors could fairly easily absorb excess supply of bonds. Lots of ifs but this is one reason why term premiums don't grow to the sky.

Banks

The other reason that term premiums don't grow to the sky is the willingness of banks to lever deposit betas for adequate positive carry. However, their willingness to lever deposit betas for completely inadequate positive carry and term premiums in the past few years has resulted in a disturbing trend that will limit the banks from buying long term bonds at a positive carry in the near future. Ironically just when the banks will be needed most to absorb supply congress, the FDIC, and even the Fed are working to adopt regulations preventing the exact sort of trades that will work now that failed when these same groups were looking in the wrong direction. For now, we assume that banks are at best neutral to duration risk and more likely being forced to sell duration vs buying. Banks have been selling though that has slowed as BTFP became available.



Foreign

Over the last year Foreign Official Reserve Managers have sold or allowed to runoff about 100BN of US Treasury Bonds and Notes. Pressure to support the Yuan and Yen have likely resulted in further runoff and possibly sales. We don't expect that sector to shift to buying UST in the near term.

Private sector bond buyers in Japan now have positive carry and relatively attractive JGB rates compared to US bonds swapped to Yen. European investors have an investable local bond market after many years of US bonds providing their only alternative.

Adding up all of the bond buying cohorts we see very little demand for bonds at the current level and though we do believe that an adequate term premium and or a positive carry will entice classic leveraged bond demand. There are trends that are concerning including, QT runoff draining RRP, balance sheet capacity of leverage providers, and bank regulatory reducing the ability for banks to take leveraged duration exposure.

The Impact of QT vs deficit spending is different.

During QT duration issuance is quite different than during "Normal" times. To expose that difference, we will fall back to a framework point. Deficit spending hands money to the private sector and simultaneously demands money from the private sector for the bonds used to finance the spending. In a closed economy every dollar spent by the government is ultimately savings for the private sector and those savings are invested in bonds. Of course, the clearing price matters but it is important to first get the basic point.

What is useful for trading markets is who gets the spending and how long it takes for the spending to work through the private economy and end up in savings. Then of course the savings needs to be invested. Following where that savings is invested ultimately leaves one to the conclusion that the only places that the spending can rest is in US treasury obligations. We won't go through the steps of all the plumbing, but we suggest you explore following deficit spending and its financing. Be conscious that spending represents someone else income and any savings invested in private sector investments either becomes someone else savings which needs to be invested or someone else spending which then circles back to savings.

Stepping back up one can see that timing of all these flows matter a lot. For instance, when the government pays interest on its debt that typically goes straight to savers. They are likely to reinvest that money and so the reinvestment supports Treasury bond investment. If deficit spending goes to entitlement programs, that spending quickly goes to actual real economy consumption which takes longer to get settled back into savings. Each sort of deficit spending has different "decay functions" either quickly going to savings or slowly working through the economy to savings. Lastly foreign aid takes a circuitous track to savings which may end up

in savings in another currency and pressure on us assets and currency or directly or it is saved in US assets.

If deficit spending rises smoothly and the issuance of government bond is relatively steady in both its increase in size and its proportion of bills, notes, and bonds. The term premium of each sort of government investment should be fairly stable. Lumpy issuance, Volatile spending, big shifts in proportions of bonds to bills can temporarily cause shifts in term premiums which sort themselves out over time.

All this being said. We are not in a normal world. QT changes everything because when the Treasury Issues bonds to pay back the Fed no spending in the economy occurs and no savings is created to absorb the bonds. We are in a world of QT, Low term premiums, volatile deficits, and rapidly shifting issuance. While the growing deficit is potentially a concern for the future. The deficit is not what is putting pressure on bond prices and other assets. Its these other factors that matter.

The limits of the risk premium expansion and bond selloff.

At a proper risk adjusted return all manner of demand will be interested in owning long term bonds. As QT ends in 2025 and more normal dynamics of steady spending leading to savings leading to issuance in a "Circle of Life" will reduce the wild swings in asset prices. At that point normal drivers of growth and inflation will dominate asset price returns. However, we are nowhere near normal.

Synthesis

The risk premium expansion has just begun. The next QRA is just a step along the way. Tactically the actual release matters and we will likely see another leg down in bond and equity prices for the balance of the year commencing this week. Nonetheless we will wait until seeing the release using our analysis to interpret the data. Should be an interesting week.

Current Portfolio and Performance

The DS Alpha Portfolio is now up 30.29% YTD in excess of cash.

Assumed Portfolio size	$ 100,000,000		
LTD P/L	$ 75,586,259		
Total Return	75.59%	YTD Return in excess of cash	30.29%
Today's Date	10/28/2023	Portfolio Created	4/15/2019

Position	Entry Price	Amount	Worst case loss	MTM	P/L	Open/Close
CLZ23 95/105 Call Spread	2.1	476	$ 1,000,000	0.52	$ (752,381)	Open
CLZ3 83/81 Put Spread	0.99	-495	$ 500,000	0.75	$ 118,812	Open
DAX 11/17/23 15500/16000 Call Spread	301.00	-503	$ 500,000	18	$ 711,055	Open
SPX 12/29/23 4075/3875 Put Spread	47.00	1108	$ 5,207,600	50	$ 332,400	Open
NDX 12/29/23 13500/12500 Put Spread	185.00	61	$ 1,128,500	165	$ (122,000)	Open
SPX 11/03/23 4150/4200 Call Spread	16.00	600	$ -	17.28	$ 76,800	Open
RXZ3 11/17/2023 132 137 Call Spread	1.17	427	$ 500,000	0.18	$ (423,077)	Open
EURUSD PUT SPREAD 1/4/2024 1.05/1.02	0.77	(44,843,049)	$ 1,000,000	0.6	$ 76,233	Open
GCZ3 Dec 1925/1875 Put Spread	12.41	806	$ 1,000,000	3.6	$ (709,911)	Open
		Risk	10.836%		10.1%	