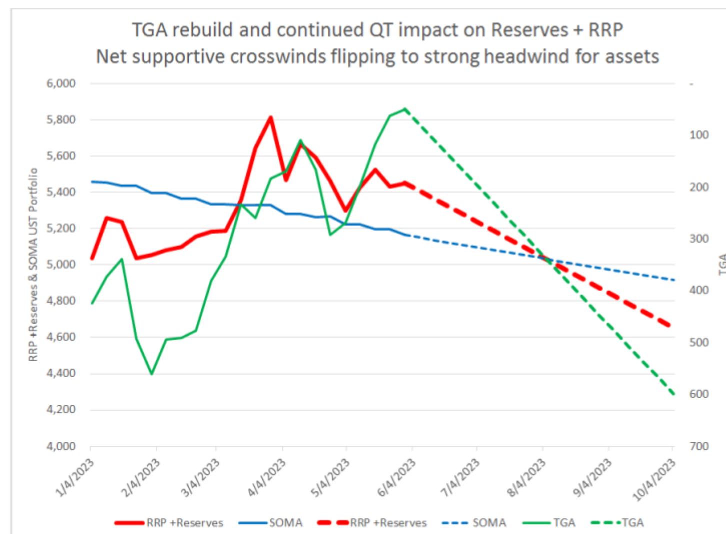
The Damped Spring Report

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

6/4/2023

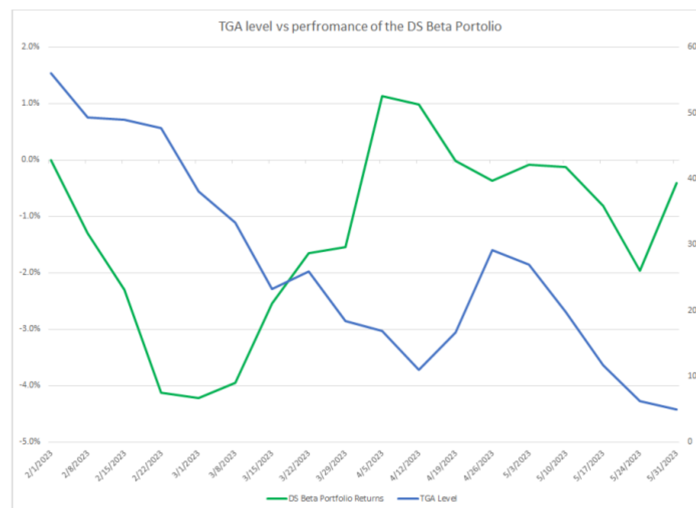
The debt ceiling crisis is over. The bill that unleashes the US government to issue new debt to fund the deficit got signed this weekend. All year borrowed money from 2022 was spent to bridge the difference between expenditures and revenue. That previously borrowed money was kept in the Treasury Department's checking account at the Fed called the Treasury General Account (TGA) The TGA was an Asset of the Treasury and a Liability of the Fed. As it got spent, it handed deposits to the private sector banking system. The banking system deposit was a liability to the recipient of the expenditure and the offset asset was from the Fed - a bank reserve. Bank reserve went up as the TGA was depleted.

The deposits were spendable money for the private sector that could be kept on deposit, removed and placed in a money market mutual fund, invested in financial assets or used for consumption. Most of those things just shifted the deposit from one person to another. The drawdown of the TGA by the government offset the opposing impact of the Fed's balance sheet reduction (QT) by more than 100%. In fact, it was almost twice as large. This all reverses on Monday. In this DSR we will examine the impact of TGA Build on the economy and financial asset markets and discuss the curious choice of Janet Yellen to refill the TGA with mostly T-bills.



Mechanics

The spend down of the TGA of over 500BN since the beginning of February has more than offset the impact of 240BN QT during this period. RRP+Bank Reserves rose by 800BN. Some of that was the impact of temporary usage of Fed facilities to manage the "Banking Crisis" but at least 260BN was directly due to TGA spend down. Asset prices were supported over the last four months and have not changed much falling only 40bp.



Given the shift from TGA rebuild to TGA spend down while QT operates in background it seems notable that asset performance was so poor during an injection of cash into the market. We expect the flip from +260BN of money creation into the private sector to –830BN of extinguishment of money in the private sector will have an impact. However, the details matter.

The Damped Spring Framework for Liquidity has these basic principles.

- Spending in the economy by the government creates savings in the private sector. Issuance by the government must be absorbed by that savings.
- Both spending and issuance are happening all the time and over time balance out.
- The timing of the spending and its conversion into savings, and the issuance matters.
- TGA shifts either accelerate spending or issuance depending on whether the TGA is falling or rising.
- The choice of issuance along the yield curve impacts the private sector based on the risk of the issued security.
- The source of the money to pay the government for its issuance matters.

Using these principles, we can evaluate the potential impact of the current TGA build plan. The current plan as announced in Q2 and Q3 quarterly refunding

documents is to use mostly T-bills to rebuild the TGA. This is a curious choice by the Treasury for several reasons we will discuss here later.

Normally, when the Treasury issues new T-Bills into the market the sources of demand are banks or their clients using their deposits at banks. Today another source of demand is Money Market Mutual Funds. (MMFs). These MMFs are already fully invested or have any excess cash as a deposit at a bank. In order to buy new T-bills, they must sell T-bills that they own which means someone else has to use their deposit to buy. However, a substantial portion of MMF invested cash is put on deposit at the Fed in the O/N RRP program and can be used to purchase bills. Whether the TGA build is funded with Reserves or RRP is critical to understand the impact on asset markets. Here are the impacts.

Bank buys a T-bill for their own account.

- Bank balance sheet debits reserve asset and credits T-bills asset
- Fed debits reserve liability and credits TGA
- Bank system reserves fall.

Bank buys a T-bill as agent for a private sector investor.

- Private sector balance sheet debits deposit asset and credits T-bill Asset
- Bank debits deposit liability and "pays" for the T-bill by debiting reserves asset.
- Fed debits reserve liability and credits TGA
- Bank system reserves fall.

MMF buys a T-bill for its portfolio.

- MMF debits RRP asset and credits T-bill asset
- Fed debits RRP liability and credits TGA
- Bank system reserves do not change.

It must be noted that the exact same mechanics work for T-Notes and T-bonds. However, MMF's are prohibited from buying maturities greater than 1 year. This type of issuance must come from Bank reserves, with one exception. When an investor wants to buy a bond using leverage, they can buy the bond and the MMF can provide a private sector repo lending cash to the bond buyer. For these reasons MMF fund is similar to when an MMF buys bills.

But the big difference between a bond issuance and a bill issuance is the risk of the investment for the private sector. The more risk that issuance requires buyers to accommodate the more impactful issuance is to asset prices. The current plan issues a bunch of bonds but focuses on bills.

Why does it matter where the money comes from.

The current banking regime is one of ample reserves. In 2020 reserves requirements were eliminated entirely as part of the Basel III framework. Prior to 2020 Banks were required to keep a minimum level of reserves on deposit with the Fed. This is sometimes referred to as a fractional reserve banking system. This system was replaced by a system that looks at the risk of the assets of the bank vs the liabilities and requires certain ratios of assets to capital (roughly shareholders equity). If done correctly this method of regulating banks leads to better outcomes than simply measuring the ratio of assets held vs reserve assets held. Nonetheless reserves are necessary for swapping assets between banks in the banking system and between banks and the Fed.

When bank reserves fall for whatever reason, a bank with no minimum reserve requirement should experience no change in their ability to buy assets for their own account or provide loans to its clients. An individual bank may face constraints if its reserves fall because the reserves are the first thing a bank can use without any cost or frictions to meet a deposit withdrawal. But the banking system as a whole should not be impacted by interbank reserve shifts or bank reserve declines.

However, the bank and its clients who buy bills or bonds do consume resources that could be used to consume or buy financial assets. For that reason, the two forms of bills purchase involving banks are likely to reduce demand for assets more broadly. If the issuance is risky long-term bonds, it reduces demand markedly if bills it has less impact. Once again why bills Janet?

On the other hand, The MMF RRP funding path has virtually no impact on market liquidity because the MMF uses no leverage. Banks may reduce their leverage in line with a reserve decline. MMF's don't.

The implication for markets is that if the 830BN of aggregate new money issued by the Treasury is financed entirely from the RRP the impact on asset prices will be minimal.

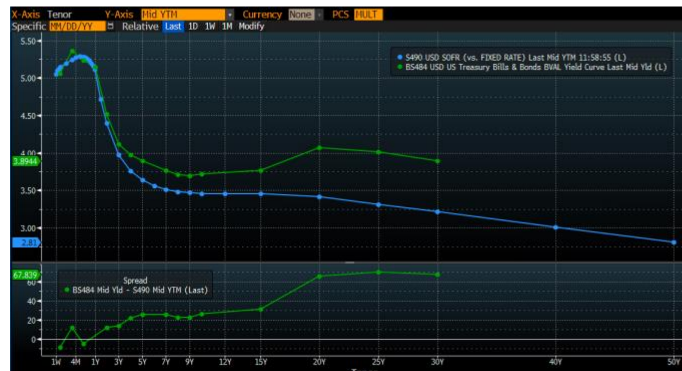
Who will buy the bills and how will we know?

Now that we know how MMF's Bank's and private sector investors can finance their purchase of the bills, lets focus on why they would buy bills at all. Each investor type has a rate they receive on cash.

- MMF's using the RRP get 5.05.
- Bank's get paid IORB of 5.15
- Private sector investors who can lend cash using repo SOFR a 5.09

Not much difference, right? But all else being equal those depositing in the Fed RRP are getting the lowest return on cash and bank's cash the most at 5.15. But

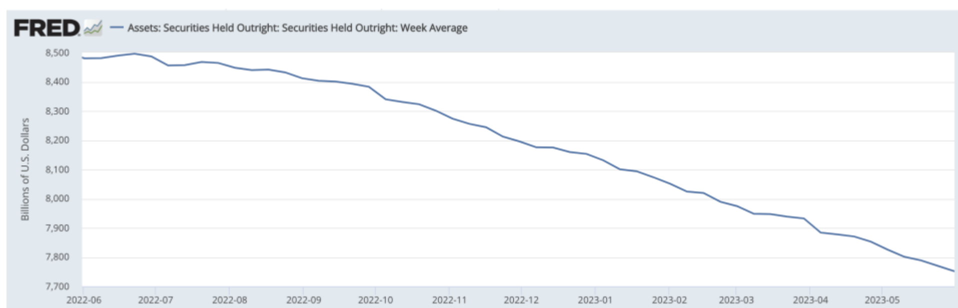
bills are not overnight they have maturities ranging from as little as 1 day to 52 weeks. Because the overnight cash rate for each investor is within the Fed Funds target range if that range goes up, the Fed hikes rates, one may expect to receive more yield than cash. A clean way to see what rate a bill should trade at given its maturity is to look at the SOFR futures markets to decide what the market expected path may be. Notice the green line (Bills and notes yields) and the blue line (SOFR yields) both expect rates to peak in 2023 and come down in 2024. Buy looking at the auction results of the bills markets and the secondary trading levels of existing bills we can determine if bills are bid up, green below blue, or struggling to find demand, blue below green.



In the month leading up to the debt ceiling the yields on bills all spiked relative to the blue curve. This is because the government was threatening default. With that now passed the price of the bills auction will provide clarity to the level of demand to allow the massive supply to clear the market.

MMF's will consider that they receive the lowest cash return and bid based on the SOFR curves expectations of future fed funds rates. At the same time, they have rules about how much overnight money they are required to keep. They are required to be highly liquid cash so that investors can redeem at a fixed price. That will limit their demand for bills.

Banks for their own accounts have the best place to keep cash the Fed pays 5.15%. In addition, they have been selling bonds for a long time and are not likely to buy bills unless they are a true bargain. They have sold 750BN over the last year and show no sign of buying.

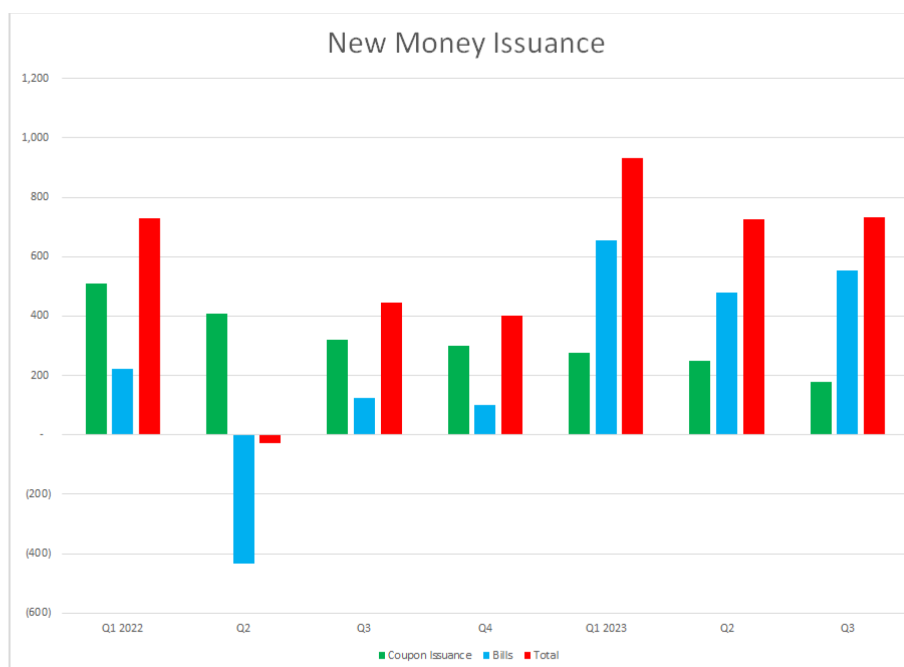


Bank clients ranging from corporations to individuals have been buying most of the bills issued over the last year. They may have adequate demand to squeeze out MMF's.

On Monday, Treasury will issue 176BN in various maturity bills and announce further auctions during the week. We will be paying close attention to the auction results. If there is strong demand and bills trade at a lower yield than SOFR that is likely to mean demand came from bank clients primarily and very little came from MMF's. If, however, auctions see minimal demand it is likely that they trade at a premium yield to SOFR which would be attractive to MMF's and draw down the RRP. The mechanism we described that places a headwind on assets depends on whether the MMF buys or the bank depositor buys. The higher the yield the more RRP drawdown and the less impact on broad financial assets.

Why bills Janet?

Despite the significant amount of new money being issued in Q2 and Q3, it strikes us as curious that Secretary Yellen is choosing to issue so little coupon bonds to the market. Next quarter will have the smallest coupon issuance since Covid. In fact at only 178BN all new money issuance will simply be used to pay back the Fed Runoff. Not build the TGA at all or fund the 500BN of new deficit over the coming quarters.



Why is Janet favoring bills?

- She has a pile to sell.
- Bills can be announced and sold rapidly without disruptions.
- Bills may drain RRP which is attractive.

Why else may she favor bills which raise questions about motives?

- Maturing bonds during the coming quarters are large and investors may pass on rolling to new duration (The size of Refinancing bond issuance is enormous)
- Banks and troubled banks in particular are long duration and bond issuance may be destabilizing.
- Perhaps the Fed wants to begin outright sales and the Treasury is stepping out of the way.

Despite these reasons we are concerned about the decision because

- Bills interest rate levels are the highest on the curve and the curve screams it wants long term bonds.
- It would be highly unusual for the Treasury to take an active bet on falling interest rates.
- But lastly our greatest concern is the choice of using mostly bills directly mutes the effect of quantitative tightening and it shows a potential conflict developing between Treasury's political desire to maintain a strong economy and the Fed's attempts to curb inflation.

In synthesis the TGA rebuild shifts a tail wind of liquidity into a head wind. The headwind may vary from nothing at all to one that will likely impact all assets. The headwind strength will depend on take up by the RRP but is designed specifically to tap the RRP. Treasury chose bills over bonds. They have chosen to design a TGA build with the least headwind possible. We don't know if this is the intent or not but are concerned. Once again it falls entirely on the Fed to respond with higher rates for longer and an acceleration of QT in order to fight inflation. Treasury has shown no guts to do so. While markets are priming for a liquidity withdrawal selloff, we are less concerned. We remain short bonds and stocks but don't expect a windfall based on TGA rebuild.

Current Portfolio and Performance

Assumed Portfolio size	$ 100,000,000		
LTD P/L	$ 46,826,880		
Total Return	46.83%	YTD Return	1.53%
Today's Date	6/4/2023	Portfolio Created	4/15/2019

Date	Position	Entry Price	Amount	Worst case loss	MTM	P/L	Open/Close
10/20/2022	CLZ23 95/105 Call Spread	2.1	476	$ 1,000,000	0.2	$ (904,762)	Open
1/4/2023	FXI ETF	30.28	115,000	$ 500,000	27.43	$ (327,750)	Open
3/16/2023	NDX 12500/11750 6/16/23 Put Spread	230.00	43	$ 1,000,000	4	$ (982,609)	Open
3/28/2023	NDX 12500/11750 6/16/23 Put Spread	170.00	59	$ 1,000,000	4	$ (976,471)	Open
3/28/2023	SPX JUNE 3900/3500 Put Spread	60.00	333	$ 2,000,000	3	$ (1,900,000)	Open
5/24/2023	SPX June 30th 4000 Put	42.75	468	$ 2,000,000	8.1	$ (1,621,053)	Open
5/24/2023	NDX June 30 13250 Put	199.00	25	$ 500,000	26	$ (434,673)	Open
5/25/2023	NDX August 13000 Put	250.00	60	$ 1,500,000	111	$ (834,000)	Open
6/2/2023	SPX Iron Condor 6/30 4290/4320/4350 JHEQX	25.50	-2225	$ 1,000,000	25.5	$ -	Open
2/1/2023	SFRZ4 ShortTwos and Spoos	97.085	-1600	$ 2,000,000	96.6	$ 1,940,000	Open
5/18/2023	ZNU July(june expiry) 117/113 Call Spread	1.875	-941	$ 2,000,000	1.125	$ 705,882	Open
5/25/2023	SFRU3 ShortTwos and Spoos	94.75	400		94.78	$ 30,000	Open
5/31/2023	ZF AUGUST 107.5 Puts 7/21/2023 Expiry	0.4921875	4063	$ 2,000,000	0.5	$ 31,746	Open
5/5/2023	EURJPY 148/152 Call Spread OTC 8/7/2023 expiry	1	50,000,000	$ 500,000	1.41	$ 205,000	Open
5/5/2023	USDJPY 135/140 Call Spread OTC 8/7/2023 expiry	1.2	41,666,667	$ 500,000	2.23	$ 429,167	Open
5/17/2023	NVDA 280/300 Call Spread	11	-111	$ 100,000	19.25	$ (91,667)	Open
5/17/2023	AAPL 160/175 Call Spread	9.8	-192	$ 100,000	11.86	$ (39,615)	Open
5/17/2023	AMZN 105/115 Call Spread	6.42	-279	$ 100,000	7.97	$ (43,296)	Open
5/17/2023	GOOG 110/120 Call Spread	6.57	-292	$ 100,000	7.85	$ (37,318)	Open
5/17/2023	META 230/245 Call Spread	8.4	-152	$ 100,000	12.09	$ (55,909)	Open
5/17/2023	MSFT 300/315 Call Spread	9.47	-181	$ 100,000	12.2	$ (49,367)	Open