

May 17, 2024

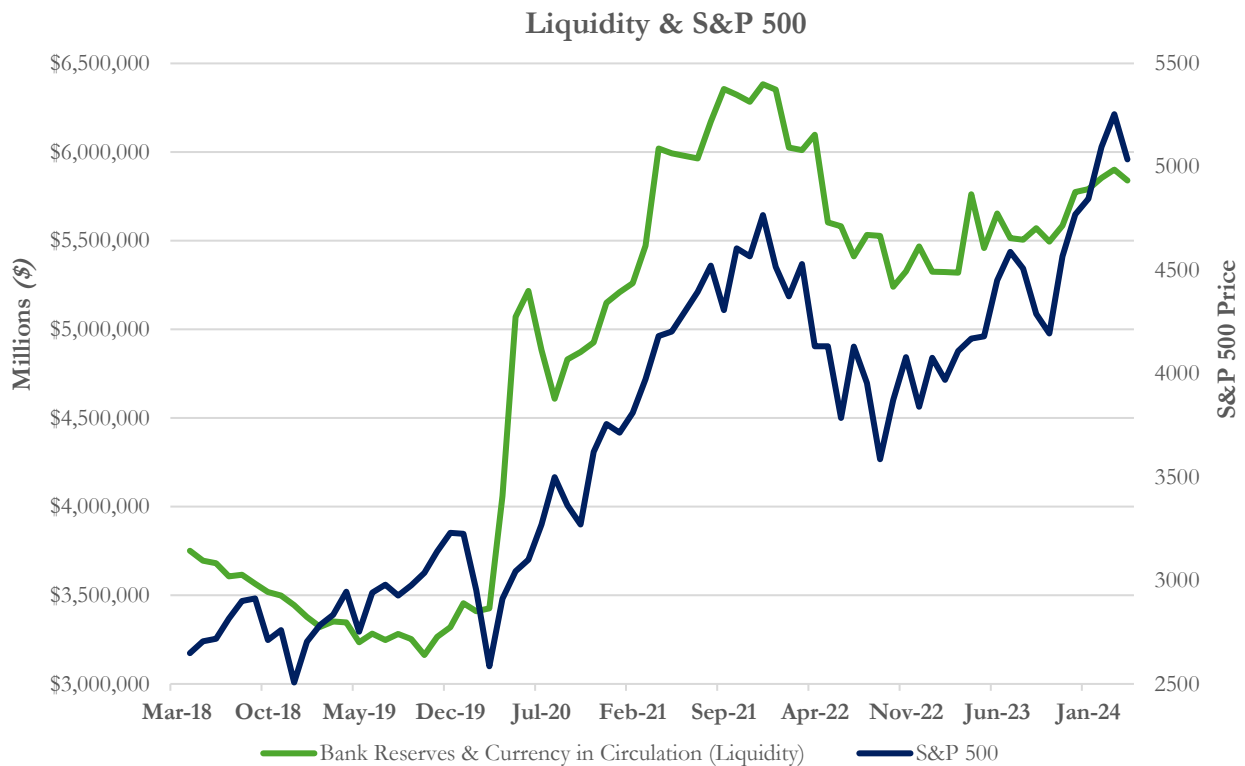
## Liquidity is King: *The Fed, the Treasury, & the Future for Inflation*

### Summary

- Changes in liquidity have dictated the return in risk assets post-COVID. Since 2022, in the 10 months that the Fed & Treasury have combined to remove more than -\$100B in liquidity, the S&P 500 has averaged a return of -5.0%. In the 5 months when they have combined to add more than +\$100B, the S&P 500 has averaged a return of +7.1%.
- The Federal Reserve utilizes two primary tools to enact monetary policy and, ultimately liquidity, the Federal Funds Rate (*the rate at which banks lend money to each other overnight*), and its balance sheet.
- The Assets on the Fed's Balance sheet are Treasury & Agency Securities. The Liabilities consists of Bank Reserves & Currency in Circulation (*ie Liquidity*), the Treasury's General Account, the Reverse Repo Facility, & other Liabilities (*Foreign Deposits, etc.*). Like any balance sheet, a change in Assets must coincide with a change in Liabilities.
- Through Quantitative Easing, the Federal Reserve buys Treasury & Agency Securities from banks in the open market, adding an asset to the Fed's balance sheet and increasing bank reserves.
- During the years following the COVID Pandemic, the Federal Reserve increased its balance sheet assets by \$4.6T, which resulted in \$2.6T of additional capital (*liquidity*) into the financial system.
- To establish a floor and enforce the bottom of the target range for the Federal Funds rate, the Fed operates a facility that engages in reverse repurchase agreements. In these transactions, the Fed will sell a security off its balance sheet to a Money Market fund or bank and agrees to buy this security back the next day at a slightly higher price (*acting as an interest rate*). Over \$2T in capital found its way into the Fed's Reverse Repo Facility (*via Money Market funds*), effectively outside of the financial system.
- The combination of excess bank reserves and an inverted yield curve caused many large banks to "shed deposits" by offering uncompetitive deposit rates. Money Market funds gained most of these assets at a time when the Treasury was reducing the supply of bills (*short-term debt*) in the market. This shortage in the supply of bills (*~\$924B*) drove much of the new capital in Money Market funds to the Fed's Reverse Repo Facility (RRP).
- While supply chain concerns certainly added transitory stress, this massive increase in liquidity combined with ultra-low interest rates primarily drove the rapidly increasing inflation rate, which peaked at 9.1% on a YOY basis in June 2022.
- In March 2022, the Fed started the fastest rate hiking cycle in history (*525 bps in 16 months*) and in June 2022 began the process of Quantitative Tightening (*reducing its holdings of Treasury & Agency Securities*), removing Assets from its balance sheet and reducing bank reserves. Quantitative Tightening eventually reached a pace of ~\$1T per year (*~\$95B per month*).
- Like commercial banks, the Treasury maintains an account (*Treasury General Account, or TGA*) at the Federal Reserve that is a liability on the Fed's balance sheet. The Treasury can add to liquidity by spending down its General Account or remove liquidity by increasing its General Account through tax revenue or debt issuance.
- From October 2022 - May 2023, the looming Debt Ceiling Crisis forced the Treasury to aggressively spend down its General Account at the Fed, helping to compensate the Fed's drain on liquidity through Quantitative Tightening.

- On June 3, 2023, the Debt Ceiling was suspended through January 1, 2025. With the Treasury General Account nearly empty, Janet Yellen began tapping the capital at the Fed’s Reverse Repo Facility by increasing net issuance of bills by \$1.2T. In doing so, the Treasury was able to increase debt issuance without straining liquidity. This is a temporary measure, however, as the RRP balance has fallen below \$500B.
- Through spending down its General Account and accessing the capital in the Reverse Repo Facility, the Treasury has effectively offset nearly all the Fed’s -\$1.5T drain on liquidity over the past 2 years. Despite this fact, at its latest meeting, the Fed announced that it would be reducing its pace of Quantitative Tightening by -\$35B per month, extending the runway of the RRP through the election.
- The move should be supportive to stock and bond prices through the election, with the largest risk being hot inflation prints in the interim. While headline CPI numbers have been positively received by markets, Core CPI has trended above the Fed’s target in recent months.
- The full impact of the Fed’s 525bps of interest rate hikes from March 2022 – July 2023 have likely not been fully realized, as it takes an average of 12 months for these effects to work their way through the financial ecosystem. Hot inflation prints may necessitate “higher rates for longer” from the Federal Reserve, further increasing the stress on banks and borrowers.

More detail can be found in the following pages. All data as of 4/30/2024 unless otherwise noted. Tom Tzitzouris (Strategas Research) was a primary resource throughout much of the following research.



Source: Bloomberg (as of 4/30/2024)

### How the Federal Reserve Impacts Liquidity

The Federal Reserve operates under a dual mandate of achieving maximum employment while maintaining price stability with a 2% inflation rate.

To achieve this mandate, the Fed implements two primary monetary policy tools the Federal Funds Rate and its balance sheet.

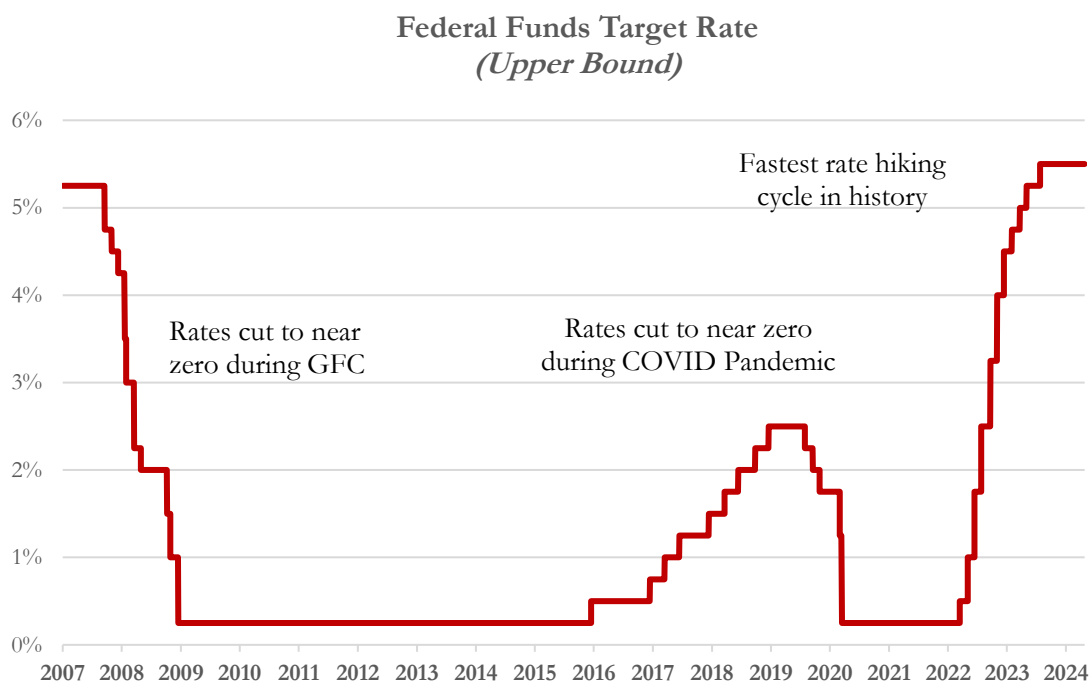
The Federal Funds Rate is set by the Fed and dictates the rate at which banks can lend money to each other overnight. Changes to the policy rate affect interest rates across the yield curve to varying degrees.

Lowering the Fed Funds rate makes it easier for banks to access capital and lend money. It also puts less stress on borrowers (*both businesses & consumers*), as they are paying less interest on loans. Lower interest rates can also inflate asset prices (*Stocks, Bonds, & Real Estate*) as expected future cash flows are discounted at a lower rate, disincentivizing saving as risk assets attract more capital. The cumulative impact of these outcomes can accelerate growth in a slowing economy.

Raising the Fed Funds has the opposite effect: as it becomes more difficult for banks to lend capital and increases the burden on commercial and consumer borrowers. The price of risk assets are negatively impacted and now must compete for capital with more attractive savings rates. The Federal Reserve increases the Fed Funds rate to slow down an economy when inflation runs too hot.

After the Fed Funds rate was benchmarked at 0% - 0.25% for the better part of 12 years post-GFC, the Federal Reserve enacted the fastest hiking cycle in history from March 2022 – July 2023, raising the policy rate 525 basis points to 5.25% - 5.50%. The move was in response to the rapidly increasing inflation that resulted from policy measures enacted during the COVID Crisis which continued over the next 2 years. Such an aggressive hiking cycle is unprecedented and is still working its way through the economy.

While the price reaction in the stock market for example are often immediate, the full impact of monetary policy adjustments to the Fed Funds rate is gradual, as it takes an average of 12 months for these effects to work their way through the financial ecosystem.

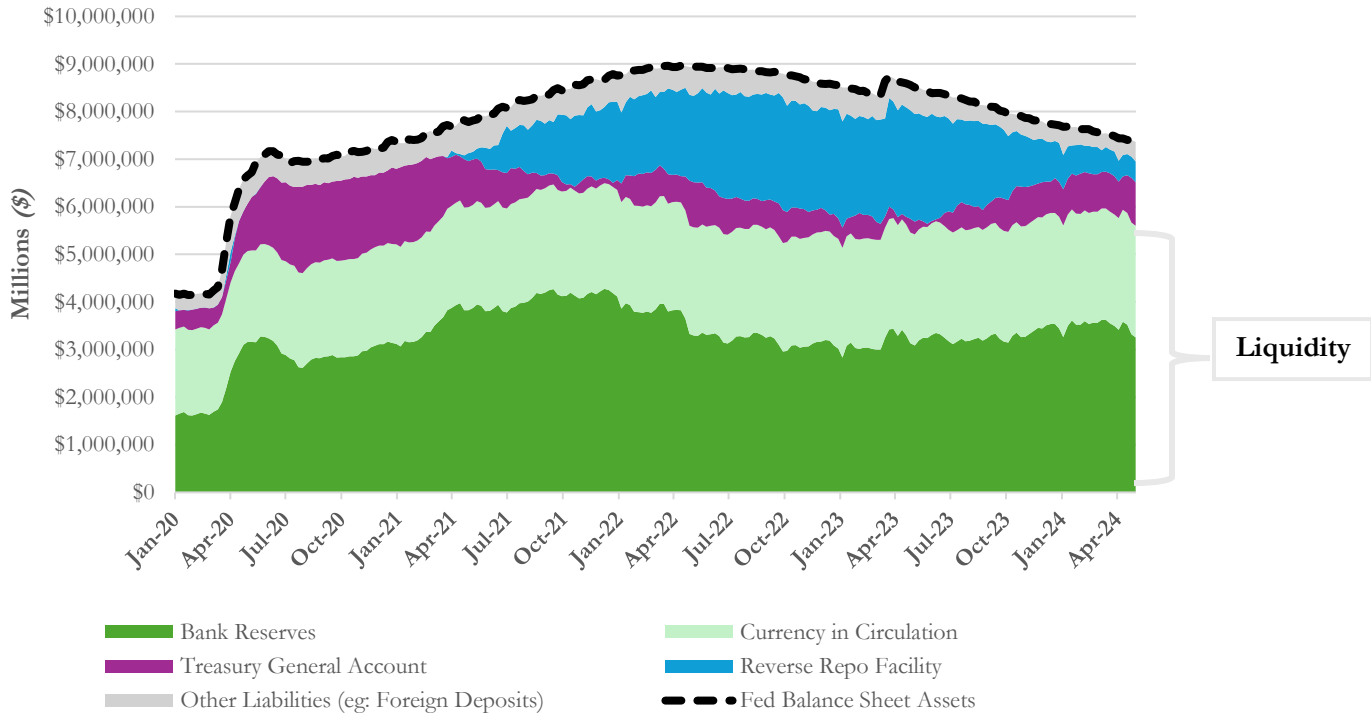


Source: Bloomberg (as of 4/30/2024)

The other primary tool at the Fed's disposal is its balance sheet.

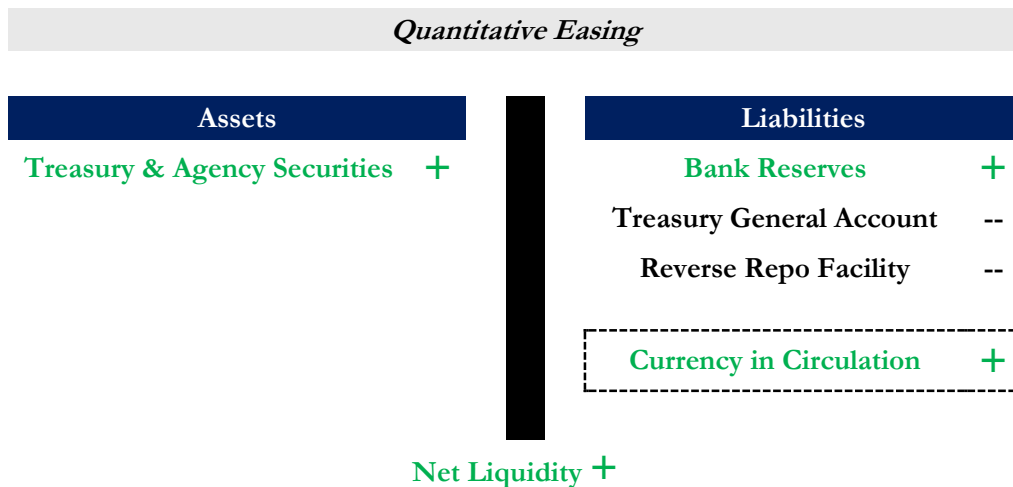
Like any balance sheet, a change in assets must coincide with a change to the liabilities.

### Components of Federal Reserve Balance Sheet



Source: Bloomberg (as of 4/30/2024)

During the GFC, the Fed began purchasing Treasury & Agency securities in the open market, which became Assets on its balance sheet in a transaction known as Quantitative Easing. In doing so, bank reserves are increased, giving banks more money to lend, which increases the money supply and lowers interest rates (*Quantitative Easing has a more direct impact on longer-term interest rates compared to rate cuts*).



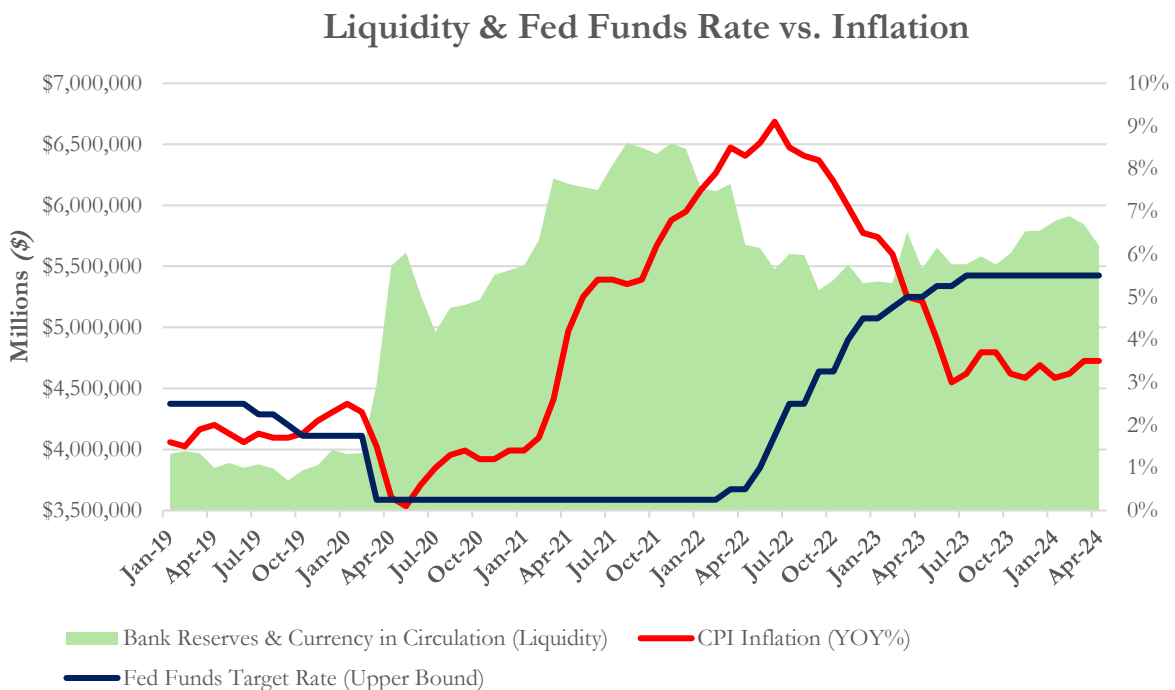
- Federal Reserve buys Treasury & Agency Securities from banks in the open market.

- Less Treasury & Agency Securities are available in the market, driving up prices and suppressing yields. Lower yields make borrowing easier.
- An Asset is added to the Fed's balance sheet.
- The Fed credits bank reserves, giving banks more capital to lend, eventually becoming currency in circulation.

During the COVID Crisis and the months following, the Fed more than doubled the size of its balance sheet through the purchase of Treasury & Agency securities from January 2020 through May 2022. At its peak, the Fed's balance sheet ballooned to \$9.0T, a \$4.8T increase from January 2020, resulting in \$2.6T additional liquidity to the financial system (78% increase). \$2.6T added to bank reserves and currency in circulation leaves a ~\$2T hole in Fed stimulus that did not make its way into the financial system. Most of this money made its way into Money Market funds, which ultimately ended up at the Fed's Reverse Repo Facility (*more on that later*).

While supply chain concerns certainly added transitory stress, this massive increase in liquidity primarily drove the rapidly increasing inflation rate, which peaked at 9.1% on a YOY basis in June 2022.

The below chart shows how the combination of increased liquidity and ultra-low interest rates accelerated inflation post-COVID:



Source: Bloomberg (as of 4/30/2024)

The Federal Reserve began tapering their asset purchases in November of 2021, but to adequately combat inflation, the Fed needed to remove the excess liquidity in financial markets by reducing its balance sheet holdings (*known as Quantitative Tightening*). The problem is that Quantitative Tightening has very little historical precedent (*attempted once in 2019 for 8 months*) and can be a painful process. Bond markets are flooded with new supply, driving up interest rates, while banks have less capital to lend. A rapid increase in longer-term rates can also materially impair marketable assets held on bank balance sheets, resulting in bank solvency concerns (*see SVB and Regional Bank Failures in March 2023*).

*Quantitative Tightening*

Assets	Liabilities
<b>Treasury &amp; Agency Securities</b> -	<b>Bank Reserves</b> -
	Treasury General Account --
	Reverse Repo Facility --
	<b>Currency in Circulation</b> -
<b>Net Liquidity -</b>	

- Federal Reserve allows maturing Treasury & Agency Securities to roll off its balance sheet (*not reinvesting*). An asset is removed from the Fed’s balance sheet.
- More Treasury & Agency Securities flood the market, inflating yields and depressing prices. Higher yields make borrowing more difficult.
- Primary Dealers (*banks*) are forced to buy unpurchased Treasuries at auction, giving them less capital to lend.

Beginning in June 2022, the Federal Reserve began Quantitative Tightening, reducing its balance sheet by as much as -\$95B per month (*approximately -\$1T per year depending on the exact amount*).

By September 30, 2022, the Fed appeared to be successfully removing excess liquidity from the financial system. Bank Reserves & Currency in Circulation had fallen -\$1.26T from its peak in December 2021 (\$6.5T), and inflation was falling. Higher interest rates and less liquidity resulted in large losses in stocks & bonds, with the S&P 500 price falling -23.7% and the Bloomberg Aggregate Bond Index falling -14.4%.

		Fed Funds Target Rate <i>(Upper Bound)</i>	Bank Reserves/Currency in Circulation (\$MM)	10-Year Yield	S&P 500 Price
<i>*Peak Liquidity</i>	<b>12/8/2021</b>	0.25%	\$6,496,169	1.52%	4701.21
	<b>9/30/2022</b>	3.25%	\$5,239,255	3.83%	3585.62
	<b>Change</b>	3.00%	-\$1,256,914	2.31%	-23.7%

*Source: Bloomberg (as of 4/30/2024)*

It was at this point, however, that the Treasury began to intervene by providing liquidity backstops to offset the Fed’s tightening measures.

### How the Treasury Impacts Liquidity

We’ve spent a lot of time over the past few years detailing how the Federal Reserve influences liquidity and how changes in liquidity can drive capital markets. What has gone less noticed, however, is how the Treasury can influence liquidity.

The current Secretary of the Treasury is Janet Yellen, who served as the Chairman of the Federal Reserve from 2014 – 2018. This experience puts Yellen in a unique position, as she understands the various

mechanisms that drive liquidity in capital markets. The Treasury funds Government spending via tax revenues and Treasury debt (*issuing bonds, notes, & bills*). Much has been made in the news concerning Government spending and the Federal deficit.

But why does the Treasury care about liquidity? There are 2 reasons:

1. The Treasury's mandate is to manage the US Government's finances to maintain a strong economy and promote conditions that enable economic growth.
2. While the Federal Reserve claims political independence (*more on this later*), the Treasury is part of the Executive Branch, meaning the Treasury has political motivations to prevent a Fed induced recession.

One could argue that the economic growth since 2022 has been almost entirely funded by the Government's budget deficit, as the chart below details:

Budget Deficit & GDP	
GDP (4Q2022)	\$26,408,400,000,000
GDP (1Q2024)	\$28,284,500,000,000
Change in GDP	\$1,876,100,000,000
Change in Budget Deficit (Since 2022)	-\$1,868,668,000,000

Source: Bureau of Economic Analysis; Bloomberg (as of 4/30/2024)

Like commercial banks, the Treasury maintains an account (*Treasury General Account, or TGA*) at the Federal Reserve that is a liability on the Fed's balance sheet.

TGA Increases (Tax Revenue or Issues Treasury Debt)	
<b>Assets</b>	<b>Liabilities</b>
Treasury & Agency Securities --	Bank Reserves -
	Treasury General Account +
	Reverse Repo Facility --
	Currency in Circulation -
<b>Net Liquidity -</b>	

- The Treasury General Account grows via tax revenue or student loan repayment, resulting in less currency in circulation.



- The Treasury issues debt (*bonds, notes, or bills*), most of which are purchased by primary dealers (*banks*), which increases the Treasury General Account and decreases bank reserves (*resulting in less available capital to be lent out and less currency in circulation*).

<i>TGA Decreases (Gov Spending)</i>	
Assets	Liabilities
Treasury & Agency Securities --	Bank Reserves --
	<b>Treasury General Account -</b>
	Reverse Repo Facility --
	Currency in Circulation +
<b>Net Liquidity +</b>	

- The Treasury funds Government programs like social security and food stamps or engages with private enterprises (*ie defense contracts/ infrastructure spending*).
- The Treasury General Account goes down and currency in circulation increases.

### The Debt Ceiling

2021 proved to be a contentious year in Congress, as 2019’s suspension of the debt limit was set to expire at the end of July 2021. 2019’s debt limit suspension was particularly fortuitous in light of the massive borrowing from the Treasury to fund government relief payments throughout the COVID pandemic.

Here’s a timeline of events:

- **January – July 2021:** Treasury borrowing falls as debt limit suspension set to expire.
- **August 2021:** Debt limit reinstated at \$28.4T as a temporary measure.
- **October 2021:** Debt limit raised by \$480B to facilitate borrowing until December.
- **December 2021:** Debt limit raised to \$31.4T (*\$2.5T increase*) to fund government spending through June 2023
- **January 2023:** Treasury hits \$31.4T debt limit and deploys “extraordinary measures” (*suspending reinvestment of Treasury debt to federal retirement accounts, etc.*) to fund government expenditures through early June.
- **June 2023:** Debt Deal is reached, suspending the debt limit through January 1, 2025. Treasury borrowing increases.

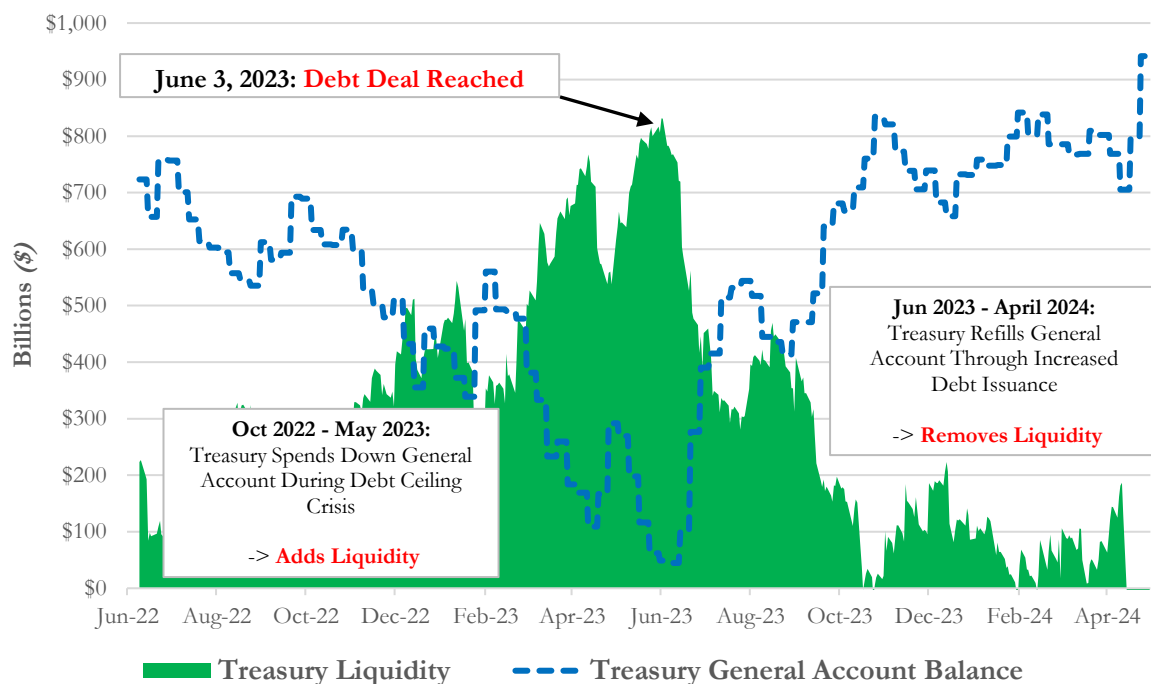
In late 2022, the debt ceiling entered the news cycle, but the below chart shows that Treasury borrowing steadily fell throughout most of 2022. With the debt ceiling looming and the Federal Reserve flooding the market with supply, reducing liquidity, why would the Treasury add additional supply that will drive up interest expense and further reduce liquidity?

Instead, the Treasury chose to fund its obligations by spending down its General Account Balance at the Fed, which increases liquidity rather than detracts from liquidity. The Treasury began aggressively spending down



the General Account from October 2022 until the debt deal was reached in June 2023, adding more than \$600B in net liquidity.

### Timeline of Treasury Liquidity (As Fed Begins to Reduce Balance Sheet)



Source: Treasury Daily Statement; Bloomberg (as of 4/30/2024)

After the debt deal was reached on June 3, 2023, Yellen & the Treasury found themselves in an interesting situation. With the Treasury General Account nearly empty, the Treasury would need to issue substantial amounts of new debt to refill its coffers and fund government obligations, however, doing so would drastically reduce liquidity, compounding the effect of the Fed's continued Quantitative Tightening.

Fortunately for the Treasury, more than \$2T of excess Fed stimulus remained in the Fed's Reverse Repo Facility, outside of the financial system.

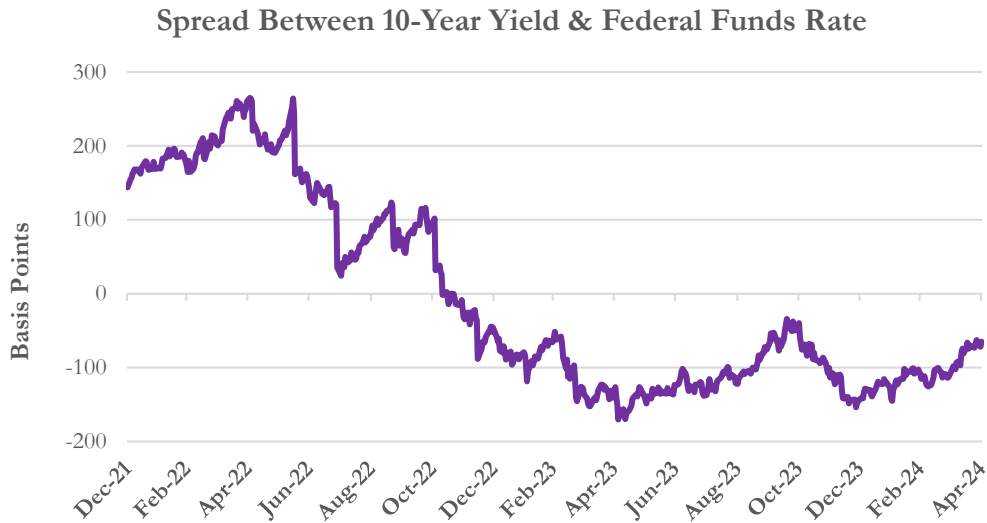
#### What is the Reverse Repo Facility?

The Fed Funds rate is the overnight rate at which banks lend capital to each other. The current hiking cycle was the fastest in history at 525 basis points in 16 months. These interest rate hikes coincided with an unprecedented amount of excess liquidity, both in banks and money market funds. A money market fund needing lenders can offer a lower rate than the 5.25% - 5.00% target dictated by the Federal Funds rate.

To establish a floor for the Fed Funds rate and maintain their target, the Federal Reserve implemented a facility for Reverse Repurchase Agreements (*Reverse Repos*). In these transactions, the Fed will sell a security off its balance sheet to a Money Market fund, typically overnight, and agrees to re-purchase the security the next day at a higher price. The spread that a Money Market fund earns on this transaction can be thought of as interest, and the facility helps discourage overnight lending to banks at rates below the Federal Funds target rate.

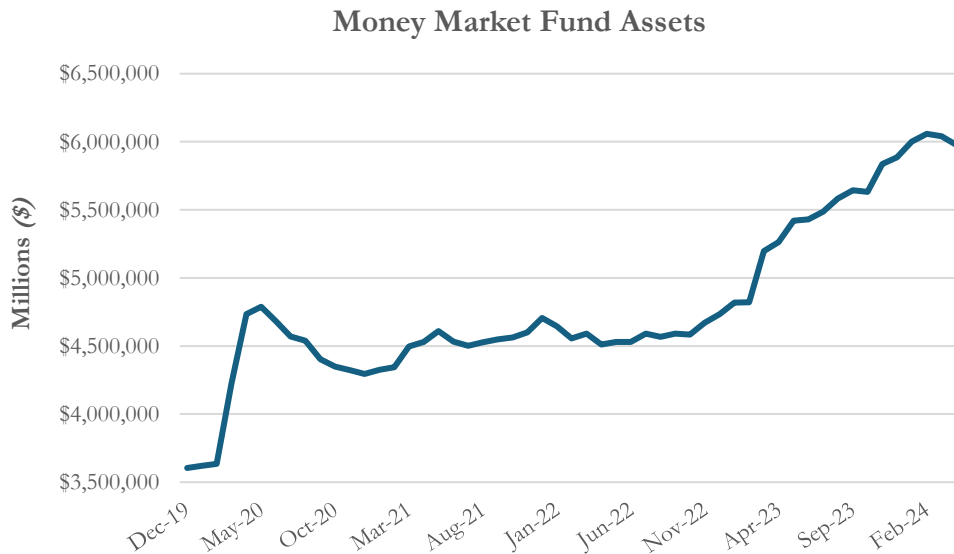
### Money Market Asset Growth

When the Fed Funds rate is higher than longer term interest rates, the yield curve is said to be inverted. An inverted yield curve is inherently disruptive to a bank’s business model, as banks are forced to borrow at higher rates than they lend. Banks must maintain adequate deposits on their balance sheets to cover the loans that they make. With so much excess capital to lend coinciding with an inverted yield curve, many of the larger banks opted to “shed deposits” by offering deposit rates well below the Fed Funds Rate. Much of this money found its way into money market funds offering yields commensurate with the Fed Funds Rate (currently 5.25% - 5.50%).



Source: Bloomberg (as of 4/30/2024)

The below chart shows Money Market fund assets growing by ~\$2.5T since the beginning of 2020:



Source: ICI Money Market Fund Assets (as of 4/30/2024)

Obama era reforms (*post-GFC*) effectively require a significant percentage of Money Market fund assets to be Government securities, and Money Market Funds by definition can only buy very short-term paper to ensure ample liquidity. As Money Market Fund assets were growing, net new issuance of Short-Term Government debt was decreasing, effectively limiting the capital that Money Market funds could lend.

With too much money and no one to lend to, Money Market funds turned to the Fed's Reverse Repo Facility (*RRP*), offering an attractive yield for an overnight loan. From February 2021 through June 2023 the RRP facility grew from near zero to nearly \$2.5T. This \$2 - 2.5T represents excess Fed stimulus that did not make its way into the financial system.

***RRP Increases (MM Funds Needing to Put Capital to Work)***

Assets		Liabilities
Treasury & Agency Securities	--	<b>Bank Reserves</b>
		-
		Treasury General Account
		--
		<b>Reverse Repo Facility</b>
		+
		<b>Currency in Circulation</b>
		-

Net Liquidity -

- Banks shed unwanted deposits due to excess capital by offering lower rates, decreasing lending and reducing banks reserves, resulting in less currency in circulation.
- This capital goes to money market funds offering higher rates.
- Money Market funds utilize the Fed's Reverse Repo facility for overnight lending, offering a more attractive return than other borrowers.

### The Treasury Taps the Reverse Repo Facility

The Treasury issues 3 main types of securities:

- **Bills:** Maturities of 4 Weeks – 1 Year
- **Notes:** Maturities of 2 Years – 10 Years
- **Bonds:** Maturities of 20 Years – 30 Years

Post-COVID, the Treasury opted to fund its obligations by issuing longer term debt, locking in historically low interest rates. The Treasury continued this practice while the Fed raised rates (*inverting the yield curve*), as the interest cost for notes and bonds was now cheaper than it was for shorter-term bills. Between January 2021 and May 2023, the Treasury issued \$3.7T in net new debt but \$4.6T in coupon bearing securities, meaning the supply of Treasury Bills declined by -\$924B during this period.

However, after the debt deal was reached in June 2023, the Treasury needed a way to raise a substantial amount of new debt without impacting liquidity. By increasing the issuance of bills (*specifically maturities less than 9 months*) and offering a higher interest rate on those bills than could be earned in the Fed's Reverse Repo Facility (*RRP*), the Treasury could attract capital from Money Market funds, away from the RRP and into the financial system.

**RRP Decreases (Market is Flooded with Treasury Bills)**

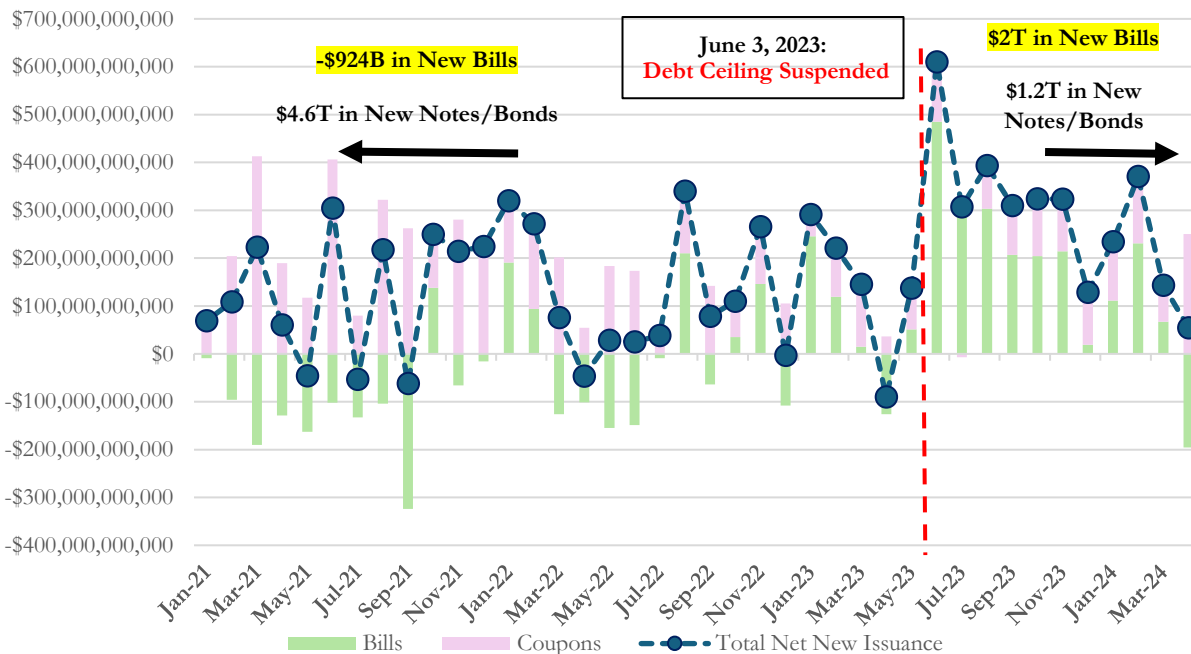
Assets		Liabilities	
Treasury & Agency Securities	--	Bank Reserves	+
		Treasury General Account	--
		Reverse Repo Facility	-
		Currency in Circulation	+

Net Liquidity +

- The Treasury increases Treasury Bill issuance relative to Notes/Bonds, paying a higher interest rate than offered by the Fed’s Reverse Repo Facility.
- Money Market Funds purchase newly issued bills using capital that’s currently at the Reverse Repo Facility, decreasing the balance of the RRP.
- Fewer coupon paying securities & increased buying from Money Market funds lowers the amount of Treasury securities that primary dealers (*banks*) are required to purchase, increasing bank reserves.
- The Treasury uses this capital to fund its obligations, increasing the currency in circulation.

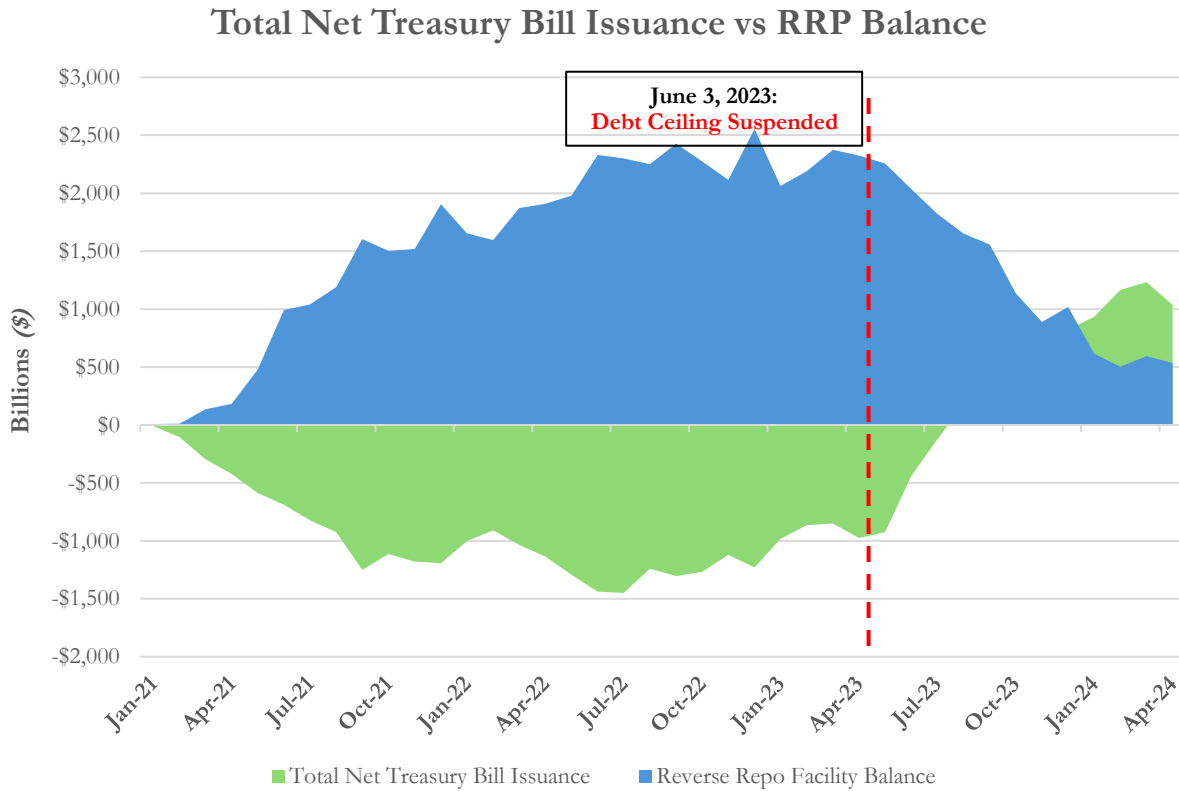
Since the debt deal in June 2023, the Treasury has issued an additional \$3.2T, with ~\$2T coming from bills (61%), and notes/bonds contributing \$1.2T (39%). The pace of new bill issuance has slowed considerably in recent months (*more on this later*), which is detailed in the below chart:

**Net New Treasury Issuance**



Source: Treasury Direct (New Cash/Pay Down Amounts)

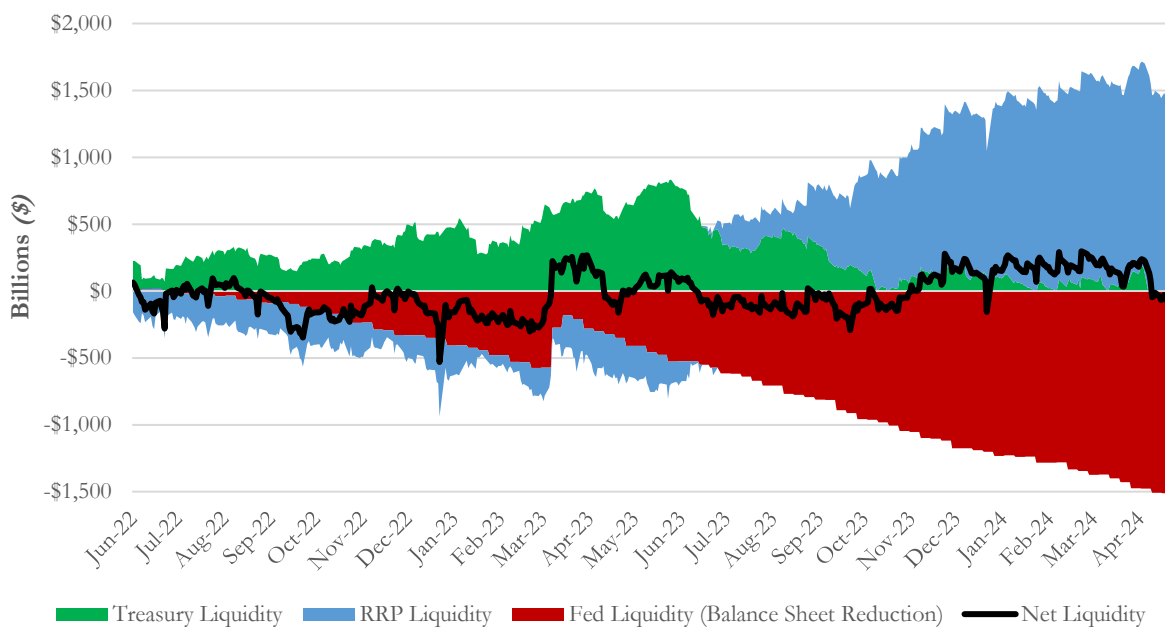
The chart below details the inverse relationship between new Treasury Bill Issuance and the Reverse Repo Facility Balance. The RRP balance was \$2.25T at the end of May when the supply of new Treasury Bills shrank. The pivot from the Treasury to issue \$2T in net new bills (*coinciding with less note/bond issuance*) has pulled \$1.6T from the RRP, and into the financial system.



### Pulling it All Together

The actions from Yellen & the Treasury have thus far offset the Federal Reserve’s efforts to remove the excess liquidity from capital markets. The below chart details the cumulative net liquidity contributions from the Federal Reserve, the Treasury, & the Reverse Repo Facility since the Fed began Quantitative Tightening in June of 2022. Despite a -\$1.5T reduction in Fed holdings of Treasury & Agency securities, Yellen’s shrewd maneuvering has resulted in a mere -\$176B of negative net liquidity over the past 2 years. Until April’s figures, which were sharply negative, the entities had combined to contribute positive net liquidity since the Fed began Quantitative Tightening, as can be seen in the chart below:

## Net Liquidity Since Fed Began Tightening



Source: Daily Treasury Statement; Federal Reserve; Bloomberg (as of 4/30/2024)

To contextualize the impact of liquidity on financial assets, the bottom chart details the performance of the US stock and bond markets since the beginning of 2022 in months with large adjustments to liquidity. The Fed, the Treasury, & the RRP have combined to remove more than -\$100B in liquidity in a single month on 10 occasions. In 9 of the 10 months, the S&P 500 generated a negative return, and the average monthly performance of the S&P 500 was -5.0%. As liquidity reductions typically result in higher interest rates, these months often resulted in poor returns for the bond market as well, with the Bloomberg Aggregate Bond Index averaging a -2.1% return.

Conversely, the Fed, Treasury, & the RRP have combined to add over +\$100B in a single month 5 times. In all 5 months the S&P 500 generated a positive return, with the average return being +7.1%. Bonds averaged a return of +2.3% during these months as well.

	# Instances	Positive S&P 500 Months	Negative S&P 500 Months	Avg. S&P 500 Perf	Avg. Barclays Agg Perf	Avg. 60/40 Perf
<b>Fed, Treasury, RRP &lt; -\$100B</b>	10	1	9	-5.0%	-2.1%	-3.9%
<b>Fed, Treasury, RRP &gt; +\$100B</b>	5	5	0	7.1%	2.3%	5.2%
<b>All Other Months</b>	13	10	3	1.9%	-0.1%	1.1%

Source: Daily Treasury Statement; Federal Reserve; Bloomberg (as of 4/30/2024)

A monthly breakdown of the data can be found below:

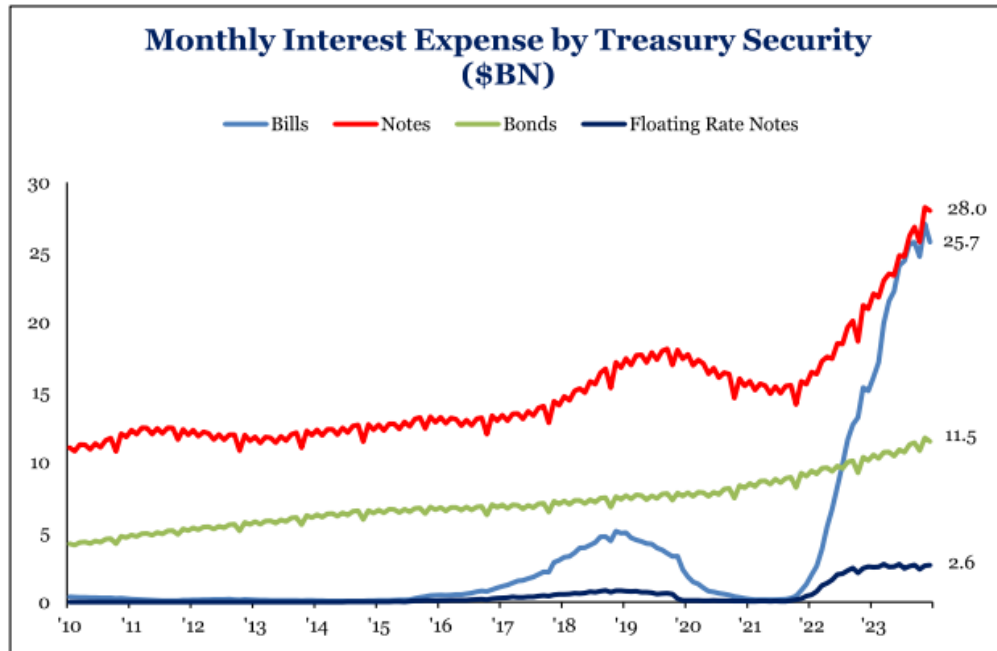
	Millions (\$)				
	Fed Liquidity	Treasury Liquidity	RRP Liquidity	Total Net Liquidity	S&P 500 Price Return
Apr 24	-\$82,305	-\$139,197	\$77,142	-\$144,360	-4.2%
Mar 24	-\$83,068	-\$16,412	\$51,498	-\$47,982	3.1%
Feb 24	-\$62,317	\$55,729	\$45,524	\$38,936	5.2%
Jan 24	-\$82,657	-\$110,145	\$203,490	\$10,688	1.6%
Dec 23	-\$83,364	\$7,804	\$95,318	\$19,758	4.4%
Nov 23	-\$111,685	\$95,209	\$186,430	\$169,954	8.9%
Oct 23	-\$94,234	-\$153,275	\$342,188	\$94,679	-2.2%
Sep 23	-\$119,252	-\$210,343	\$254,014	-\$75,581	-4.9%
Aug 23	-\$122,028	\$72,797	\$52,914	\$3,683	-1.8%
Jul 23	-\$97,570	-\$153,026	\$195,478	-\$55,118	3.1%
Jun 23	-\$44,940	-\$341,617	\$309,648	-\$76,909	6.5%
May 23	-\$176,914	\$242,748	\$24,702	\$90,536	0.2%
Apr 23	-\$143,174	-\$108,125	-\$14,699	-\$265,998	1.5%
Mar 23	\$323,752	\$293,756	-\$151,013	\$466,495	3.5%
Feb 23	-\$88,367	\$14,515	-\$82,288	-\$156,140	-2.6%
Jan 23	-\$80,612	-\$63,922	\$261,442	\$116,908	6.2%
Dec 22	-\$33,407	\$83,548	-\$177,090	-\$126,949	-5.9%
Nov 22	-\$138,514	\$123,074	\$70,943	\$55,503	5.4%
Oct 22	-\$72,477	\$55,021	\$239,054	\$221,598	8.0%
Sep 22	-\$30,526	-\$77,033	-\$174,885	-\$282,444	-9.3%
Aug 22	-\$63,911	-\$9,591	-\$62,031	-\$135,533	-4.2%
Jul 22	-\$23,549	\$153,682	\$37,982	\$168,115	9.1%
Jun 22	-\$728	\$64,908	-\$231,226	-\$167,046	-8.4%
May 22	-\$24,918	\$122,793	-\$192,588	-\$94,713	0.0%
Apr 22	\$2,057	-\$369,263	-\$17,223	-\$384,429	-8.8%
Mar 22	\$9,013	\$122,773	-\$47,617	\$84,169	3.6%
Feb 22	\$67,644	-\$82,961	-\$125,276	-\$140,593	-3.1%
Jan 22	\$103,025	-\$403,028	\$29,460	-\$270,543	-5.3%

Source: Daily Treasury Statement; Federal Reserve; Bloomberg (as of 4/30/2024)

### What Happens When the Reverse Repo Facility Runs Dry?

The Treasury was successful in refilling its General Account through increased bill issuance, and the pace of the falling RRP Balance slowed considerably to start the year (*down -\$200B YTD*). But with the budget deficit coming in higher than expected, the Treasury will have to continue to tap the RRP for funds. At some point the RRP will run out, pushing the burden back to banks and negatively impacting liquidity. It's likely that the Treasury would opt to again spend down their General Account in the near term rather than issue large amounts of debt. Ultimately, it is unsustainable for the Treasury to continue to rely on shorter-term bill financing as higher interest costs are forcing the Treasury to borrow more money. The Treasury will be forced to either reduce the budget deficit (*reduce spending/issue less debt*) and/or issue more notes/bonds to fund the government's obligations.





Source: Dan Clifton, Strategas Research (5/9/24)

However it plays out, the end goal is the same... eventually the Treasury will not be able to offset the Fed's drain on liquidity.

Last week, the Federal Reserve announced that while they decided to leave the Fed Funds rate unchanged at the most recent meeting, they would be slowing the pace of their balance sheet reduction by -\$35B (37% reduction). It is an interesting decision considering that, to-date, Quantitative Tightening has failed to achieve its objective of removing excess liquidity from the financial system. Additionally, such a move effectively extends the runway of RRP liquidity from July/August through October/early-November; or to put it another way... through the Presidential election.

The decision from the Fed last week and the Treasury's announcement to increase issuance through bills should act as a net boost to liquidity over the next 5 to 6 months, and generally supports higher stock prices, lower yields, and a weaker dollar.

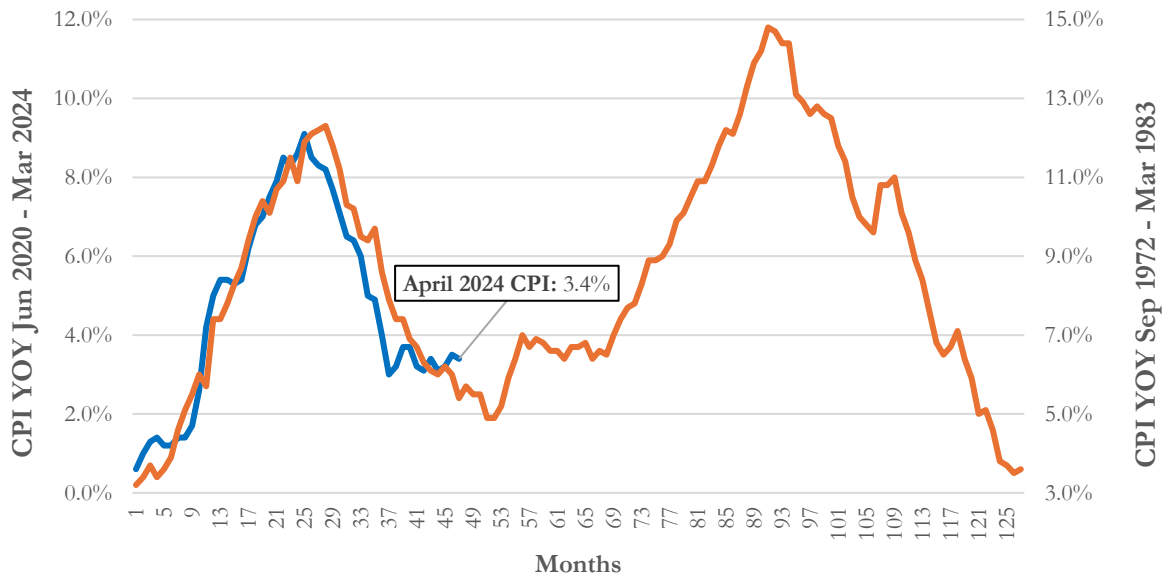
Barring a meaningful pivot from the Fed, we expect the eventual expiration of RRP as a liquidity backstop will negatively impact markets.

### What Does All This Mean for Inflation?

The biggest risk to supportive liquidity conditions through the election are hot inflation prints, which would likely result in a negative market reaction and may necessitate more aggressive policy from the Federal Reserve, and we must re-iterate that it is likely that the ultimate impact of the Fed's 525 bps of rate hikes have yet to be fully realized.

The Fed has been able to justify the recent reduction in Quantitative Tightening and potential rate cuts ahead of the election because inflation has come down meaningfully from its peak in June 2022. However, history has shown that inflation historically comes in waves, and a pre-emptive pivot toward easier policy in pursuit of a "soft/no landing" scenario (*lower inflation without a recession*) could see inflation accelerate as it did in the 1970s, as is displayed in the below chart:

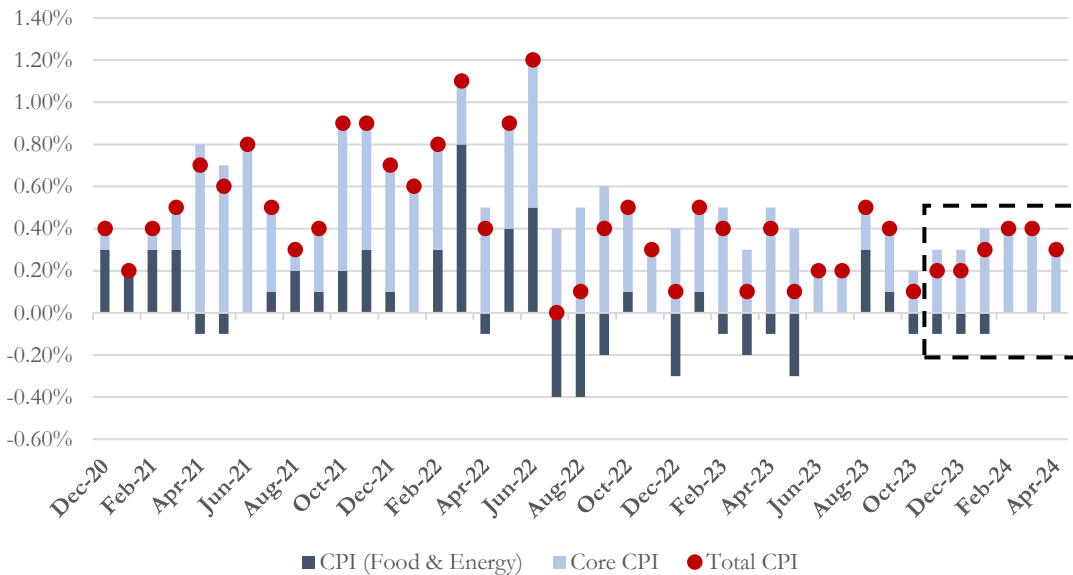
### Current Inflation Cycle vs 1970's



Source: Bloomberg (as of 4/30/2024)

Falling headline CPI has been positively received by markets, however, over the last 6 months, Core CPI (*ex-Food & Energy*) has been trending higher on a MOM basis, averaging +0.35%. A monthly rate of +0.35% annualizes to a +4.3% rate on a YOY basis, before accounting for food & energy prices, which have been negative or zero for the past 6 months. Core CPI will need to consistently stay at or below +0.2% to continue to bring down inflation.

### Month-Over-Month % Change in CPI (Seasonally Adjusted)



Source: Bloomberg (as of 4/30/2024)