

US Money Market Funds post bank turmoil

WEDNESDAY, MAY 17, 2023

OVERVIEW

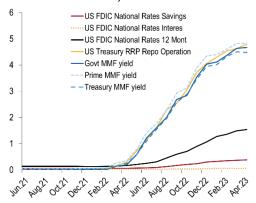
- Inflows to Money Market Funds (MMFs) were strong in March following the Silicon Valley Bank (SVB) collapse and picked up again in early May, sparked by renewed concerns over regional banks. In the period since the SVB collapse, and following large deposit outflows from the banking sector, MMFs grew by more than \$450bn on net. The net increase was the largest increase since the pandemic and was absorbed by government and Treasury MMFs. Over the same period, prime MMFs managed to recover outflows initially seen post-SVB. These net inflows occurred despite April being a month typically linked with outflows due to tax collection. MMF Assets Under Management (AUMs) at the beginning of May stand at a record high \$5.7 tn level.
- As depositors moved into money funds, MMFs' participation in the Fed's Overnight Reverse Repo (ON RRP)
 facility continued to grow, alongside private repo (including sponsored repo) and Agency debt holdings.
- Debt ceiling concerns left an imprint on MMFs. Government and Treasury MMFs, which make up about 80% of total MMF AUMS, are major investors in Treasuries. With the X-date—the date the US Treasury runs out of borrowing capacity—predicted to occur shortly after June 1st, government MMFs have reduced Treasury holdings to historical lows at the end of April. At the same time, Treasury MMFs, which have very limited investment options outside Treasuries, drastically shed holdings of Treasury securities with maturity longer than 30 days in favor of ON RRP holdings. Overall, MMFs are trying to hedge themselves from affected Treasuries to the extent possible.
- Separately, at the end of April the New York Fed offered some further clarifications regarding its ON RRP eligibility criteria requiring counterparties to ensure that usage of the facility is aligned with the "natural extension of an existing business model". Changes to the Fed's eligibility criteria should not impact the existing ON RRP users, according to some market analysts, but is viewed as opening the door for further changes that could limit MMFs usage of the facility. One approach to limit usage—lowering the caps—may not lead to large declines in ON RRP, given that only a handful of MMFs tap the ON RRP for more than \$100b (with the cap at \$160bn). The clarifications, however, should restrain the use of the RRP facility from Funds such as the Circle Reserve Fund, which is separately managed government Fund established by USDC, a major stable coin, with the view to establish ON RRP eligibility.

Figure 1. MMF Holdings – Assets under Management.

US MMF yields continued to rise in 2023, closely following monetary policy rates.

1. US MMF yields by Fund type and various bank/CD rates

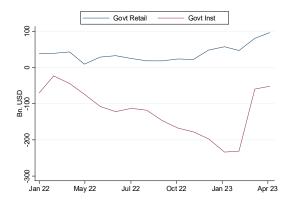
(in billions of US Dollars)



- The yields of US MMF continued to rise in 2023. Prime MMFs, which invest in a broader range of assets (including CP) typically offered rates higher than the overnight RRP. Government MMFs, which primarily invest in RRP, offered rates slightly below the RRP since late 2022.
- In the meantime, the gap with bank rates continues to be large, despite anecdotal evidence that banks are boosting the efforts to catch up.

The inflows into government MMFs were driven mainly by institutional investors.

3. Cumulative change (since Jan 2022) in Government MMF AUMs, by investor type (in billions of US Dollars)

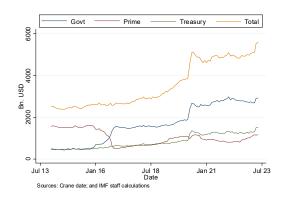


- Looking at the composition of investors, government MMF inflows since March 2023 were mainly driven by institutional investors.
- Retail investors cumulative flows also edged higher.

MMFs saw strong inflows since March, following the US regional bank turmoil.

2. MMF Total AUM by Fund type

(in billions of US Dollars)

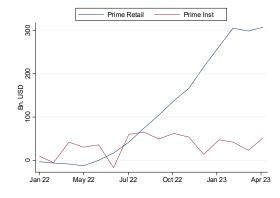


- MMFs AUMs increased sharply in March and further in April 2023, following tensions in the US banking system, in line with bank deposits shifting towards MMFs.
- The rise was absorbed fully by MMFs investing in government securities (Government and Treasury).
- Instead, Prime MMFs, which saw upward-trending AUMs since late 2022, experienced mild outlows in March.
- On net, total AUMs reached new historical heights by March-end.

While the banking turmoil halted the prior increase in prime inflows.

4. Cumulative change (since Jan 2022) in Prime MMF AUMs, by investor type

(in billions of US Dollars)

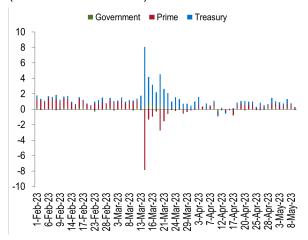


- Prime MMFs saw considerable inflows in 2022,
 mainly from retail investors, who are not affected by the
 2021 SEC reforms. The banking turmoil halted the trend.
- Institutional MMFs cumulative flows remain subdued.

Figure 1. MMF Holdings – Assets under Management.

Prime outflows in March were concentrated in specific funds.

5. Daily Flows for one fund family, by MMF type (in billions of US Dollars)

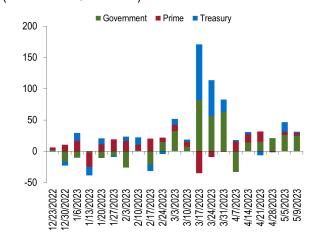


- Prime outflows immediately following the SVB collapse were not generalized but concentrated on few funds.
- The affected funds were mainly institutional funds, reportedly related to internal cash redistribution among funds of the same family (cash drawn out from MMFs as demand from equity/bond funds for liquidity rose).
- In the occasion of one Fund family, the retail prime funds also saw significant outflows, with the flows moving into Treasury MMFs of the same family.

Sources: Crane data and IMF Staff calculations.

Daily flows show that deposit flight to MMFs has picked up again in early May with renewed tensions in regional banks.

6. Weekly flows by MMF Type (in billions of US Dollars)



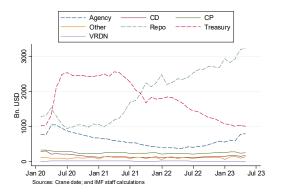
- Net flows overall continued to be positive since the banking turmoil in March, despite a few observed daily outflows, related to tax payment dates.
- Prime MMFs recovered their March outflows
- Strong inflows to all Fund types were renewed in early May, following the demise of First Republic bank and more tension in regional banks.

Figure 2. Asset composition of US MMFs and RRP take up

Agency and Repo investments increased since March...

1. Total AUM by asset type

(in billions of US Dollars)

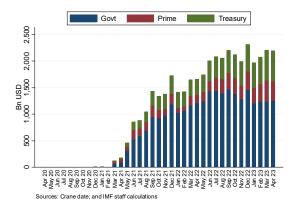


- The strong March inflows were largely invested in repo and Agency debt. FHLB issuance rose dramatically following the SVB collapse, providing investment opportunities for MMFs.
- At the same time, money market repo and FHLB rates rose temporarily above the RRP rate in March making these alternatives more profitable.

Prime MMFs increased their RRP participation in 2023.

3. RRP take-up by Fund type

(in billions of US dollars)



- Based on month-end holdings, MMFs increased their RRP participation in 2023, mainly driven by higher prime MMF take-up.
- During March, however, take-up was volatile. Reportedly, in the days following the SVB collapse MMFs and FHLBs drew cash from the RRP (the former to invest in higher-yielding alternatives and the latter to address liquidity demand from their members). Subsequently, RRP volumes increased again.

Sources: Crane Data, Bloomberg, NY Fed and IMF Staff calculations.

...with both private and RRP repos increasing.

2. MMF RRP and private repo holdings (in billions of US dollars)

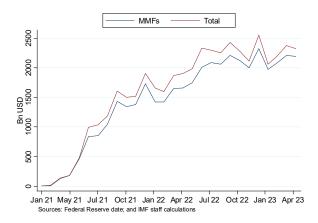


- As a result, MMFs increased their private repo alongside their RRP participation (repo with the Federal Reserve).
- The increase in private repo and FHLB lending is in line with a weak funding stress narrative post SVB. Should overall funding stress had been strong, most likely MMFs would have instead parked their cash into the RRP facility of the Fed.

Overall, MMFs remain by far the dominant counterparts of RRP operations

4. Total RRP and MMF take-up in the RRP

(in billions of US dollars)

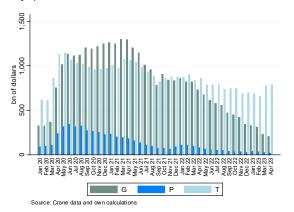


 MMFs continue to be major RRP participants, accounting for more than 90% of the RRP take-up.

Figure 3. MMF are concerned about debt ceiling dynamics

Treasury holdings from government MMFs reached record low levels in April 2023

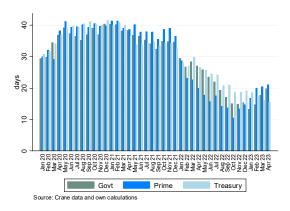
1. Treasury holdings by Fund Type (in days)



- Government MMFs shed their Treasury (and notably T-Bill) holdings during the current hiking cycle in line with low T-Bill issuance, rich T-Bill rates and heightened monetary policy uncertainty.
- With ongoing uncertainty about the debt ceiling, government MMFs slashed their holdings further in March and April as a hedging mechanism.
- Treasury market funds, which have more limited investment options, held their Treasury (and notably T-Bill) volumes broadly stable.

Treasury MMF WAMs continued to decline

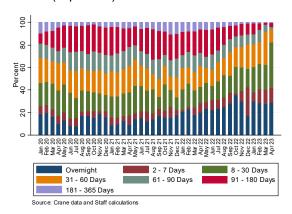
3. WAM of assets by Fund Type (in days)



- Consistent with the drop in Treasury maturities,
 WAMs Treasury MMFs holdings continued to decline.
- Instead, Government and prime MMFs, which are less exposed to Treasuries, continued to lengthen their WAMs in 2023, as markets priced in the end of the hiking cycle followed by rate cuts already in 2023.

...while Treasury Funds shortened dramatically their maturities in March 2023.

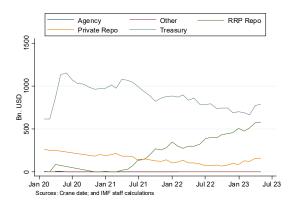
2. Share of Treasury holdings by maturity buckets (in percent)



- Treasury MMFs shifted their Treasury holding progressively towards shorter maturities.
- At the end of April, 80% of their Treasuries were invested in maturities up to 30 days. The significant increase in the 8-30 maturity bucket reflects the debt-ceiling risks with the X-date in June/July 2023.
- Conversely, Treasuries with maturities 30-60 days are at record lows.

Looking at broader assets, Treasury MMFs increased considerably their RRP investments

4. Holdings of Treasury MMFs by asset type (in billions of US dollars)



- Treasury MMFs increased their RRP holdings substantially since April 2019, as investments in shortterm Treasuries became increasingly difficult.
- Their private repo holdings remain at low levels.

Figure 4. The NY Fed clarified the eligibility requirements for the RRP

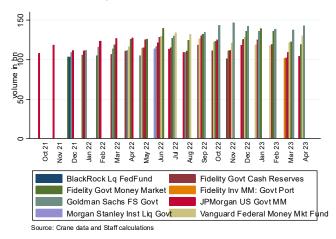
On April 25th, the NY Fed <u>announced</u> adjustments to the Federal Reserve Policy on Counterparties for Market Operations and clarified the Federal Reserve's expectations and eligibility requirements for Reverse Repo Counterparties. There were two notable changes: First, the NY Fed clarified that "in addition to implementing monetary policy, broader policy goals including fostering financial stability and ensuring bank safety and soundness, are considered when reviewing a prospective or existing counterparty". Second, the clarification regarding RRP eligibility criteria required counterparties of the Reverse Repo program to ensure that usage of the facility is aligned with the "natural extension of an existing business model and the counterparty should not be organized for the purpose of accessing RRP operations". This clarification should exclude funds that "are organized for a single beneficial owner".

Changes to the Fed's eligibility criteria should not impact the existing RRP counterparties, according to some market analysts. Market contacts claim that this opens the door for further changes that could limit MMFs usage of the facility. These could include changes in the RRP rate and or changes in the cap. While a change in rate could be linked to broader monetary policy implementation issues (with the RRP rate being and administered rate), some market analysts maintain that a drop in the cap may not have a significant impact.

At the same, the eligibility updates should restrain the use of the RRP facility for Funds such as the Circle Reserve Fund, which is a separately managed government Fund established by USDC, a major stablecoin, with the intended purpose of seeking RRP eligibility.

Few counterparties hold volumes more than \$100bn and have so far remained below \$160bn counterparty limit

1. Counterparties with RRP volumes more than 100bn (in bn of US Dollars)

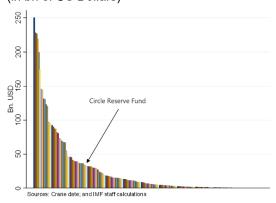


Lowering the caps may not lead to large declines in the RRP, given that only a handful of MMFs tap the RRP for more than \$100b (with the cap at \$160bn).

Circle Reserve Fund is a sizeable government MMF, reaching its AUM peak in January 2023

2. AUMs MMFs by order (as of January 2023)

(in bn of US Dollars)



- USDC is the only investor of the Circle Reserve Fund, a new, separately managed government MMF administered by Blackrock. The Fund was created with explicit intention to apply for RRP access.
- The new Fund was launched in November 2022 and invests solely in Treasuries. USDC has shifted its T-Bill holdings into the Fund as they expired and planned to also shift its cash (currently in banks) once the fund got access to the RRP.
- The Fund is mid-sized, with a maximum size of almost 40bn in January 2023. All holdings are T-Bills.