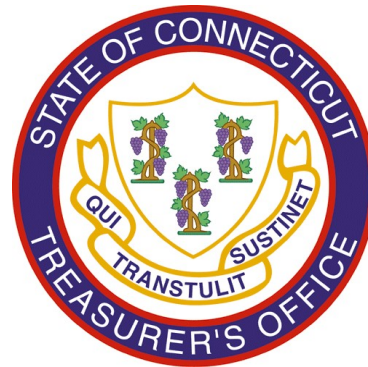

Short-Term Investment Fund
GFOA of CT Spring 2022 Quarterly Meeting
April 6, 2023



Michael M. Terry, CFA
Principal Investment Officer

Pension Funds Management Division

Primary Objectives

STIF's mandate is to provide:

- Safety
- Liquidity
- Yield

Short-Term Investment Fund

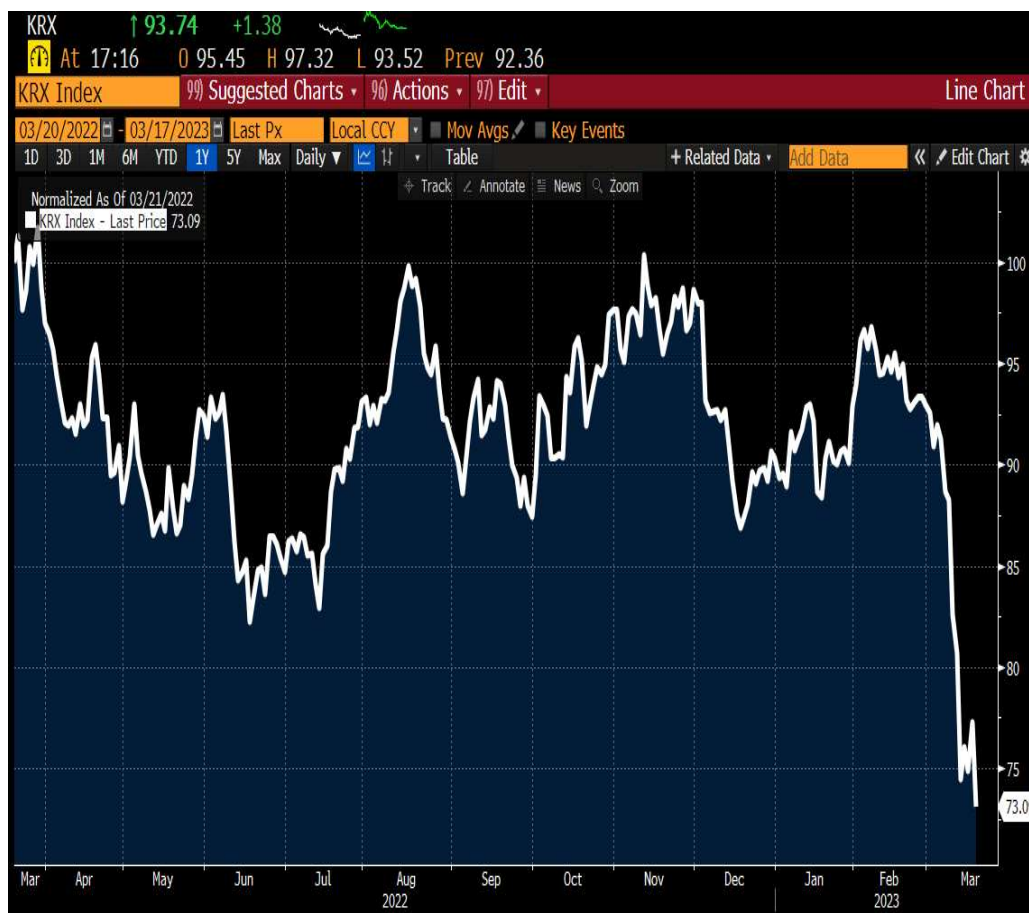
Bank Turmoil Update

As a result the mismatch between assets and liabilities, banks came under pressure near the middle of March 2023. The event can best be described as a liquidity event, or the ability of banks to meet significant withdrawals. Banks generally remain better capitalized than they have been in decades. The STIF has a significant portion of its assets invested in banks, but we note the following:

- The fund has no investments in regional banks that are not backed by a Federal Home Loan Bank letter of credit, the bank sector that experienced the most acute pressure.
- The bank investments remaining in the fund are comprised of larger, well capitalized and highly rated institutions.

Short-Term Investment Fund

Bank Turmoil Update – Regional Bank Index



Source: Bloomberg

- Regional banks have been disproportionately affected during this period.
- We do not believe the issues are systemic, but rather are idiosyncratic and manageable.
- We expect additional regulation and stress testing to result from the issues being addressed.

Short-Term Investment Fund

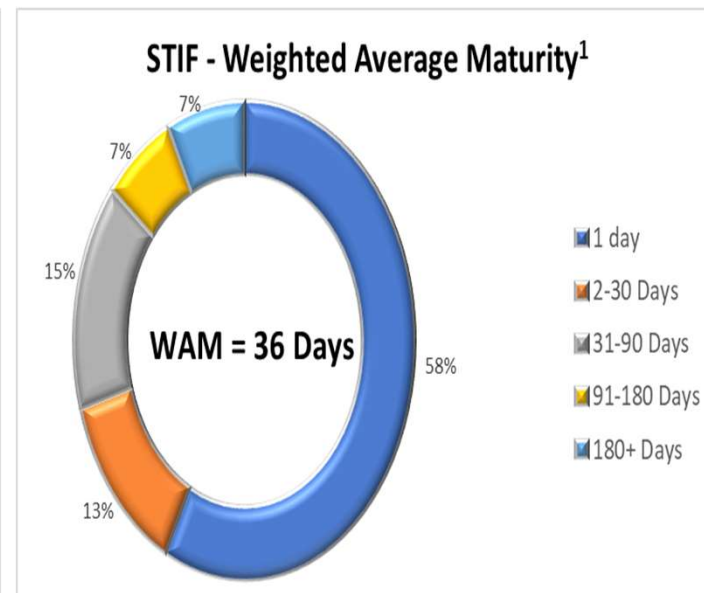
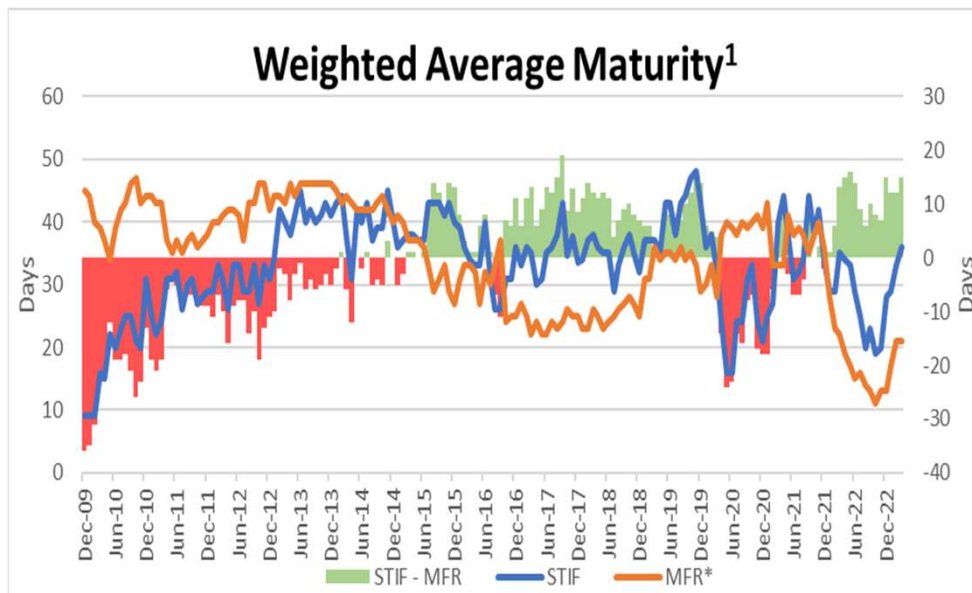
Bank Turmoil Update – Effects on Rate Expectations

As the result of financial market instability and increased probability of a recession, approximately 75 basis points of Federal Reserve Rate hikes have been removed from expectation.



Short-Term Investment Fund – Safety

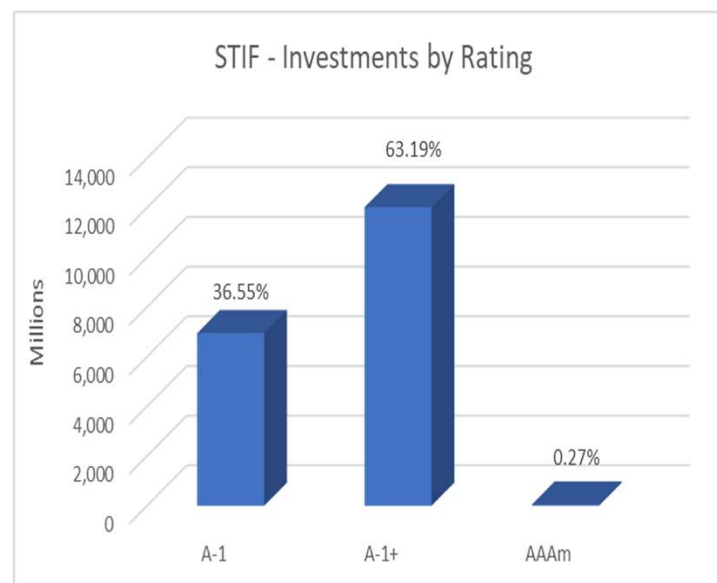
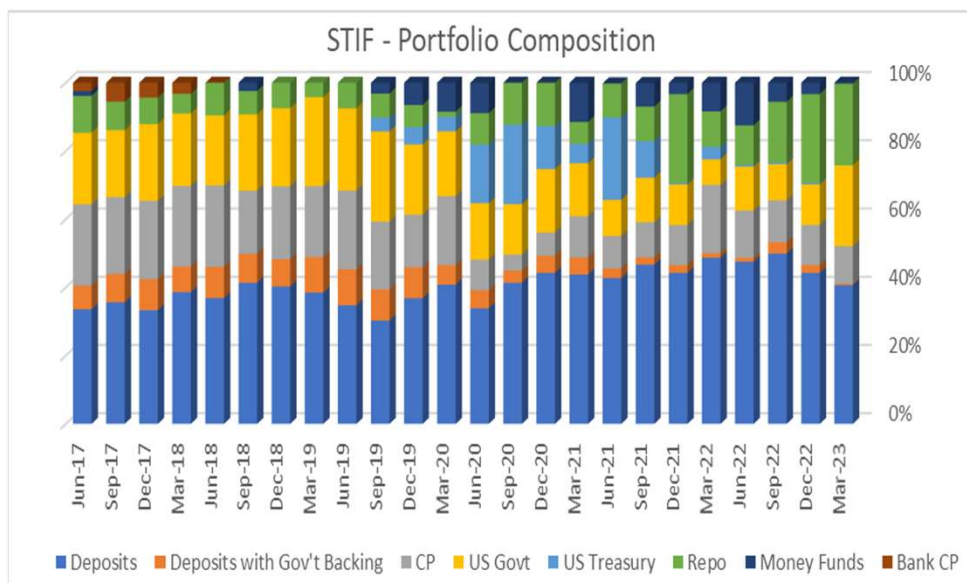
Conservative Maturity Profile



- The fund's WAM was 36 days as of 3/17/2023, 15 days longer than its benchmark, but below its internal guideline of 55 days as well as its rating and GASB maximum of 60 days.
- The fund actively manages its WAM depending on view, not the benchmark.

Short-Term Investment Fund – Safety

Conservative Portfolio Composition

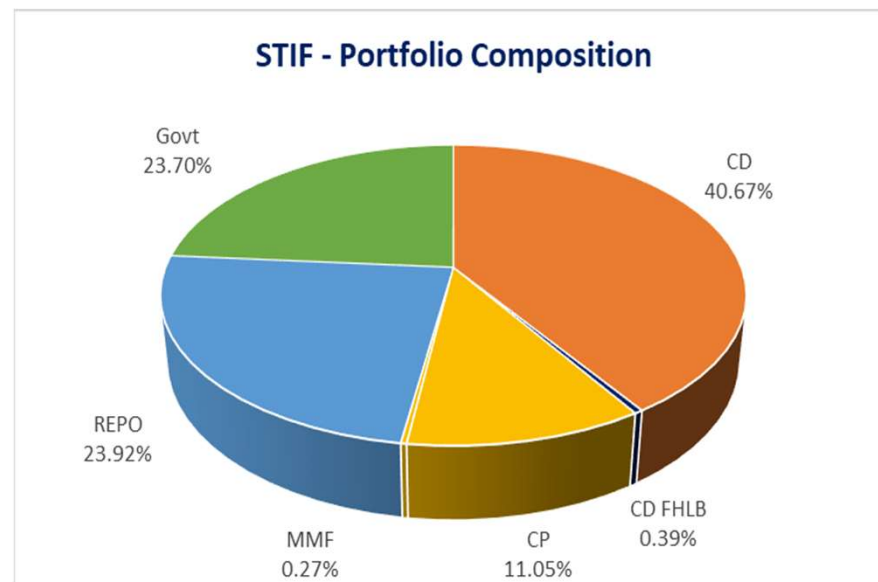


- The STIF portfolio remains conservative with a focus on government/agency, bank and highly rated corporate issuers.
- A-1+ rates investments make up over 63 percent of the fund's holdings.

Short-Term Investment Fund – Safety

Conservative Portfolio Composition

- The fund remains well diversified from a sector and issuer perspective.
- Issuers are limited to a 5 percent limit on a consolidated basis.
- Currently, 48 percent of the portfolio is invested in government or government backed securities.



Short-Term Investment Fund – Safety

Conservative Portfolio Composition – Top Ten

| STIF - Top Ten Issuers | | | |
|--------------------------------|----------------|----------------------|----------|
| Issuer | Exposure | Percent of Portfolio | Rating |
| Federal Home Loan Bank | 3,020,609,871 | 16% | AA+/A-1+ |
| Bank of Nova Scotia NY Repo | 2,000,000,000 | 11% | A-1 |
| Federal Farm Credit Bank | 1,363,436,572 | 7% | AA+/A-1+ |
| Bank of America Repo | 1,050,000,000 | 6% | A-1 |
| Mizuho Repo | 1,000,000,000 | 5% | A-1 |
| Nordea Bank NY Branch | 850,000,000 | 4% | A-1+ |
| Cooperatieve Centrale | 800,000,000 | 4% | A-1+ |
| Royal Bank of Canada NY Branch | 800,000,000 | 4% | A-1+ |
| Australia and New Zealand Bank | 800,000,000 | 4% | A-1+ |
| Svenska Handelsbanken | 750,000,000 | 4% | A-1+ |
| Total | 12,434,046,443 | 65% | |
| Non-Govt/Govt backed Total: | 4,000,000,000 | 21% | |

- STIF has been actively diversifying the portfolio across markets while only investing in the strongest issuers.
- The top ten issuers represent 65 percent of the portfolio. Of this, only 20 percent are non-government entities – all of which are highly rated.

Short-Term Investment Fund – Safety

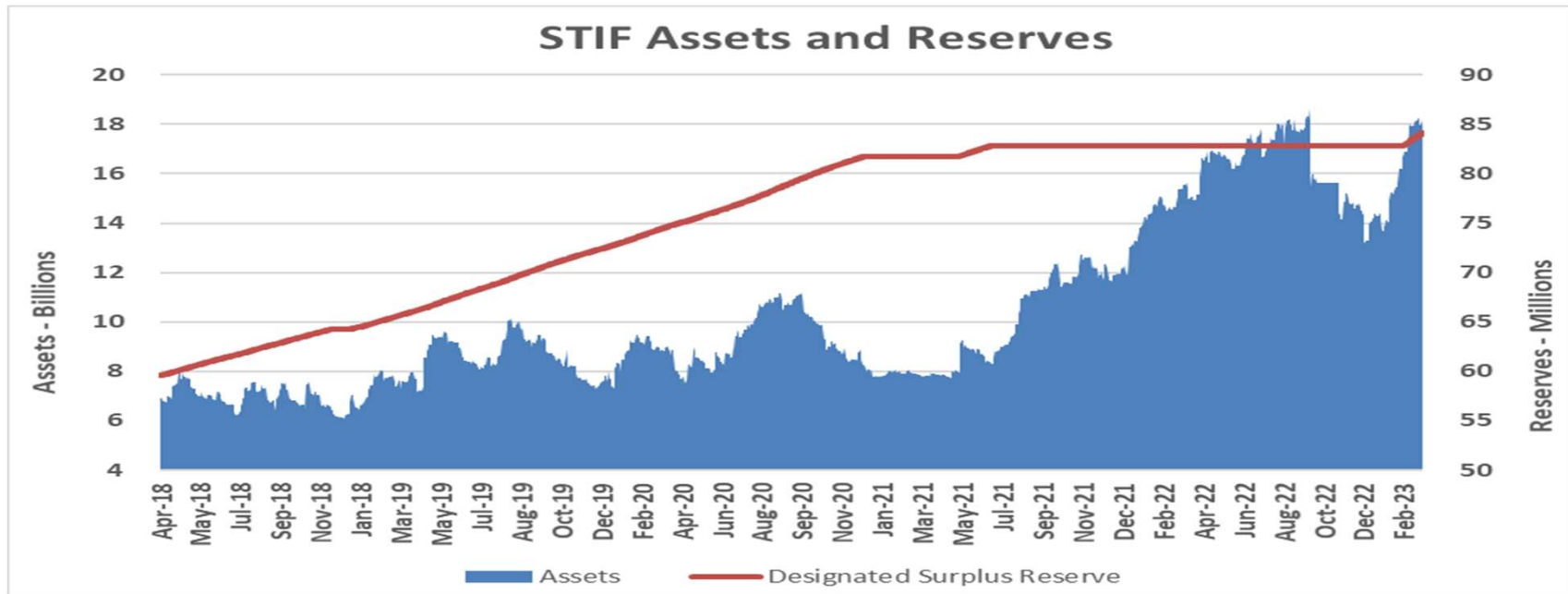
Conservative Portfolio Composition – Banks

Banks within the STIF portfolio are larger, well-capitalized banks. Banks are monitored and evaluated for asset quality, provisions, business lines, funding, and availability of additional liquidity.

| STIF Bank Holdings | | | | | | | | |
|---------------------------------------|---------------------------|-----------------|--------|--------|---------|--------|----------|----------|
| Bank Name | Domicile | Tier 1 CE Ratio | S&P | | Moody's | | Fitch | |
| | | | S&P ST | S&P LT | MDY LT | MDY LT | Fitch ST | Fitch LT |
| Nordea Bank Abp/New York NY | 850,000,000 Finland | 16.40 | A-1+ | AA- | Aa3 | P-1 | F1+ | AA |
| Australia & New Zealand Banking /NY | 800,000,000 Australia | 12.30 | A-1+ | AA- | Aa3 | P-1 | F1 | A+ |
| Cooperatieve Centrale | 800,000,000 Netherlands | 17.40 | A-1 | A+ | Aa2 | P-1 | F1+ | AA- |
| Royal Bank of Canada/New York NY | 800,000,000 Canada | 12.60 | A-1+ | AA- | Aa1 | P-1 | F1+ | AA |
| Bank of Nova Scotia | 750,000,000 Canada | 11.50 | A-1 | A+ | Aa2 | P-1 | F1+ | AA |
| Svenska Handelsbanken/New York NY | 750,000,000 Sweden | 19.60 | A-1+ | AA- | Aa2 | P-1 | F1+ | AA+ |
| Toronto-Dominion Bank/NY | 684,535,292 Canada | 16.20 | A-1+ | AA- | Aa1 | P-1 | F1+ | AA |
| DZ Bank AG /New York | 550,000,000 Germany | 15.30 | A-1 | A+ | Aa2 | P-1 | F1+ | AA- |
| MUFG Bank Ltd/New York NY | 450,000,000 Japan | 11.00 | A-1 | A | A1 | P-1 | F1 | A |
| Norinchukin BK NY BR | 400,000,000 Japan | 17.00 | A-1 | A | A1 | P-1 | NR | NR |
| National Bank of Canada/New York NY | 300,000,000 Canada | 12.70 | A-1 | A | Aa3 | P-1 | F1+ | NR |
| Bank of America NA | 253,470,320 United States | 11.20 | A-1 | A+ | Aa2 | P-1 | F1+ | AA+ |
| Sumitomo Mitsui Banking Corp/New York | 200,000,000 Japan | 14.50 | A-1 | A | A1 | P-1 | F1 | A |
| Commonwealth Bk Aus NY Branch | 150,000,000 Australia | 11.50 | A-1+ | AA- | Aa3 | P-1 | F1 | A+ |
| Berkshire Bank | 75,000,000 United States | 12.35 | | | | | | |
| | | 7,813,005,612 | | | | | | |

Short-Term Investment Fund – Safety

Designated Surplus Reserve



Fund assets remain near all-time highs, ending February 2023 with approximately \$18 billion in assets.

- The “reserve transfer”, or contributions to the designated surplus reserve was reinstated February 2, 2023 contributions of \$1.4 million were made during the month.

Short-Term Investment Fund – Safety

Stress Test

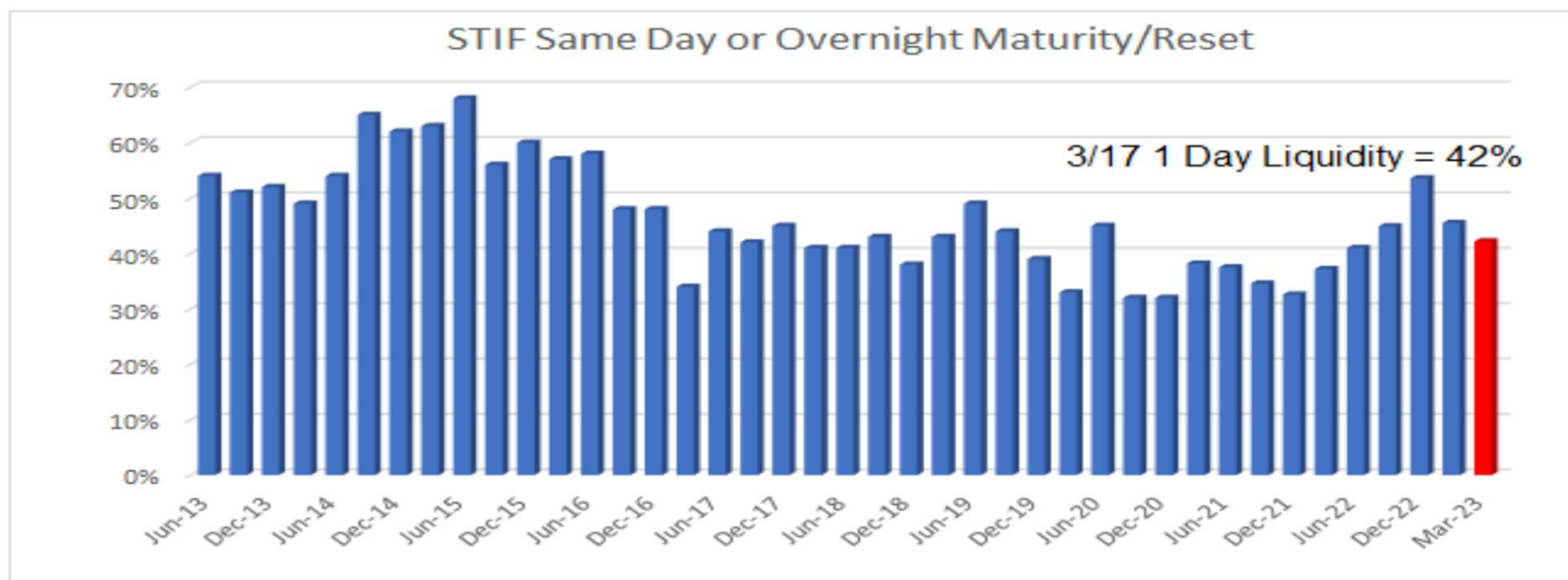
PORTFOLIO SENSITIVITY MATRIX (Px due to interest rate and credit spread movement)

| | | | | | |
|-----------------|------------|------------|------------|------------|------------|
| VALUATION DATE | 3/17/2023 | | | | |
| Current NAV | 1.00008518 | | | | |
| CS Increase | 0 bps | 20 bps | 50 bps | 75 bps | 100 bps |
| IR Increase = 0 | 1.00008518 | 1.00005980 | 1.00002173 | 0.99999001 | 0.99995829 |
| 25 bps | 1.00004383 | 1.00001845 | 0.99998039 | 0.99994866 | 0.99991694 |
| 50 bps | 1.00000249 | 0.99997711 | 0.99993904 | 0.99990731 | 0.99987559 |
| 75 bps | 0.99996114 | 0.99993576 | 0.99989769 | 0.99986597 | 0.99983424 |
| 100 bps | 0.99991979 | 0.99989441 | 0.99985634 | 0.99982462 | 0.99979290 |
| 125 bps | 0.99987844 | 0.99985306 | 0.99981500 | 0.99978327 | 0.99975155 |
| 150 bps | 0.99983710 | 0.99981172 | 0.99977365 | 0.99974192 | 0.99971020 |
| 175 bps | 0.99979575 | 0.99977037 | 0.99973230 | 0.99970058 | 0.99966885 |
| 200 bps | 0.99975440 | 0.99972902 | 0.99969095 | 0.99965923 | 0.99962751 |

- STIF's portfolio is tested under various scenarios for changes in interest rates, changes in risk premiums and investor redemptions.
- The portfolio consistently proves resilient to changes.
- If credit spread increase 200bps and interest rates increase 100bps – simultaneously – the fund has a NAV of 0.99962, which means investors still receive par.

Short-Term Investment Fund – Liquidity

Significant Liquidity

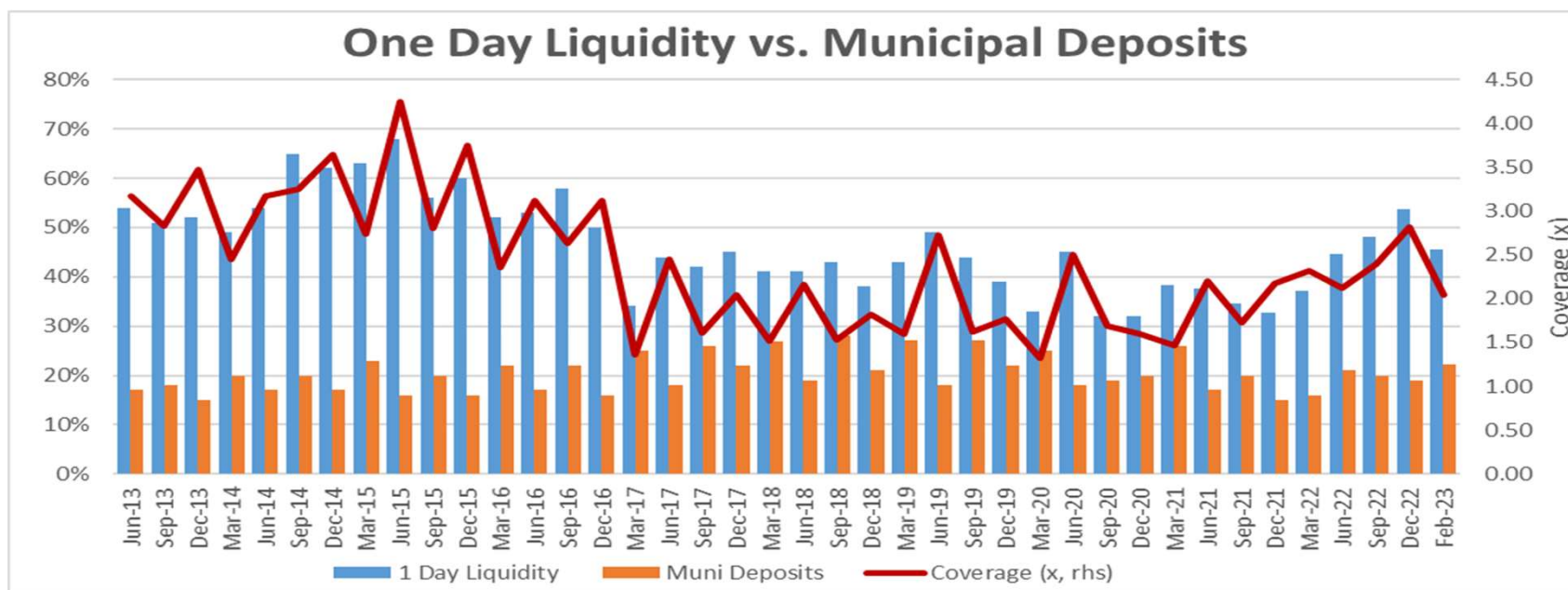


Overnight Investments or investments that are available on a same-day or next-day basis.

- As of March 17, 2023, one-day liquidity stood at 42 percent of the portfolio, or 2.2x municipal investments.

Short-Term Investment Fund – Liquidity

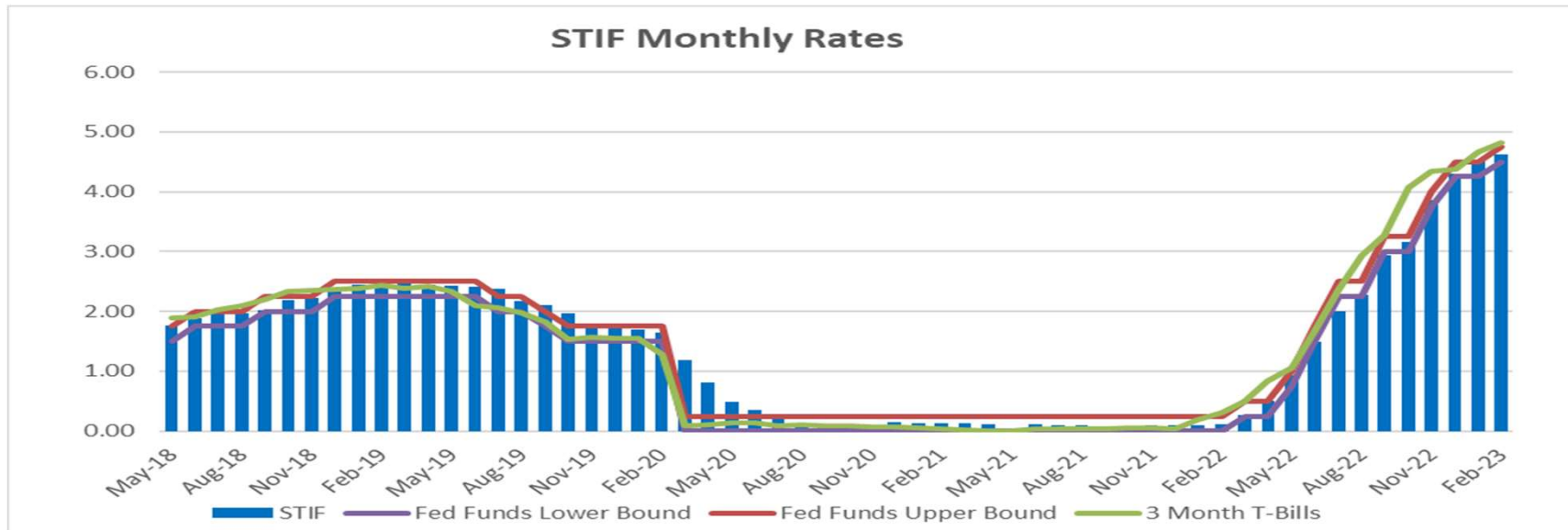
Investor Composition



- The State Treasury continues to be the single largest investor in STIF.
- Local governments, with approximately \$3.9 billion in deposits in STIF, represented 22% of the fund as of February 28, 2023.
- One day liquidity was approximately 2x municipal deposits.

Short-Term Investment Fund - Yield

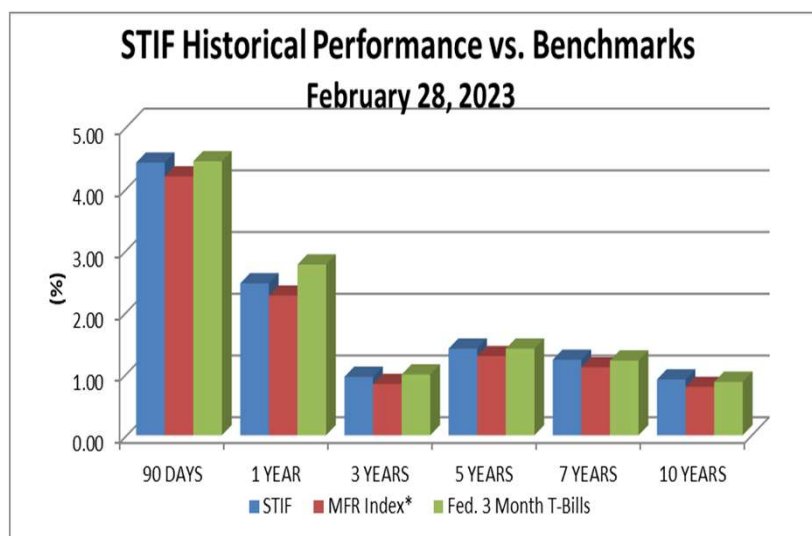
Recent Performance



- While the rate on STIF is currently slightly lower than three month T-Bills, it falls near the upper-end of the Federal Funds target range. The reserve transfer was reinstated February 2, 2023, reducing the fund's rate by ten basis points, but increasing the safety of the fund.
- The fund also provides daily liquidity without the price volatility of other money market rates.

Short-Term Investment Fund – Performance

Period ending February 28, 2023



| STIF Historical Performance | | | | | | |
|-----------------------------|---------|--------|---------|---------|---------|----------|
| Total Return | 90 DAYS | 1 YEAR | 3 YEARS | 5 YEARS | 7 YEARS | 10 YEARS |
| STIF | 4.42 | 2.46 | 0.95 | 1.40 | 1.22 | 0.90 |
| MFR Index* | 4.19 | 2.26 | 0.83 | 1.28 | 1.10 | 0.78 |
| Fed. 3 Month T-Bills | 4.44 | 2.77 | 0.98 | 1.40 | 1.21 | 0.86 |

* iMoneyNet's First Tier Institutions-Only AAA-Rated Money Fund Report (MFR) Averages Index.

- As rates have increased, and despite the conservative nature of the fund, the STIF has outperformed its primary benchmark across all time periods.
- The fund's performance resulted in an additional \$21.2 and \$9.1 million fiscal year-to-date and calendar year-to-date, respectively, in interest earnings above the benchmark for Connecticut's state and local governments.

Going Forward

- The fund is maintaining a cautious approach to issuer exposure as well as the fund's maturity profile.
- Short-term rates are expected to continue to be volatile in the immediacy, stabilizing when the path of federal funds becomes more evident.
- Bank deposit instruments continue to be attractive relative to other opportunities and alternatives- fundamental analysis is front and center.
- Floating rate issues are being selectively purchased when the spread to SOFR or Prime is viewed as attractive.

STIF – Staying the Course



- The fund is not meant to be a show horse, it has been designed to be a workhorse – plow straight rows, deliver the load from point A to point B, have a sturdy gait, and the ability to weather any storm.

Short-Term Investment Fund Team

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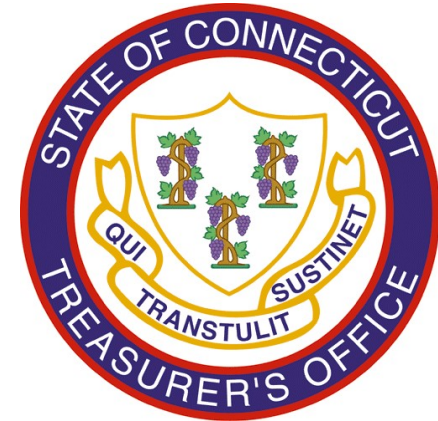
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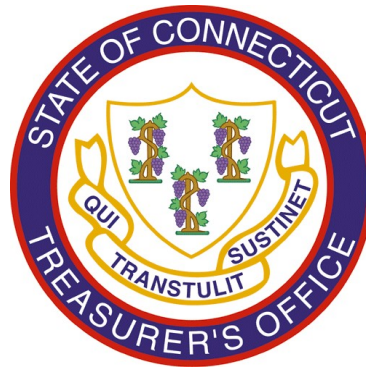
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Erick Russell
Connecticut State Treasurer

Office of Connecticut State Treasurer Erick Russell



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