

FitchRatings

Closed-End Fund Leverage Utilization

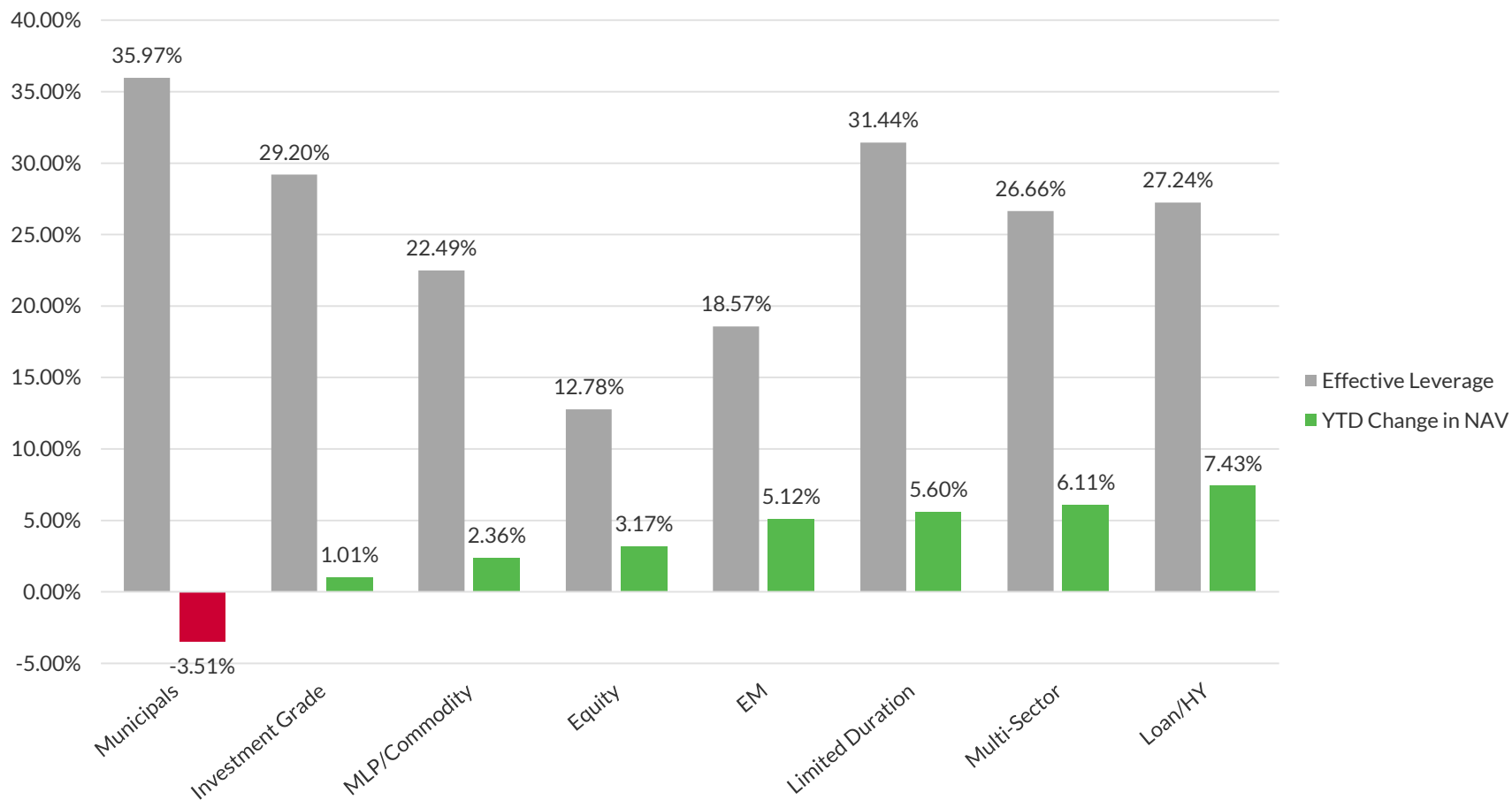


22nd Annual Capital Link
Closed-End Funds &
Global ETFs Forum

Wednesday, November 1, 2023
Digital Conference

Steven Johnson, CFA
Fitch Ratings

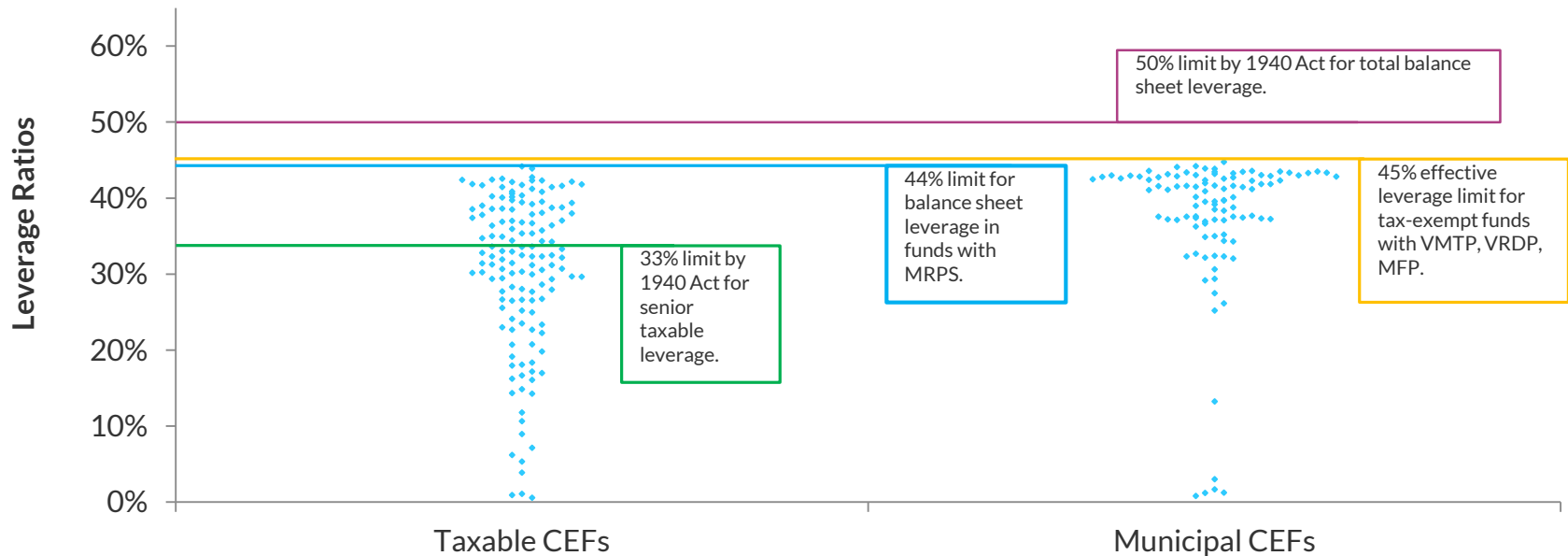
Effective Leverage and YTD Change in NAV by Sector



Source: CEFConnect. Data as of 10/25/2023 closing prices.

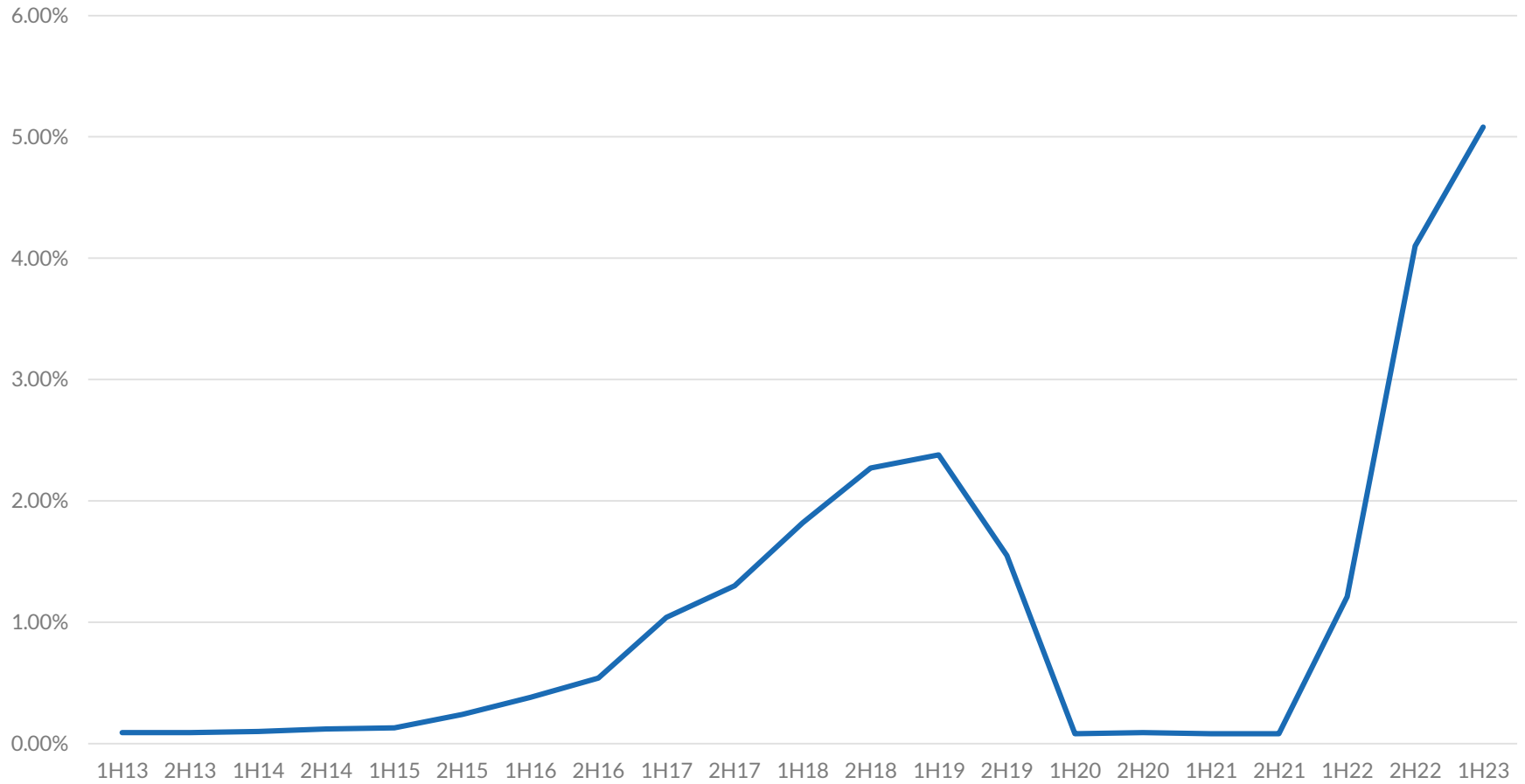
Closed-End Fund Leverage Ratios

- Leverage ratios limited by regulation, ratings and risk management
- Taxable funds range by sector and cluster in the 30-40% range
- Municipal funds cluster around 40%
- More funds in 1H23 reduced leverage than seen in previous years



Source: FitchRatings, SEC Filings. Data covers 181 U.S. leveraged CEFs with data as of 6/30/2023 or latest available. Graph illustrates regulatory and security leverage limits. Bank counterparties institute additional leverage limits, and funds with Fitch-rated securities incorporate limits in line with rating levels based on their asset/leverage profiles

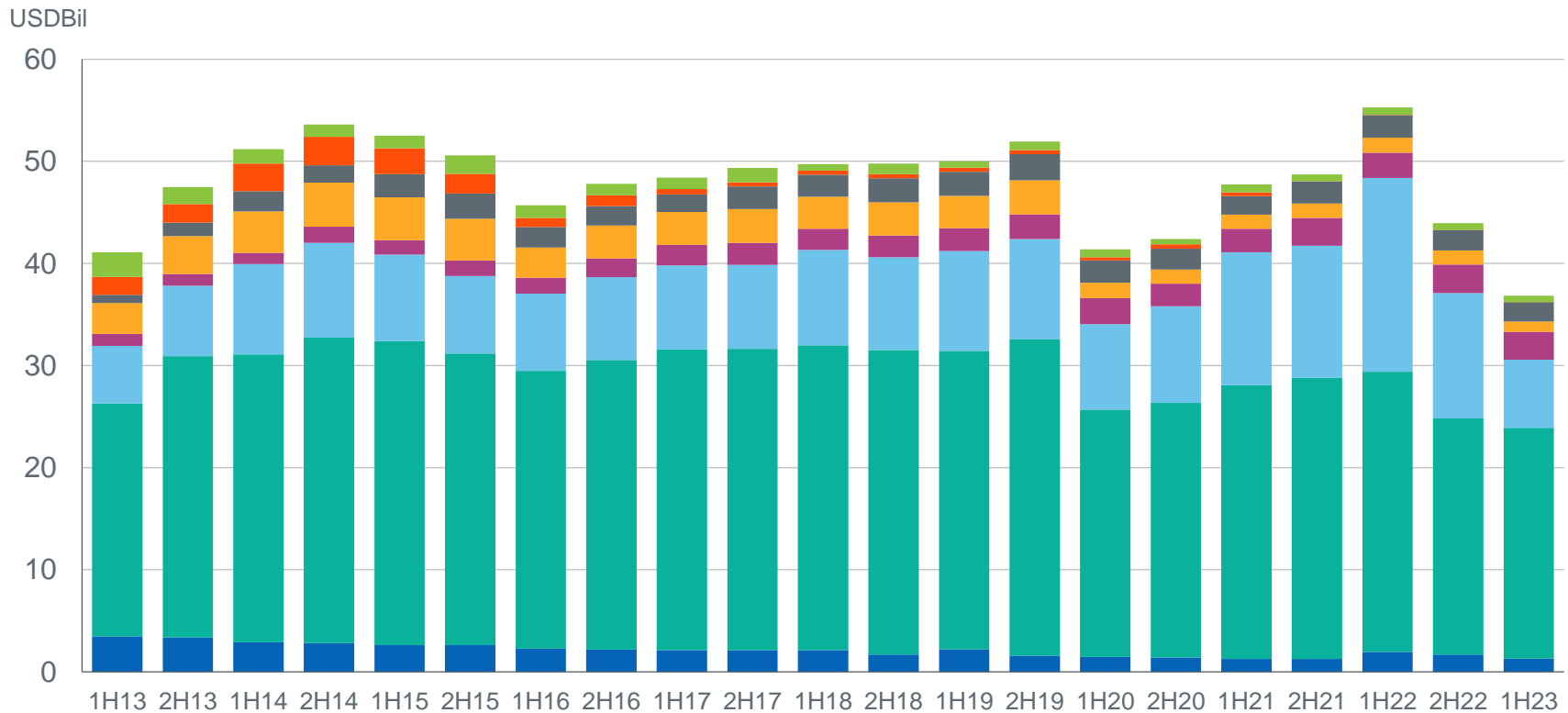
Fed Funds Rate, Jan 2013 – June 2023



Source: St. Louis Fed, Federal Reserve Economic Data (FRED)

Leverage Used in Taxable CEFs

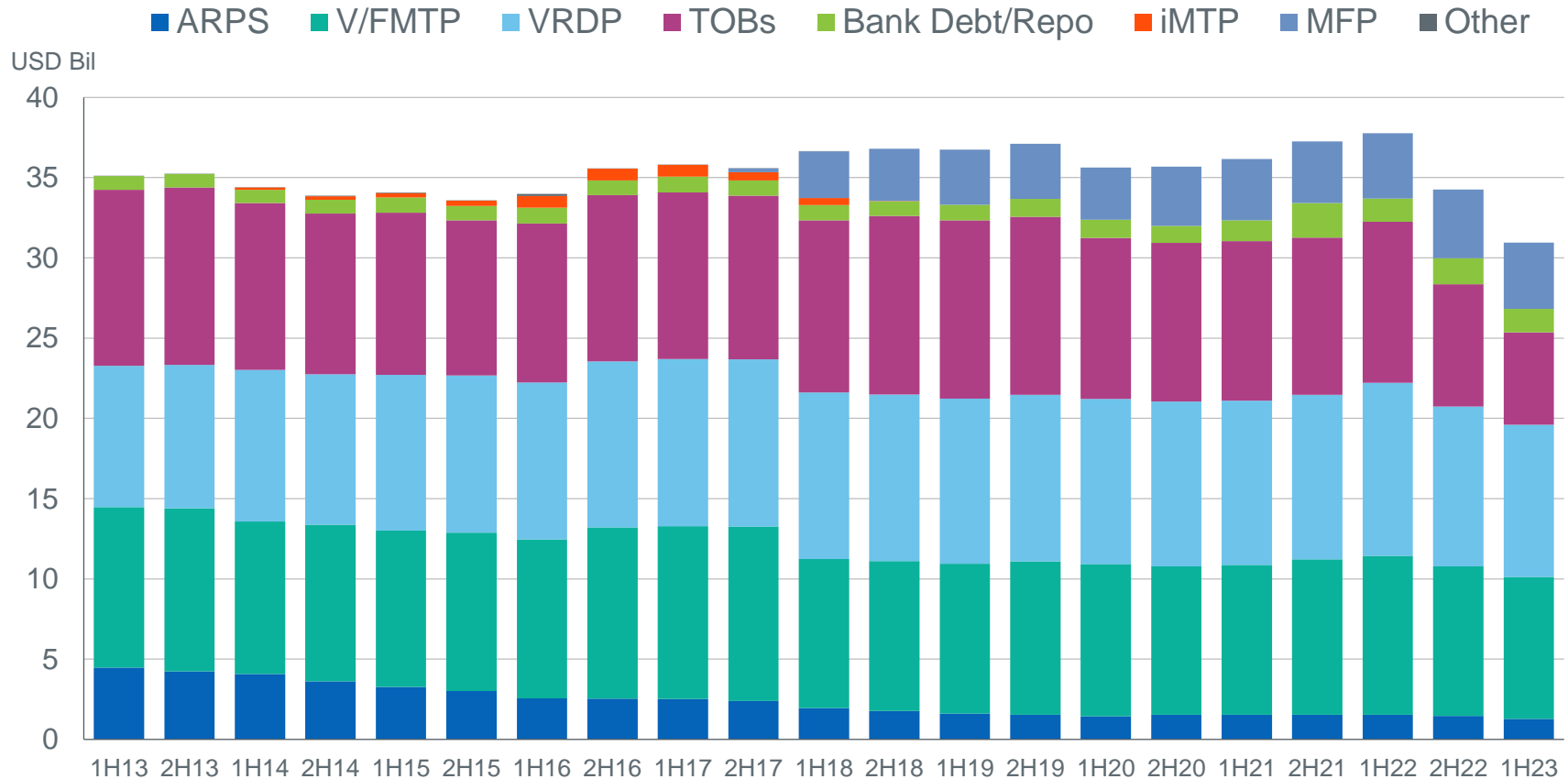
■ ARPS
 ■ Bank Debt
 ■ Repo
 ■ Public Preferred
 ■ Private Notes
 ■ Private Preferred
 ■ ABCP
 ■ Other



Source: Fitch, SEC Filings, press releases.

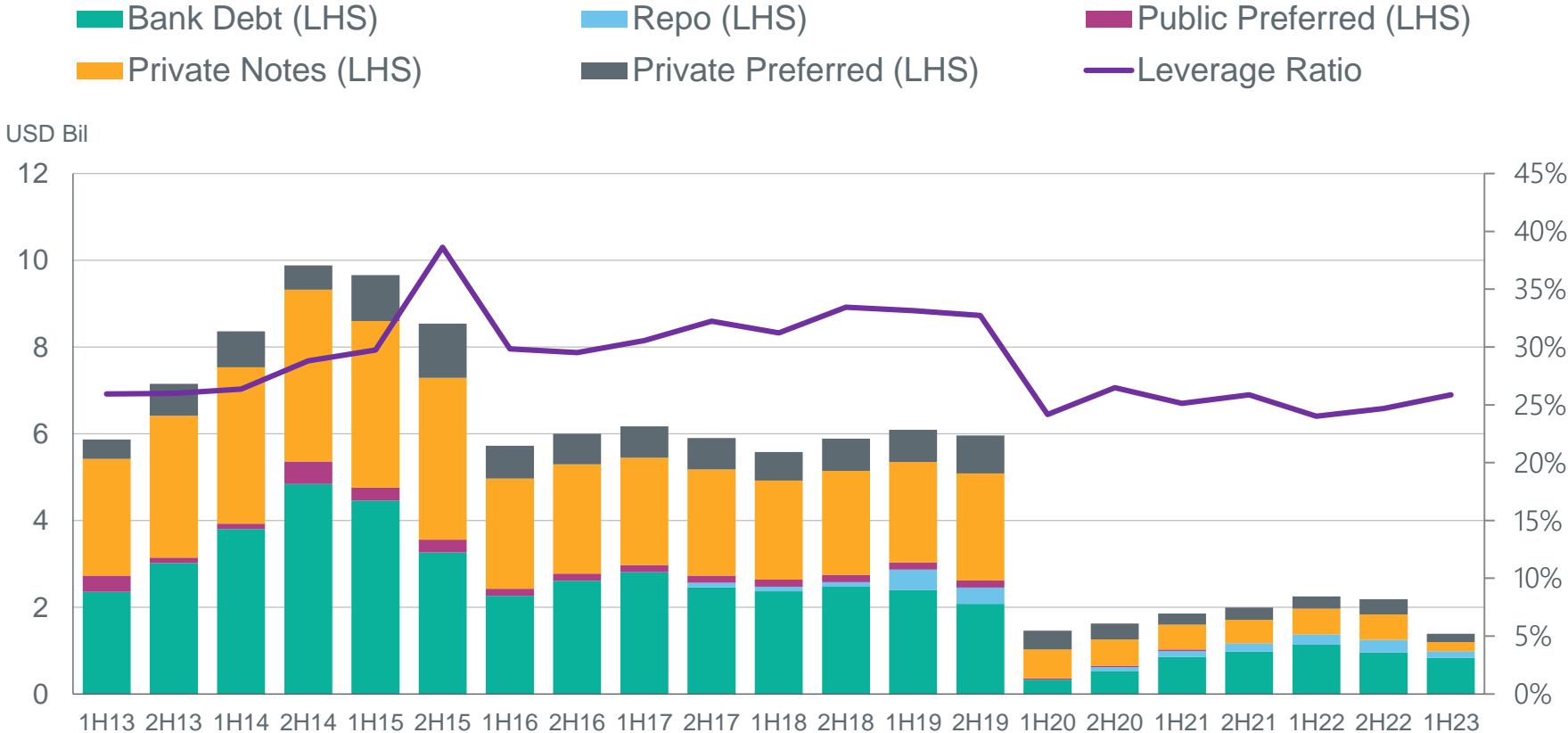
Data in billions, as of 6/30/2023 or latest available, covers \$36.9 billion in outstanding leverage across 226 U.S. closed-end funds.

Leverage Used in Municipal CEFs



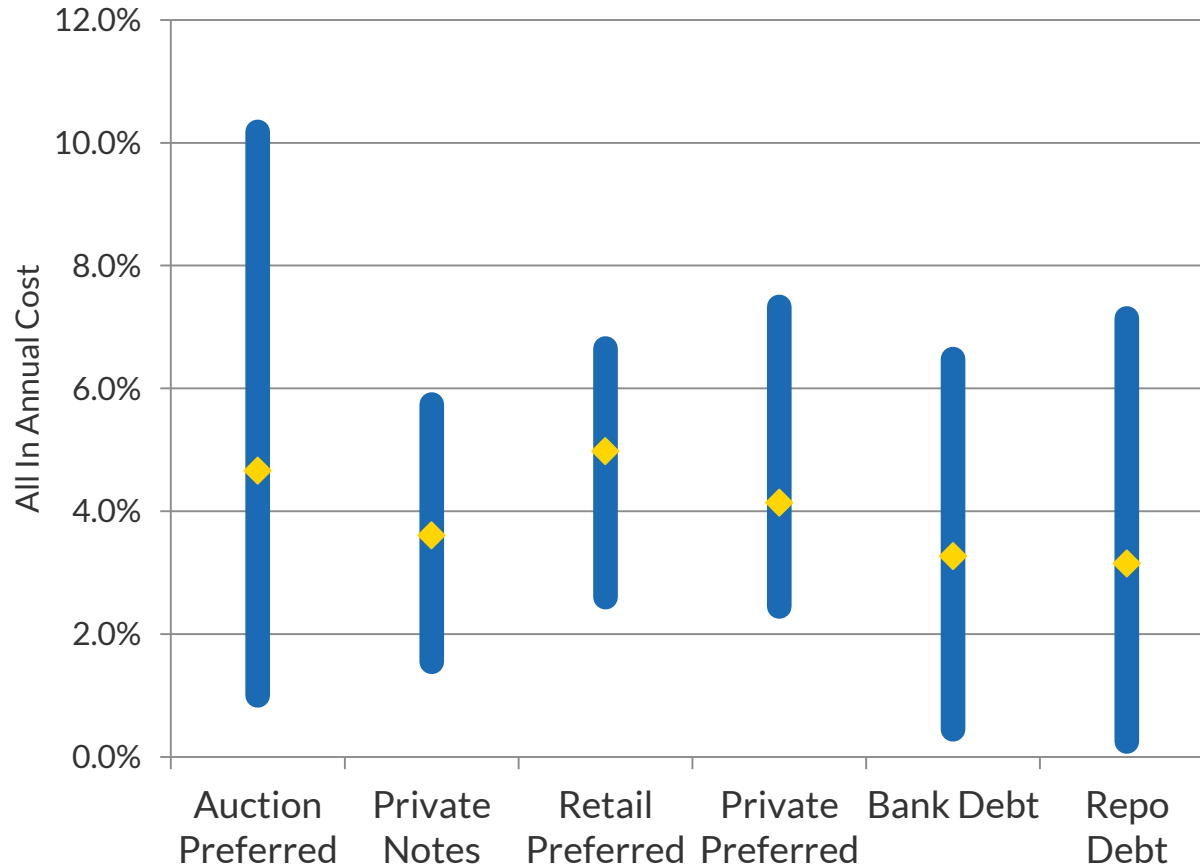
Source: Fitch, SEC Filings, and press releases.
 Data in billions as of 6/30/2023, or latest available. Covers \$31 billion in outstanding leverage across 133 U.S. closed-end funds.

Leverage Used in MLP CEFs



Source: Fitch, SEC Filings, press releases.
 Data in billions, as of 6/30/2023 or latest available. Covers \$1.6 billion in outstanding leverage across 18 U.S. closed-end funds.

Taxable CEFs – Current Leverage Costs

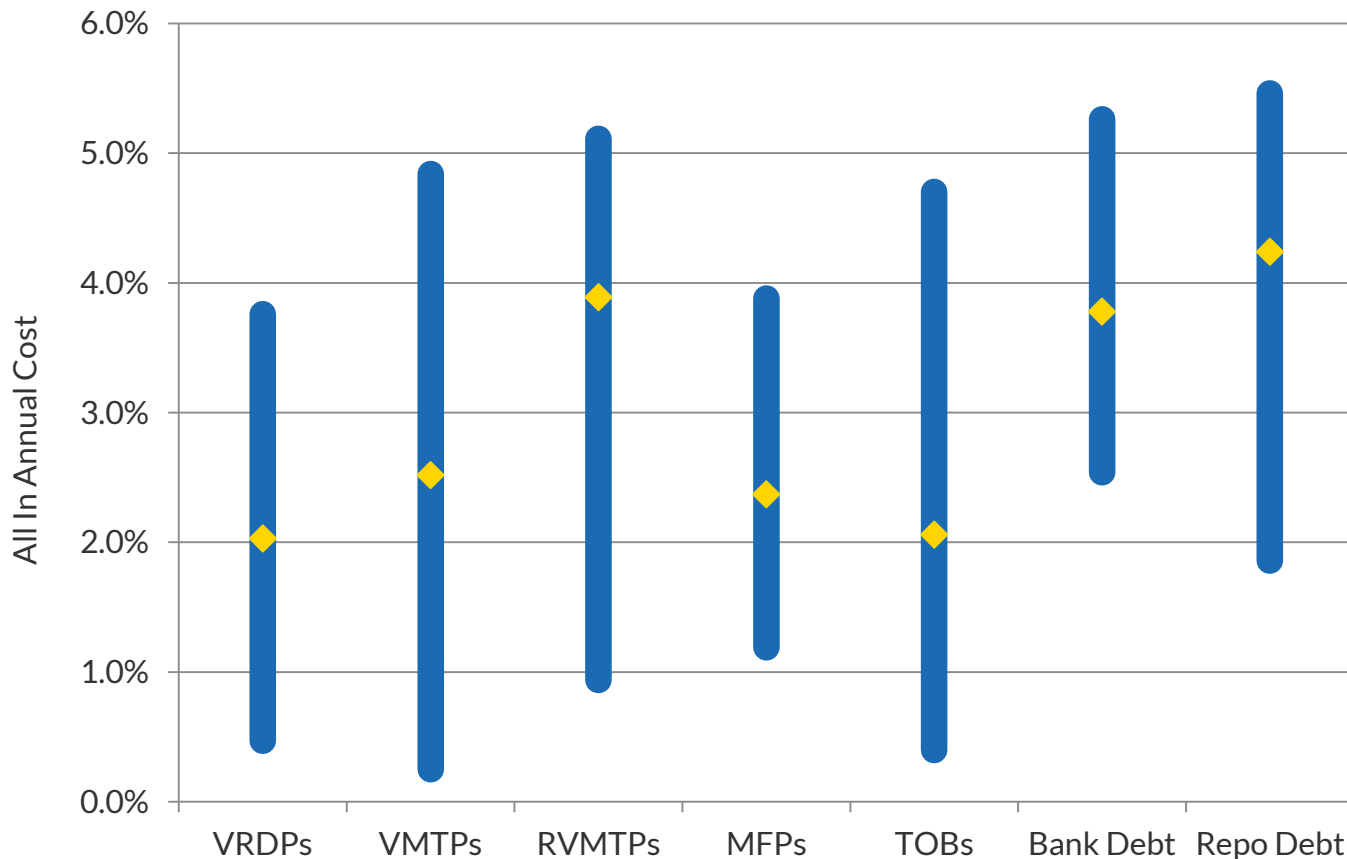


Costs vary by:

- Term of the issuance;
- Manager track record;
- Portfolio sector and quality;
- Secured/unsecured status
- Seniority in capital structure;
- Prevailing interest rates;
- Collateral type/quality;
- Market timing

Source: FitchRatings, SEC Filings. Figures represent borrowing costs from Jan 2022 – June 2023

Municipal CEFs – Current Leverage Costs



- Costs vary by:
- Term of the issuance;
 - Manager track record;
 - Portfolio sector and quality;
 - Prevailing interest rates;
 - Market timing

Source: FitchRatings, SEC Filings. Figures represent borrowing costs from Jan 2022 – June 2023

CEF Bank Financing as of 1H2023

Bank Counterparty	Facility (\$ Mil.)	Number of CEFs	Reverse Repos (\$ Mil.)	Number of CEFs	Total (\$ Mil.)	% of Total	% Δ from 1H2022
State Street	7,325	33	0	0	7,325	24%	-10%
BNP Paribas	4,953	30	1,320	19	6,273	20%	-23%
Bank of Nova Scotia	2,411	26	255	10	2,666	9%	-2%
Bank of New York	1,144	7	4	1	1,149	4%	-15%
Royal Bank of Canada	0	0	1,142	22	1,142	4%	-35%
Societe Generale	561	4	526	12	1,087	4%	-44%
Barclays	0	0	917	14	917	3%	-54%
Bank of America	352	5	503	14	855	3%	307%
Morgan Stanley	0	0	690	5	690	2%	13%
Toronto-Dominion Bank	123	1	513	12	636	2%	61%
All Other Counterparties	890	12	2,197	98	3,088	10%	-58%
Not Disclosed	4,911	36	0	0	4,931	16%	4%
Total	22,671	154	8,067	207	30,758	100%	-22%

Source: FitchRatings, SEC Filings

Fitch's Closed-End Funds Rating Criteria

“Going Beyond the 1940 Act”

	1940 Act	Fitch CEF Criteria
Asset Coverage Ratios	Based on current market values	Based on stressed market values, reflecting each asset class's unique price volatility based on historically observed worst case price declines and liquidity stress
Nontraditional Leverage	Not captured	Captures all senior and pari passu obligations, such as reverse-repurchase agreements, TOBs, securities lending arrangements and derivatives, among others
Portfolio Diversification	Baseline diversification framework; register as diversified or non-diversified	Addresses concentration risk at the level of individual issuers, corporate industries/municipal sectors, foreign currencies and geography

Fitch-Rated CEFs

As of November 2023, Fitch rates **12** kinds of structural liabilities issued by **95** different CEFs managed by **19** unique asset managers investing in **11** different sectors.

FitchRatings

Questions?



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