FUNDMARKET INSIGHT REPORT

REFINITIV LIPPER RESEARCH SERIES

APRIL 30, 2023

The Month in Closed-End Funds: April 2023

Performance

For the first month in three, equity closed-end funds (CEFs) on average posted positive returns on a net-asset-value (NAV) and market basis, rising 0.67% and 0.40%, respectively, for the month. Meanwhile, for the second month in a row, their fixed income CEF counterparts witnessed monthly gains on a NAV basis (+0.56%), but for the first month in three a gain on a market basis (+0.21%) for March. Year to date, both equity and fixed income CEFs posted plus-side returns on a NAV-basis, rising 3.13% and 3.61%, respectively.

U.S. markets generally finished lower at the beginning of March, with the Nasdaq and S&P 500 slumping during the holiday-shortened trading week, with equity markets closed for Good Friday. However, defying the Federal Reserve's hopes for a big slowdown in hiring, the Department of Labor reported the U.S. economy added 236,000 new jobs in March, slightly lower than analyst expectations of 238,000, with the unemployment rate slipping to 3.5%, while wages rose 0.3%. The 10-year Treasury yield rose nine basis points (bps) on the day to 3.39% as the odds of a 25-bps hike by the Federal Reserve Board on May 3 increased. In other news earlier in the week, U.S. job openings dropped below the 10-million mark to a 21-month low, perhaps indicating the beginning of a cooling job market, while first-time jobless claims from the week prior came in higher than expected.

The Dow posted its fourth straight week of market gains the following week—its longest weekly winning streak since October after investors digested strong Q1 bank earnings. Investors remained nervous after economic data showed that March retail sales—a critical component of consumer spending—declined 1%, dropping for the fourth month in five and after Federal Reserve Governor Christopher Waller said the Fed needs to keep hiking interest rates because inflation is still too high. In other news, core consumer-price inflation ticked higher to a 5.6% year-over-year rate. The 10-year Treasury yield rose 13 bps for the week to settle at 3.52%.

The Dow snapped its four-week winning streak as investors kept a keen eye on Q1 earnings while watching for signs of an economic slowdown. The Conference Board's leading economic index for March fell to its lowest level since November 2020 as the number of people collecting unemployment benefits reached its highest level since November 2021. However, keeping investors in the hunt, according to Refinitiv's proprietary research team, 76.1% of the S&P 500 constituents that had reported earnings thus far beat analyst expectations. The 10-year Treasury yield closed the week up five bps to 3.57%.

Despite the U.S. banking system coming under renewed pressure in the last week of April over First Republic Bank's inability to raise new capital after experiencing withdrawals over the week, likely headed into receivership by the Federal Deposit Insurance Corporation and inflation data locking in expectations of another interest rate hike next week, strong Q1 earnings from the likes of Meta Platforms, Microsoft, and Alphabet pushed the Dow to its best monthly gain in three months—rising 2.48% for April. The 10-year Treasury yield closed the week down 13 bps to 3.44%.

The Month in Closed-End Funds: April 2023

- For the first month in three, equity CEFs (+0.67% on a NAV basis) on average witnessed plus-side performance while their fixed income CEF cohorts (+0.56%) posted gains for the second consecutive month.
- At month end, 12% of all CEFs traded at a premium to their NAV, with 14% of equity CEFs and 10% of fixed income CEFs trading in premium territory. The taxable bond CEFs macro-classification witnessed the smallest widening of discounts for the month among Lipper's CEF macro-groups—18 bps to a 9.05% median discount.
- For the first month since October 2019, Developed Markets CEFs (+2.24%) outperformed the other classifications in the equity CEF universe for April.
- For the first month in three, High Yield CEFs (Leveraged) (+1.07%) outperformed the other classifications in the domestic taxable fixed income CEF universe.
- The domestic taxable bond CEFs macro-group (+0.93%) outpaced its world bond (+0.40%) and municipal debt (-0.00%) CEF counterparts.

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While Treasury yields generally rose at the short-end of the curve, yields remained inverted for all maturities from the one-month to the seven-year yield. The two- and 10-year Treasury yield spread remained negative by 60 bps—widening just two bps from March's month-end closing value. Nonetheless, the one-month Treasury yield witnessed the largest decline, falling 39 bps to 4.35%, while the two-month yield saw the largest rise, 35 bps to 5.14%

During the month, the dollar weakened against the euro (-1.45%) and the pound (-1.62%) but gained against the yen (+2.70%). Commodity prices rose for the month, with front-month gold prices rising 1.07% to close the month at $1,990.10/oz. and front-month crude oil prices increasing 1.47% to close at $76.78/bbl.

For the month, 77% of all CEFs posted NAV-based returns in the black, with 72% of equity CEFs and 81% of fixed income CEFs chalking up returns in the plus column. For the second month in a row, Lipper's world equity CEFs (+0.83%) macro-group outpaced its two equity-based brethren: domestic equity CEFs (+0.65%) and mixed-assets CEFs (+0.56%).

For the first month since October 2019, the Developed Markets CEFs classification (+2.24%) moved to the top of the equity leaderboard, followed by Utility CEFs (+2.13%) and Natural Resources CEFs (+2.09%). Convertible Securities CEFs (-1.03%) was the laggard in the equity universe and was bettered by Emerging Markets CEFs (-0.29%) and Sector Equity CEFs (-0.09%). For the remaining equity classifications, returns ranged from positive 0.14% (Real Estate CEFs) to positive 1.83% (Energy MLP CEFs).

Three of the five-top performing equity CEFs for April were warehoused in Lipper's World Equity CEFs macro-group. At the top of the leaderboard was **Central and Eastern Europe Fund Inc.** (**CEE**, housed in the Emerging Markets CEFs classification), rising 11.14% on a NAV basis and traded at a 1.75% premium on April 28. Following CEE were **Swiss Helvetia Fund Inc.** (**SWZ**, warehoused in the Developed Markets CEFs classification), gaining 6.06% and traded at a 16.73% discount at month end; **First Trust Dynamic Europe Equity Income Fund** (**FDEU**, also housed in the Developed Markets CEFs classification), gaining 4.53% and traded at an 6.12% discount on April 28; **SRH Total Return Fund, Inc.** (**STEW**, housed in the Diversified Equity CEFs classification), rising 4.29% and traded at a 19.13% discount at month end; and **Gabelli Healthcare & WellnessRx Trust** (**GRX**, warehoused in Lipper's Sector Equity CEFs classification), returning 4.09% and traded at a 17.23% discount on April 28.

For the month, the dispersion of performance in individual equity CEFs—ranging from negative 6.81% to positive 11.14%—was narrower than March's spread and skewed slightly more to the upside. The 20 top-performing equity CEFs posted returns at or above positive 2.84%, while the 20-lagging equity CEFs were at or below negative 2.35%.

CLOSED-END FUNDS LAB

TABLE 1 CURRENT-MONTH PERFORMANCE, P&D, P&D SHIFTS (% OF UNIVERSE)

	NAV RETURNS POSITIVE	PREMIUM/DISCOUNT		NOW TRADING AT	
		BETTER	WORSE	PREMIUM	DISCOUNT
Equity CEFs	72	30	70	14	86
Bond CEFs	81	41	59	10	90
ALL CEFs	**77**	**36**	**54**	**12**	**88**

TABLE 2 AVERAGE NAV RETURNS, SELECTED PERIODS (%)

	APRIL	YTD	3-MONTH	CALENDAR-2022
Equity CEFs	0.68	3.13	-2.30	-9.85
Bond CEFs	0.56	3.61	-0.39	-12.21
ALL CEFs	**0.61**	**3.41**	**-1.20**	**-11.18**

TABLE 3 NUMBER OF IPOs, YTD VERSUS PRIOR YEAR

	APRIL 30, 2023	CALENDAR-2022
Conventional CEFs	0	5
Interval CEFs	9	22

TABLE 4 AVERAGE SIZE OF IPOs, SELECTED PERIODS, $MIL

THREE MONTHS THROUGH 03/31/2023	0
COMPARABLE YEAR-EARLIER THREE MONTHS	236
CALENDAR 2022 AVERAGE	202

TABLE 5 NUMBER OF MERGERS & LIQUIDATIONS, YTD VERSUS PRIOR YEAR

	APRIL 30, 2023	CALENDAR-2022
ALL CEFs	**11**	**21**

TABLE 6 MEDIAN PREMIUMS AND DISCOUNTS (%)

	31-JAN	28-FEB	31-MAR	28-APR
Equity CEFs	-8.62	-9.65	-10.73	-11.63
Bond CEFs	-8.18	-8.19	-9.88	-10.29
ALL CEFS	**-8.35**	**-8.60**	**-10.08**	**-10.62**

Source: Refinitiv Lipper, an LSEG Business

For the month, 72 CEFs in the equity universe posted returns in the red. The worst-performing fund was housed in Lipper's Emerging Markets CEFs classification. At the bottom of the pile was **Templeton Dragon Fund Inc.** (**TDF**), shedding 6.81% of its March closing NAV and traded at a 14.78% premium on April 28. The second worst-performing equity CEF was **Wildermuth Fund, Class C Shares** (**WEFCX**, an interval CEF warehoused in Lipper's Options Arbitrage/Options Strategies CEFs classification), posting a 6.75% loss.

The U.S. Treasury yield curve remained inverted but rose slightly at the short-end of the curve during the month, with all maturities one year or less, except the one-month yield (39 bps loss), witnessing gains. All yields with maturities less than 10 years remained above the 10-year Treasury yield (+3.44%), with the two-year (two bps) and 20- year (one bp) yields witnessing the smallest declines to 4.04% and 3.80%, respectively. At month end, the two- and 10-year Treasury yield spread (-60 bps) widened two bps for April after hitting negative 46 bps on April 25.

For the second month in three, the domestic taxable bond CEFs macro-group outpaced the other two macro-groups in the fixed income universe, posting a 0.93% gain on average, followed by world income CEFs (+0.40%) and municipal debt CEFs (-0.00%).

For the first month in three, investors pushed High Yield CEFs (Leveraged) (+1.07%) to the top of the domestic taxable fixed income leaderboard, followed by Loan Participation CEFs (+0.99%) and High Yield CEFs (+0.94%). Corporate Debt BBB-Rated (Leveraged) CEFs (+0.62%) posted the group's smallest gains and was bettered by U.S. Mortgage CEFs (+0.65%). On the world income side, the relatively strong performance from Global Income CEFs (+0.72%) was neutralized by losses from Emerging Markets Hard Currency Debt CEFs (-0.82%), but the subgroup managed to stay on the plus-side for the month.

The municipal debt CEFs macro-group was the worst performing macro-group for the month, posting a 0.00% return on average, with only three of the nine classifications in the group posting plus-side returns for April. The High Yield Municipal Debt CEFs (+0.19%) classification posted the strongest returns of the group, followed by New York Municipal Debt CEFs (+0.10%) and General & Insured Municipal Debt CEFs (+0.03%), while Pennsylvania Municipal CEFs (-0.33%) was the group laggard. National municipal debt CEFs (+0.03%) outperformed their single state municipal debt CEF counterparts (-0.06%) by nine bps.

Three of the five top-performing individual fixed income CEFs were housed in Lipper's Loan Participation CEFs classification, with **XAI Octagon Floating Rate & Alternative Income Term Trust** (**XFLT**, housed in the Loan Participation CEFs classification) rising to the top of fixed income leaderboard, posting a 3.06% return and trading at a 0.77% premium on April 28. Following XFLT were **KKR Income Opportunities Fund** (**KIO**, warehoused in Lipper's High Yield CEFs [Leveraged] classification), chalking up a 2.78% return and traded at an 11.59% discount at month end; **BNY Mellon Alcentra Global Multi-Strategy Credit** (**XALCX**, interval hybrid CEF housed in the Loan Participation CEFs classification), gaining 2.73%; **Flat Rock Enhanced Income Fund** (**FRBBX**, also an interval CEF housed in the Loan Participation CEFs classification), rising 2.37%, and **Credit Suisse Asset Management Income Fund Inc.** (**CIK**, housed in the High Yield CEFs [Leveraged] classification), returning 2.24% and traded at a 6.34% discount on April 28.

For the remaining funds in the fixed income CEF universe, monthly NAV-based performance ranged from negative 4.93% for **Virtus Stone Harbor Emerging Markets Income Fund** (**EDF**, housed in Lipper's Emerging Markets Hard Currency Debt CEFs classification and traded at an 4.71% premium on April 28) to positive 2.21% for **Credit Suisse High Yield Bond Fund** (**DHY**, housed in the High Yield CEFs [Leveraged] classification and traded at a 9.57% discount at month end). The 20 top-performing fixed income CEFs posted returns at or above positive 1.68%, while the 20 lagging CEFs posted returns at or below negative 0.33% for the month. For April, only 67 of the 354 fixed income CEFs witnessed negative NAV-based performance.

Premium and Discount Behavior

For April, the median discount of all CEFs widened 53 bps to 10.62%—wider than the 12-month moving average median discount (8.52%). Equity CEFs' median discount widened 90 bps to 11.63%, while fixed income CEFs' median discount widened 41 bps to 10.29%. The taxable bond CEFs macro-group's median discounts witnessed the smallest widening among the CEF macro-groups—18 bps to 9.05%—while the world income CEFs macro-group witnessed the largest widening of discounts—220 bps to 6.75%.

Gabelli Utility Trust (**GUT**, housed in the Utility CEFs classification) traded at the largest premium (+99.71%) in the CEF universe on April 28, while **Destra Multi-Alternative Fund** (**DMA**, housed in the Income & Preferred Stock CEFs classification) traded at the largest discount (-45.00%) at month end.

For the month, 36% of all closed-end funds' discounts or premiums improved, while 64% worsened. In particular, 30% of equity CEFs and 41% of fixed income CEFs saw their individual discounts narrow, premiums widen, or premiums replace discounts. The number of funds traded at premiums on April 28 (50) was six less than the number on March 31 (56).

CEF Events and Corporate Actions IPOs

There were no CEF IPOs in April.

Rights, Repurchases, Tender Offers

RiverNorth Capital and Income Fund, Inc. (**RSF**) announced the final results of its repurchase offer for up to 5% of its outstanding common shares. The repurchase offer expired on April 5, 2023. Based on information provided by DST Systems, Inc., the depositary for the repurchase offer, a total of 2,000,834 shares were submitted for redemption and 214,663 shares were repurchased. In accordance with the terms and conditions of the repurchase offer, because the number of shares submitted for redemption exceeds the number of shares offered to purchase, the fund will purchase shares from tendering shareholders on a pro rata basis (disregarding fractional shares). The purchase price of repurchased shares is equal to the fund's NAV per share calculated as of the close of regular trading on the NYSE on April 5, 2023, which is equal to $16.75 per share.

Mergers, Liquidations, and Reorganizations

Nuveen Intermediate Duration Municipal Term Fund (**NID**) completed its termination and liquidation following the close of business on March 31, 2023. The termination and liquidation were performed in accordance with the fund's investment objectives and organizational documents, consistent with the fund's previously announced liquidation plans. Upon the fund's termination, NID had a final extended NAV of $13.4154 per common share. In its liquidation, the fund paid a cash distribution of $11.6956 per common share to all fund shareholders. Additionally, the fund distributed one unit of Nuveen Intermediate Duration Municipal Term Fund Liquidating Trust per common share of NID owned by each shareholder on the liquidation date. Upon its formation on March 31, 2023, the liquidating trust had a NAV equal to $1.7198 per unit.

The boards of directors of **Neuberger Berman Municipal Fund Inc.** (**NBH**), **Neuberger Berman California Municipal Fund Inc.** (**NBW**), and **Neuberger Berman New York Municipal Fund Inc.** (**NBO**) have approved proposals to reorganize each of NBW and NBO into NBH. The proposed reorganizations for the funds are subject to certain conditions, including necessary approval by each fund's stockholders. The funds expect to hold a special meeting of stockholders to consider approval of the reorganization proposals on or about June 29, 2023.

Neuberger Berman Investment Advisers LLC (NBIA), the funds' investment advisor, recommended, and the boards approved, the reorganizations as a result of a comprehensive assessment of the funds. NBIA and the boards believe the reorganizations will benefit stockholders of each fund through the creation of a larger fund that may offer economies of scale, including a lower total annual operating expense ratio, enhanced earnings potential, and increased market liquidity for the combined fund's common stock, which could positively impact trading in the combined fund's shares.

The boards of trustees of **Nuveen Preferred and Income Fund** (**JPT**), **Nuveen Preferred & Income Securities Fund** (**JPS**), and **Nuveen Preferred & Income Opportunities Fund** (**JPC**) have approved a proposal to merge the funds. The proposed mergers, if approved by shareholders, would combine each of JPT and JPS into JPC. The mergers are intended to create a larger fund with lower net operating expenses, enhanced earnings potential, and increased trading volume on the exchange for common shares. The proposed mergers of the funds are subject to certain conditions, including necessary approval by the funds' shareholders. Detailed information on the proposed mergers will be contained in proxy materials expected to be filed in the coming weeks. The mergers are not contingent on each other.

The merger of **Eaton Vance Tax-Managed Buy-Write Strategy Fund** (**EXD**) into **Eaton Vance Tax-Managed Buy-Write Opportunities Fund (ETV**) was completed at the close of the NYSE on April 14, 2023. EXD shareholder approval of the agreement and plan of reorganization pursuant to which the merger was affected was previously obtained on March 16, 2023. The merger was based upon the funds' closing net assets on April 14, 2023. The exchange ratio at which common shares of EXD were converted to common shares of ETV was as follows: 0.750447085.

Other

The **Cushing MLP & Infrastructure Total Return Fund** (**SRV**) announced that certain changes to the name of the fund and the fund's non-fundamental investment policies previously announced on January 30, 2023, became effective. Effective April 3, 2023, the name of the fund is **NXG Cushing Midstream Energy Fund**. The fund's NYSE ticker symbol remains SRV. The fund will continue to pursue its investment objective to obtain a high after-tax total return from a combination of capital appreciation and current income.

The fund previously pursued its investment objective by investing, under normal market conditions, at least 80% of its net assets, plus any borrowings for investment purposes, in a portfolio of infrastructure master limited partnerships (MLPs) and MLP-related investments (together, MLP investments), which are investments that offer economic exposure to public and private MLPs in the form of common or subordinated units issued by MLPs, securities of entities holding primarily general partner or managing members interests in MLPs, debt securities of MLPs, and securities that are derivatives of interests in MLPs, which are I shares and other derivative securities that have economic characteristics

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of MLP securities, and businesses that operate and have the economic characteristics of MLP investments but are organized and taxed as C-corporations or as limited liability companies. The fund previously invested no more than 25% of its total assets in securities of energy MLPs that qualify as publicly traded partnerships under the Internal Revenue Code.

Effective immediately, it will no longer be a policy of the fund to invest at least 80% of its net assets, plus any borrowings for investment purposes, in a portfolio of MLP investments. The fund will pursue its investment objective by investing, under normal market conditions, at least 80% of its net assets, plus any borrowings for investment purposes, in a portfolio of midstream energy investments. The fund considers midstream energy investments to be investments that offer economic exposure to securities of midstream energy companies, which are companies that provide midstream services in the energy infrastructure sector, including the gathering, transporting, processing, fractionation, storing, refining and distribution of natural resources, such as natural gas, natural gas liquids, crude oil refined petroleum products, biofuels, carbon sequestration, solar, and wind. The fund considers a company to be a midstream energy company if at least 50% of its assets, income, sales, or profits are committed to, derived from, or otherwise related to midstream energy services. The fund does not anticipate that any changes in the fund's investment approach or rebalancing of the fund's portfolio will be required in connection with the name and policy change.

The fund intends to continue to qualify to be treated as a regulated investment company (RIC) under the code. Therefore, the fund will, as of the end of each fiscal quarter, invest no more than 25% of the value of the fund's total assets in the securities of MLPs and other entities treated as "qualified publicly traded partnerships" under the code.

Forum Capital Advisors LLC, a Denver-based registered investment advisor, announced it has partnered with both Fidelity Investments and Charles Schwab & Co, Inc. to add **Forum Real Estate Income Fund** (**FORAX**, an interval CEF) to their respective intermediary platforms, broadening access to the firm's registered offering for financial advisors and their clients. Forum Real Estate Income Fund is a daily priced interval fund registered under the Investment Company Act of 1940 (the 1940 Act) created to deliver access to institutional investment quality commercial real estate debt investments not typically available to individual investors. On September 28, 2022, the fund converted to a registered non-diversified, closed-end interval fund in accordance with Rule 23c-3 under the 1940 Act, as amended. The fund commenced investment operations as a registered closed-end tender fund on April 16, 2021, after the conversion from a limited partnership private fund exempt from registration under the 1940 Act, Forum Integrated Income Fund I, L.P., which commenced operations on October 24, 2019, (the private fund). The private fund was not registered under the 1940 Act, and therefore was not subject to certain restrictions imposed by the 1940 Act on registered investment companies and by the Internal Revenue Code of 1986 on regulated investment companies.

For immediate assistance, feel free to contact Lipper Client Services toll-free at 877.955.4773 or via email at LipperUSClientServices@refinitiv.com. For more information about Lipper, please visit our website at refinitiv.com/en or lipperalphainsight.com

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