

FUNDMARKET INSIGHT REPORT

REFINITIV LIPPER RESEARCH SERIES

MAY 31, 2022

The Month in Closed-End Funds: May 2022

Performance

For the second month in three, equity CEFs on average witnessed plus-side performance on a NAV and market basis, but gained just 0.73% and 0.35%, respectively, for the month. Meanwhile, for the fifth consecutive month their fixed income CEF counterparts posted a loss on a NAV basis (-0.40%), but for the first month in five were in the black on a market basis (+0.82%) for April.

The U.S. markets booked another week of losses at the start of the month as investors weighed the April jobs numbers amid inflation fears, sending the S&P 500 to its fifth straight week of losses. The Department of Labor announced the U.S. economy had added 428,000 new jobs for April, beating analyst expectations of 400,000, fanning inflationary fears. However, the unemployment rate was unchanged from the 3.6% reported in March, just above a 54-year low. Average hourly pay cooled a bit in April, rising 0.3%. A sharp drop in Q1 productivity accompanied by an increase in labor costs kept inflationary concerns on the rise. The 10-year Treasury yield and front-month crude oil futures rose seven bps and 1.4%, respectively, to 3.12% and \$109.77/barrel (bbl).

The following week, despite the Nasdaq posting its largest one-day percentage gain since November 4, 2020, on Friday, May 13, and the DJIA rising 466.36 points on the day, the Dow suffered its seventh straight weekly decline, its longest losing streak since July 2001, as investors continued to worry over rising interest rates, slowing growth, and high inflation. The 10-year Treasury yield closed the week out at 2.93%. Front-month crude oil futures prices rose 4.1% on the day, closing at \$110.49/bbl and posting a weekly gain of 0.7%.

U.S. stocks ended mixed during the following week, with the Dow booking its eighth consecutive week of losses—the DJIA's longest losing streak since April 1932, according to Dow Jones Market Data—after the S&P 500 traded briefly in bear market territory and both Walmart and Target reported disappointing Q1 earnings. The 10-year Treasury yield fell 15 bps for the week to close at 2.76%. Oil prices remained relatively unchanged, closing at \$110.25/bbl.

In the last week of trading, stocks closed higher after the Federal Reserve's preferred measure of inflation, the personal consumption expenditures index, in April showed its smallest increase in a year and a half. Breaking its longest weekly losing streak since 1932, the DJIA booked a weekly gain of 6.2%. The PCE index rose just 0.2% in April. The rate of core PCE inflation slowed over the past year from 5.2% in March to 4.9% in April. After the release of the Fed's May meeting minutes, speculation of a potential pause in interest rate hikes later this year were on the rise. However, oil prices were on a climb, with front-month crude oil futures increasing 0.9%—closing at \$115.07/bbl—the highest closing value since March 11. The 10-year Treasury yield closed down one bp to 2.74%.

On the last trading day, a hawkish speech by Fed governor Christopher Waller weighed on investors, pushing stocks lower and yields higher. Nonetheless, the DJIA and S&P 500 just managed to remain in the plus column for the month, while the Nasdaq fell for the second straight month. The Conference Board's index of consumer confidence witnessed minor declines, falling from 108.6 in April to 106.4 in May, but beat analyst expectations of 103.9. Front-month crude oil futures declined 0.4% to finish the month at \$114.67/bbl and the 10-year Treasury rose 11 bps to 2.85%.

The Month in Closed-End Funds: May 2022

- For the second month in three, equity closed-end funds (CEFs) on average witnessed positive returns, rising 0.73% on a net-asset-value (NAV) basis for May, while for the fifth consecutive month, fixed income CEFs posted returns in the red (-0.40%).
- Only 20% of all CEFs traded at a premium to their NAV at month end, with 24% of equity CEFs and 16% of fixed income CEFs trading in premium territory. The single state municipal debt CEFs macro-classification witnessed the largest narrowing of discounts for the month among Lipper's CEF macro-groups—234 basis points (bps) to a 6.27% median discount.
- Natural Resources CEFs (+8.98%) outpaced the other classifications in the equity CEF universe for May.
- For the first month in 11, the California Municipal Debt CEFs (+2.28%) classification outpaced the other classifications in the fixed income CEF universe for May.
- For the first month in five, the municipal debt CEFs macro-group posted a plus-side return (+2.00%, on average), with all nine classifications in the group experiencing positive performance for the month.



Authored by:

TOM ROSEEN
Head of Research Services
Refinitiv Lipper
An LSEG Business

The 10-year Treasury yield declined four bps for the month, settling at 2.85%, after hitting a monthly closing high of 3.12% on May 6. The Treasury yield curve flattened in the belly of the curve, with the two-year Treasury yield witnessing the largest decline for the month, dropping 17 bps to 2.53%, while the one-month yield witnessed the largest increase, 36 bps to 0.73%. The two- and 10-year Treasury yield spread widened 13 bps to 32 bps.

During the month, the dollar weakened against the euro (-1.75%), the pound (-0.40%), and the yen (-1.00%). Commodity prices were mixed for the month, with near-month gold prices falling 3.49% to close the month at \$1,842.70/oz. and front-month crude oil prices rising 9.53% to close at \$114.67/bbl.

For the month, 52% of all CEFs posted NAV-based returns in the black, with 59% of equity CEFs and 46% of fixed income CEFs chalking up returns in the plus column. For the sixth month in a row, Lipper's domestic equity CEFs (+1.16%) macro-group outshined its two equity-based brethren: world equity CEFs (+1.11%) and mixed-assets CEFs (-1.02%).

Given the continued rise in crude oil prices and select commodities, it wasn't surprising to see the Natural Resources CEFs classification (+8.98%) move to the top of the equity leaderboard for the month, followed by Energy MLP CEFs (+7.12%) and Utility CEFs classifications (+3.44%). Once again, Convertible Securities CEFs (-3.09%) posted the largest losses in the equity universe and was bettered by Sector Equity CEFs (-1.39%) and Real Estate CEFs (-0.43%). For the remaining equity classifications, returns ranged from negative 0.31% (Income & Preferred Stock CEFs) to positive 1.37% (Developed Markets CEFs).

Three of the five top-performing CEFs for May were warehoused in Lipper's Natural Resources CEFs classification, with **Tortoise Energy Independence Fund (NDP)** posting the strongest returns, rising 15.73% on a NAV basis and traded at a 16.08% discount on May 31. Following NDP were **RENN Fund (RCG)**, housed in the Global CEFs classification) gaining 13.54% and traded at a 3.22% premium at month end; **Adams Natural Resources Fund (PEO)**, housed in Lipper Natural Resources CEFs classification) rising 12.80% and traded at a 14.54% discount on May 31; **BlackRock Energy & Resources Trust (BGR)**, also warehoused in the Natural Resources CEFs classification), returning 12.11% and traded at a 10.86% discount at month end; and **ClearBridge MLP and Midstream Fund Inc. (CEM)**, housed in the Energy MLP CEFs classification), rising 9.29% and traded at a 16.90% discount on May 31.

For the month, the dispersion of performance in individual equity CEFs—ranging from negative 11.97% to positive 15.73%—was wider than April's spread and more skewed to the plus side. The 20 top-performing equity CEFs posted returns at or above positive 6.62%, while the 20-lagging equity CEFs were at or below negative 3.98%.

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	59	40	60	24	75
Bond CEFs	46	62	38	16	84
ALL CEFs	52	52	48	20	80

TABLE 2
AVERAGE NAV RETURNS, SELECTED PERIODS (%)

	MAY	YTD	3-MONTH	CALENDAR-2021
Equity CEFs	0.73	-4.94	-2.24	18.56
Bond CEFs	-0.40	-8.60	-5.63	5.66
ALL CEFs	0.09	-7.00	-4.16	11.29

TABLE 3
NUMBER OF IPOs, YTD VERSUS PRIOR YEAR

	MAY 2022	CALENDAR-2021
Conventional CEFs	4	13
Interval CEFs	4	24

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

THREE MONTHS THROUGH 4/30/2022	305
COMPARABLE YEAR-EARLIER THREE MONTHS	1,805
CALENDAR 2021 AVERAGE	1,217

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

	MAY 2022	CALENDAR-2021
ALL CEFs	12	57

TABLE 6
MEDIAN PREMIUMS AND DISCOUNTS (%)

	28-FEB	31-MAR	29-APR	31-MAY
Equity CEFs	-6.89	-6.18	-7.99	-8.15
Bond CEFs	-6.25	-6.33	-7.99	-7.32
ALL CEFs	-6.40	-6.30	-7.99	-7.48

Source: Refinitiv Lipper, an LSEG Business

For the month, 155 CEFs in the equity universe posted plus-side returns. The three worst performing funds were housed in Lipper's Sector Equity CEFs classification. At the bottom of the heap was **ASA Gold & Precious Metals Limited (ASA)**, shedding 11.97% of its April-closing NAV and traded at a 12.45% discount on May 31. The second worst-performing equity CEF was **BlackRock Innovation and Growth Trust (BIGZ)**, posting an 8.33% loss and traded at a 12.90% discount at month end.

The U.S. Treasury yield curve flattened in the belly of the curve during the month, with the two- and three-year yields witnessing the largest declines (17 and 16 bps, respectively). At month end, the two- and 10-year Treasury yield spread (32 bps), widened 13 bps for May. The short end of the curve saw the greatest rises in yield, with the one- and three-month Treasury yields rising 36 and 31 bps to 0.73% and 1.16% at month end.

For the first month in three, the municipal debt CEFs macro-group outpaced the other macro-groups in the fixed income universe, posting a 2.00% return on average, followed by world income CEFs (-0.31%) and domestic taxable bond CEFs (-1.90%).

Fixed income investors focused on attractive opportunities in the municipal debt market and a slight drop in Treasury yields during the month. For the first month in 11, investors pushed Corporate Debt BBB-Rated CEFs (+0.27%, April's laggard) to the top of the domestic taxable fixed income leaderboard, followed by Corporate Debt BBB-Rated CEFs (Leveraged) (-0.07%) and U.S. Mortgage CEFs (-0.73%). Loan Participation CEFs (-2.98%) posted the weakest returns of the group and was bettered by High Yield CEFs (-2.70%). On the world income side, Global Income CEFs (-0.26%) and Emerging Markets Hard Currency Debt CEFs (-0.44%) remained quasi-supportive of the macro-group for the month.

For the first month in five, the municipal debt CEFs macro-group posted a positive return (+2.00%) on average, with all nine classifications in the group experiencing plus-side performance for May. The California Municipal Debt CEFs (+2.28%), New York Municipal Debt CEFs (+2.25%), and High Yield Municipal Debt CEFs (+2.21%) classifications outshined the other classifications in the group for the month, while General & Insured Municipal Debt CEFs (+1.33%) was the relative laggard of the group. Single state municipal debt CEFs (+2.08%) outpaced their national municipal debt CEF counterparts (+1.96%) by 12 bps. However, year to date the macro-group is down 12.40% on a NAV basis.

The two top performing individual fixed income CEFs were interval hybrid CEFs housed in Lipper's High Yield Municipal Debt CEFs classification. At the top of the chart was **Nuveen Enhanced High Yield Municipal Bond Fund, A Shares (NHYEX)**, returning 3.79%, followed by **Nuveen Enhanced High Yield Municipal Bond Fund, I Shares (NMSSX)**, returning 3.73%. Following those two were **PIMCO California Municipal Income Fund II (PCK)**, housed in the California Municipal Debt CEFs classification) returning 3.29% and traded at a 1.50% premium on May 31; **RiverNorth Managed Duration Muni Income Fund II Inc. (RMMZ)**, housed in the General & Insured Municipal Debt CEFs [Leveraged] classification), returning 3.13% and traded at a 7.91% discount at month end; and **PIMCO New York Municipal Income Fund (PNF)**, warehoused in Lipper's New York Municipal Debt CEFs classification), adding 3.13% to its April month-end value and traded at a 5.29% discount on May 31.

For the remaining funds in the fixed income CEF universe, monthly NAV-based performance ranged from negative 10.29% for **XAI Octagon Floating Rate & Alternative Inc Term Trust (XFLT)**, housed in Lipper's Loan Participation CEFs classification and traded at a 10.73% premium on May 31) to positive 3.05% for **PIMCO Municipal Income Fund (PMF)**, housed in the General & Insured Municipal Debt CEFs [Leveraged] classification and traded at a 4.00% premium at month end). The 20 top-performing fixed income CEFs posted returns at or above positive 2.63%, while the 20 lagging CEFs posted returns at or below negative 4.17% for the month. There were 159 fixed income CEFs that witnessed positive NAV-based performance for May.

Premium and Discount Behavior

For May, the median discount of all CEFs narrowed 52 bps to 7.48%—wider than the 12-month moving average median discount (3.99%). Equity CEFs' median discount widened 16 bps to 8.15%, while fixed income CEFs' median discount narrowed 67 bps to 7.32%. Single state municipal debt CEFs' median discounts witnessed the largest narrowing among the CEF macro-groups—234 bps to 6.27%—while the world equity CEFs macro-group witnessed the largest widening of discounts—75 bps to 12.40%.

Gabelli Utility Trust (GUT), housed in the Utility CEFs classification) traded at the largest premium (+66.82%) in the CEF universe on May 31, while **Foxby Corp. (FXBY)**, housed in the Diversified Equity CEFs classification) traded at the largest discount (-31.84%) at month end.

For the month, 20% of all closed-end funds' discounts or premiums improved, while 80% worsened. In particular, 24% of equity CEFs and 16% of fixed income CEFs saw their individual discounts narrow, premiums widen, or premiums replace discounts. The number of funds traded at premiums on May 31 (86) was five more than the number on April 29 (81).

CEF Events and Corporate Actions IPOs

There were no CEF IPOs in May.

Rights, Repurchases, Tender Offers

The board of trustees of **The Gabelli Global Utility & Income Trust (GLU)** has approved a transferable rights offering which would allow the fund's record date common shareholders to acquire additional common shares. Each shareholder will receive one transferable right for each common share held on the record date (May 12, 2022). Four rights plus \$16 will be required to purchase one additional common share. The purchase price will be payable in cash. Record date shareholders who fully exercise their primary subscription rights will be eligible for an oversubscription privilege. This privilege entitles these shareholders to subscribe, subject to certain limitations and a pro-rata allotment, for any additional common shares not purchased pursuant to the primary subscription. Rights acquired in the secondary market may not participate in the oversubscription privilege. The rights were expected to trade "when issued" on the New York Stock Exchange (NYSE) beginning on May 10, 2022. The fund's common shares were expected to trade "ex-rights" on the NYSE beginning on May 11, 2022. The rights were expected to begin trading for normal settlement on the NYSE (GLU RT) on or about May 17, 2022. The offering expires on June 23, 2022, unless extended. The fund expected to mail subscription certificates evidencing the rights and a copy of the prospectus for the offering to record date shareholders beginning on May 16, 2022.

Clarion Partners Real Estate Income Fund Inc., which offers **Class S Shares (CPRSX)**, **Class T Shares (CPRTX)**, **Class D Shares (CPRDX)**, and **Class I Shares (CPREX)**, announced that the fund's board of directors has approved a tender offer for up to 5% of the fund's aggregate NAV, subject to the right to purchase additional shares representing up to 2% of the fund's NAV without amending or extending the offer. The tender offer will be conducted at a price equal to the fund's NAV per share of common stock on the day on which the tender offer expires. The fund intended to commence its tender offer on or about June 14, 2022, with the expiration of the tender offer currently expected to be July 14, 2022.

Western Asset Middle Market Income Fund Inc. (XWMTX) announced that the fund's board of directors has approved a tender offer to purchase for cash up to 2.5% of the fund's outstanding shares of common stock, subject to the right to purchase up to an additional 2% of the fund's outstanding shares without amending or extending the offer. The tender offer will be conducted at a price equal to the fund's NAV per share of common stock on the day on which the tender offer expires. The fund intended to commence

its tender offer on or about June 1, 2022, with the expiration of the tender offer currently expected to be June 30, 2022.

Western Asset High Income Fund II Inc. (HIX) announced the final results of its transferable rights offering. The offer expired on May 6, 2022, and the rights no longer trade on the NYSE. The final subscription price per share was \$5.17, which was equal to 90% of the fund's NAV at the close of trading on the NYSE on May 6, 2022. The offer resulted in the issuance of 6,001,836 shares of common stock. The gross proceeds of the offer were expected to be approximately \$31 million. The shares of common stock subscribed for were expected to be issued on or about May 13, 2022. The fund will return to subscribing investors the full amount of any excess payments. Purchase price is equal to 100% of the fund's NAV per share as of March 31, 2022.

BNY Mellon Alcentra Global Multi-Strategy Credit Fund, Inc. (XALCX) announced the final results of its quarterly tender offer for up to 2.5% of the fund's issued and outstanding shares of common stock. The tender offer, which expired on May 13, 2022, was oversubscribed. Therefore, in accordance with the terms and conditions of the tender offer, the fund purchased shares from all tendering shareholders on a pro-rata basis, after disregarding fractions, based on the number of shares properly tendered. The final results of the tender offer are as follows: number of shares tendered: 272,622, number of shares to be purchased: 56,978, pro-rata factor: 0.20957, purchase price: \$98.03.

Cornerstone Total Return Fund, Inc. (CRF) announced on May 16, 2022, that the rights offering of shares of the fund's common stock will be suspended until further notice. In accordance with rights, an undertaking made by the fund in the registration statement it filed with the Securities and Exchange Commission in connection with the rights offering, the fund is suspending its rights offering until further notice due to the fund's NAV having declined more than 10% from \$8.65 on April 8, 2022 (the effective date of the fund's registration statement) to \$7.45 on May 13, 2022. Subscribing stockholders will be permitted to cancel their exercise of rights until such as time as the rights offering is resumed. The rights offering will be suspended until such time as the board of directors of the fund determines that market conditions and other factors make it appropriate to resume the rights offering. The fund will continue to review market conditions and will make an announcement if it decides to resume the rights offering. There can be no assurance that the fund will resume the rights offering.

Cornerstone Strategic Value Fund, Inc. (CLM) announced that the subscription period for its previously suspended rights offering for shares of the fund's common stock would resume on Monday, May



Authored by:
TOM ROSEEN
Head of Research Services
Refinitiv Lipper
An LSEG Business

23, 2022, and the expiration date will be extended so that the subscription period will expire on Friday, June 10, 2022, unless it is further extended by the fund. The original record date will continue to be April 18, 2022. Related to the timing of the rights offering, the June 2022 monthly distribution record date has been changed to June 10, 2022. The payable date of June 30, 2022, and the per share amounts previously reported are unchanged. The fund suspended its rights offering on May 16, 2022, due to the fund's NAV having declined more than 10% from \$9.01 on April 8, 2022 (the effective date of the fund's registration statement) to \$7.76 on May 13, 2022. All terms of the rights offering will remain the same, except that the expiration date for the rights offering is extended until June 10, 2022, unless further extended.

Neuberger Berman High Yield Strategies Fund Inc. (NHS) announced the final results of its transferable rights offering, which expired on May 17, 2022. The final subscription price per share of common stock was \$8.60, which was equal to 87% of the fund's NAV per share of common stock at the close of trading on the NYSE on the expiration date. The offer resulted in the issuance of 4,763,981 shares of common stock. The gross proceeds of the offer are expected to be approximately \$40.9 million. The shares of common stock subscribed for were expected to be issued on or about May 25, 2022. The fund will return to subscribing investors the full amount of any excess payments.

Mergers and Reorganizations

Common shareholders of **Nuveen Enhanced Municipal Value Fund (NEV)** and preferred shareholders of **Nuveen Municipal Credit Income Fund (NZF)** have approved the funds' reorganization. The reorganization will combine NEV into NZF. Subject to the satisfaction of certain customary closing conditions, the transaction is expected to become effective before the market opens on June 6, 2022. The monthly distributions typically declared the first business day of the month for NEV and NZF will be replaced by pre-reorganization distributions, which, to the extent declared, were announced on May 24, 2022, with a record date of June 3, 2022. The payable date will remain July 1, 2022. Following the transaction, the surviving fund, NZF, may also declare an additional post-reorganization distribution, which, to the extent made, is expected to have a record date of June 16, 2022, and be payable July 1, 2022. The total per-common share dollar amount of the pre- and, to the extent made, post-reorganization tax-exempt distributions received by common shareholders of each fund on July 1, 2022, are expected to be equal to or greater than the per-common share dollar amount of the prior month's tax-exempt distribution of each fund prior to the reorganization.

Nuveen announced that the **Nuveen Credit Opportunities 2022 Target Term Fund (JCO)** declared a special income distribution. As previously announced, consistent with its investment objectives and organizational documents, the fund planned to terminate its existence and liquidate on or about June 1, 2022. As the fund approached liquidation, its common shares continued trading on the NYSE through May 25, 2022, and it was suspended from trading before the open of trading on May 26, 2022. The current NAV of the fund as of the close of business on May 11, 2022, was \$8.03. The fund's NAV was reduced by the amount of the distribution declared today on the ex-dividend date.

The special distribution declared, together with the fund's final liquidating distribution, should be considered as part of the fund's objective to return the original \$9.85 NAV of the fund (original NAV) on or about June 1, 2022. As previously announced, due to market conditions, JCO did not anticipate returning the original NAV at its termination. The investment objective relating to original NAV was not a guarantee and is dependent on a number of factors, including the extent of market recovery and the cumulative level of income retained in relation to cumulative portfolio gains net of losses.

Other

The Central and Eastern Europe Fund, Inc. (CEE) announced that its board of directors determined not to proceed with the previously announced change of the benchmark index for the fund from the MSCI Emerging Markets Eastern Europe Index to a custom blend of the MSCI Germany Index (24% weight), the MSCI Austria Index (4% weight), MSCI Switzerland Index (12% weight), and the MSCI Emerging Markets Eastern Europe Index (60% weight), contingent on stockholder approval of the removal of the fund's policy to concentrate its investments in the energy sector. Accordingly, the fund will retain the MSCI Emerging Markets Eastern Europe Index as the benchmark index for the fund. The board of directors determined that it would continue to recommend stockholder approval at the fund's annual meeting of stockholders of the proposal to change the fund's concentration policy.

Virtus AllianzGI Artificial Intelligence & Technology Opportunities Fund (AIO), Virtus AllianzGI Convertible & Income 2024 Target Term Fund (CBH), Virtus AllianzGI Convertible & Income Fund (NCV), Virtus AllianzGI Convertible & Income Fund II (NCZ), Virtus AllianzGI Diversified Income & Convertible Fund (ACV), Virtus AllianzGI Equity & Convertible Income Fund (NIE), and Virtus Dividend, Interest & Premium Strategy Fund (NFJ) have been informed by Allianz Global Investors U.S. LLC, the subadvisor to each fund, that AllianzGI will no longer act as a subadvisor to the funds after a transition period of up to four months. Consequently, in the coming weeks, the board of each fund will consider possible options and alternatives, including a potential proposal to fund shareholders to approve a new subadvisor. On May 17, 2022, AllianzGI resolved certain government charges about matters unrelated to the funds with the U.S. Securities and Exchange Commission and Department of Justice. As a result of the settlement, AllianzGI is not permitted to manage U.S. registered open-end and closed-end funds. Concurrently, AllianzGI announced its intention to enter into an agreement with Voya Investment Management to transfer the investment teams who currently manage the funds to Voya. Under the terms of its settlement, AllianzGI will bear all expenses associated with the transition of these funds, including expenses associated with obtaining necessary shareholder approvals.

© Refinitiv 2022. All Rights Reserved. Refinitiv Lipper FundMarket Insight Reports are for informational purposes only, and do not constitute investment advice or an offer to sell or the solicitation of an offer to buy any security of any entity in any jurisdiction. No guarantee is made that the information in this report is accurate or complete and no warranties are made with regard to the results to be obtained from its use. In addition, Lipper will not be liable for any loss or damage resulting from information obtained from Refinitiv Lipper or any of its affiliates.

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

