

Nuveen Municipal High Income Opportunity Fund (NMZ)

Marketing communication | 2Q 2025 | As of 30 Jun 2025

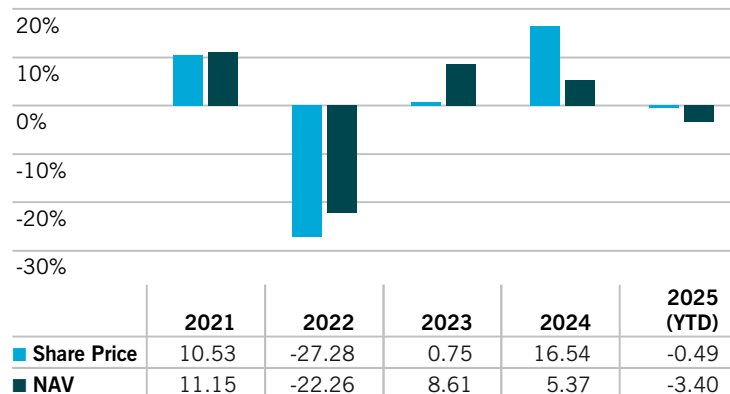
Effective 09 May 2025, Steve Hlavin joined Dan Close and Stephen Candido as a portfolio manager of the Fund. This update did not impact the overall investment strategy.

Fund description

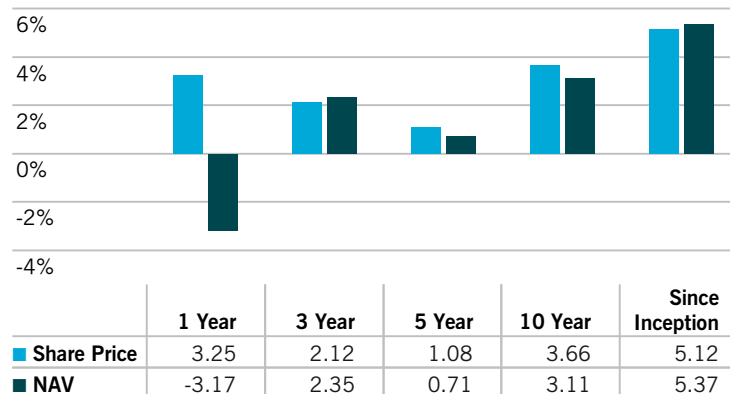
The Fund's primary investment objective is to provide high current income exempt from regular federal income tax. Its secondary investment objective is to seek attractive total return consistent with its primary objective.

The Fund invests in municipal securities that are exempt from federal income taxes; the Fund uses leverage. By investment policy, up to 75% of its managed assets may be invested in municipal securities rated, at the time of investment, Baa/BBB or lower by at least one nationally recognized statistical rating organization including below-investment grade securities, or unrated securities judged by the manager to be of comparable quality. No more than 10% of the Fund's managed assets may be invested in municipal securities rated below B3/B-, or that are unrated but judged by the manager to be of comparable quality.

Calendar Year Returns (%)



Average Annualized Total Returns (%)



Performance data shown represents past performance and does not predict or guarantee future results. Current performance may be higher or lower than the data shown. NAV returns are net of fund expenses, and assume reinvestment of distributions.

Capital Structure¹

Total Managed Assets	\$1,541,064,748
Total Investment Exposure	\$2,007,553,748

Common Shares²

Shares Outstanding	115,101,107
Average Daily Volume (in shares)	258,185
Total Regulatory Leverage Percent	23.17%
Effective Leverage Percent	41.02%
Average Cost of Leverage	3.29%

Fund Characteristics^{3,4}

Number of Holdings	876
Percent Portfolio Pre-refunded	1.81%
Percent Portfolio Income Subject to AMT (YTD annualized as of 5/31/2025)	16.34%
Average Coupon	4.38%
% of Portfolio Allocated to Zero Coupon Bonds	8.60%
Avg. Coupon not including Zero Coupon Bonds	6.31%
Leverage-Adjusted Effective Duration	17.51
Effective Maturity (years)	22.21
Average Bond Price as a % of Par	\$74.27

Annual Expense Ratios (%)

	Common Shares	Total Fund
Management Fees	1.04%	0.67%
Other Expenses	0.08%	0.06%
Subtotal	1.12%	0.73%
Interest Expense from Leverage	1.19%	0.93%
Total	2.31%	1.66%

See the Fund's Annual Report for full information on expenses.

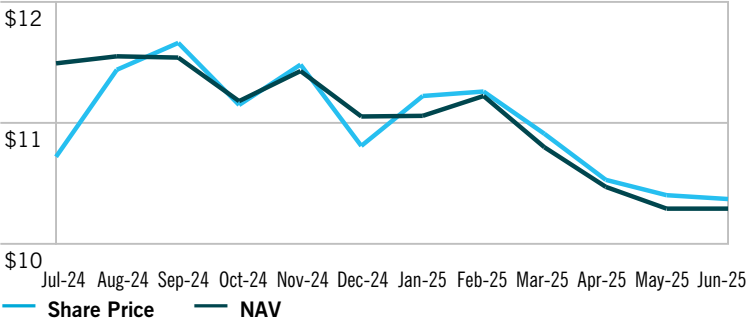
- 1 Total Investment Exposure is the total of the Fund's managed assets plus any additional economic exposure the Fund has due to its investments in certain securities.
- 2 Effective leverage is the Fund's effective economic leverage, and includes both regulatory leverage and the leverage effects of certain derivative investments in the Fund's portfolio that increase the Fund's investment exposure. Regulatory leverage consists of preferred shares issued by or borrowings of a fund. Both of these are part of a fund's capital structure. Regulatory leverage is subject to asset coverage limits set in the Investment Company Act of 1940. For more information, see Understanding Leverage on www.nuveen.com/cef.
- 3 All characteristics are asset-weighted using the current market value of investments held in the portfolio as well as the full amount and exposure of bonds held in a tender option bond (TOB) trust, even though the fund owns only the residual inverse floater in its portfolio. Holdings and ratings are subject to change. Totals may not add up to 100% due to rounding.
- 4 Debt characteristics (duration, maturity, bond price) are relative to the percentage of the portfolio invested in debt securities.

Nuveen Municipal High Income Opportunity Fund (NMZ)

2Q 2025 | As of 30 Jun 2025

Share Price and NAV History (\$)

Data reflects performance over the previous 12 months



Past performance is no guarantee of future results.

Portfolio Management

Nuveen Asset Management, LLC is the subadviser to the Fund and an affiliate of Nuveen, LLC.

Credit Quality (%)³

U.S. Guaranteed	2.2%
AAA	1.4%
AA	9.4%
A	17.6%
BBB	11.6%
BB	5.1%
B	2.5%
CCC	0.8%
D	0.0%
Not Rated	49.5%

Ratings shown are the lowest rating given by one of the following national rating agencies: S&P, Moody's or Fitch. Credit ratings are subject to change. AAA, AA, A, and BBB are investment grade ratings; BB, B, CCC/CC/C and D are below-investment grade ratings. Holdings designated NR are not rated by these national rating agencies.

Call Exposure (%)⁴

Next 12 Months	17.2%
13-24 Months	9.3%
25-36 Months	14.4%
37-48 Months	8.7%
49-60 Months	9.1%

Key Information Regarding Distributions^{1, 2}

Current Distribution (Monthly)	\$0.0655
Average Earnings/Share	\$0.0480
Average Earnings/Distribution Ratio	73.22%
Average UNII Per Share	-\$0.1193
Distribution Rate on NAV	7.64%
Distribution Rate on Market Price	7.58%

Total Distributions Paid Per Share

YTD (Declared)	\$0.3930
Inception to Date (Declared)	\$18.8754

Distributions are currently estimated to include the following amounts from sources other than net investment income: 0% capital gains and 21% return of capital. If a distribution is estimated to include anything other than net investment income, the Fund provides a Section 19(a) notice of the best estimate of its distribution sources at that time which may be viewed at [nuveen.com/CEFDistributions](https://www.nuveen.com/CEFDistributions) or within the Fund's literature section under 19(a) notices. These estimates may not match the final tax characterization (for the full year's distributions) contained in shareholders' 1099-DIV forms after the end of the year. The distribution rate should not be confused with yield or performance.

Top 5 Holdings

	% of Portfolio
Puerto Rico Sales Tax Financing Corp Sales Tax Revenue	2.8%
New Jersey Transportation Trust Fund Authority	1.7%
Net Receivable For Sale Of Vistra Vision Class B Units	1.7%
Iowa Finance Authority	1.3%
Public Finance Authority	1.3%

Holdings may vary and are subject to change without notice.

Top 5 Sectors³

	% of Portfolio
Tax Obligation/Limited	32.4%
Transportation	18.1%
Education and Civic Organizations	10.2%
Health Care	10.1%
Tax Obligation/General	5.4%

Important information on risk

Investing in closed-end funds involves risk; principal loss is possible. There is no guarantee the Fund's investment objectives will be achieved. Closed-end fund shares may frequently trade at a discount or premium to their net asset value. **Debt or fixed income securities** such as those held by the Fund, are subject to market risk, credit risk, interest rate risk, derivatives risk, liquidity risk, and income risk. As interest rates rise, bond prices fall. **Lower credit debt** securities may be more likely to fail to make timely interest or principal payments. **Leverage** increases return volatility and magnifies the Fund's potential return and its risks; there is no guarantee a fund's leverage strategy will be successful. These and other risk considerations such as **inverse floater risk** and **tax risk** are described in more detail on the Fund's web page at www.nuveen.com/NMZ.

1 **Average earnings per share** and **average undistributed net investment income (UNII) per share** are estimates, using an average of the last three months, except for preferred securities funds, mortgage-backed securities funds and floating rate funds, which use an average of the last six months.

2 **Distribution Rate** at market price and NAV is calculated by annualizing the most recent declared regular distribution and dividing by the fund's market price or NAV, respectively. Special distributions, including special capital gains distributions, are not included in the calculation.

3 All characteristics are asset-weighted using the current market value of investments held in the portfolio as well as the full amount and exposure of bonds held in a tender option bond (TOB) trust, even though the fund

owns only the residual inverse floater in its portfolio. Holdings and ratings are subject to change. Totals may not add up to 100% due to rounding.

4 For the percentage of the portfolio in debt, preferred and other hybrid securities, including CoCos (if any). Percentages reflect the percentage of the Fund's investment exposure callable in the timeframe relative to the "as of" date shown. The "Next 12 months" figure (if shown) includes investments that are currently callable, as well as callable in the next 12 months. Securities subject to call may not be called.

Glossary

Average Coupon is the average coupon rate, or amount of interest paid as expressed by a percentage, of all fixed-income investments in the Fund's portfolio. **Effective Maturity** is the weighted average of the effective maturity dates of the fixed-income securities in the Fund's holdings. A bond's effective maturity takes into account the possibility that it may be called by the issuer before its stated maturity date. In this case, the bond trades as though it had a shorter maturity than its stated maturity. **Leverage Adjusted Effective Duration** is the Fund's average effective duration adjusted for the impact of the Fund's utilization of leverage in the form of senior securities as defined by Section 18 of the Investment Company Act of 1940. Funds that utilize leverage in the form of senior securities will have a leverage-adjusted effective duration that is longer than its baseline effective duration.

Nuveen Securities, LLC, member FINRA and SIPC.