

Exchange Traded Funds

Own HY munis for more yield, less default

ETF Research

The most attractive yield in the bond market

A delayed timeline for Fed cuts makes high yield municipal bonds more attractive. HY munis offer 8-9% yields on a tax-adjusted basis, near the highest levels since 2017, and 60bps more than high yield corporate bonds (Exhibit 3). HY corporate bond coupon payments are also taxable at ordinary income rates; returns have trailed HY munis by >150% since December 1995 net of taxes despite higher credit risk (Exhibit 2).

BB munis default like investment grade corporates

Investors can harvest high muni yields for reasonable default risk. BB-rated muni bonds account for about 75% of the benchmark HY muni index today, up from 25% in 2015. BB-rated munis have averaged 3.4% 10-year default rates since 1970, equivalent to BBB-rated corporate bonds (Exhibit 4). High yields and reasonable credit risk make HY munis a cornerstone in our [Dynamic Prudent Yield strategy](#).

HY muni bonds are an under-owned duration asset

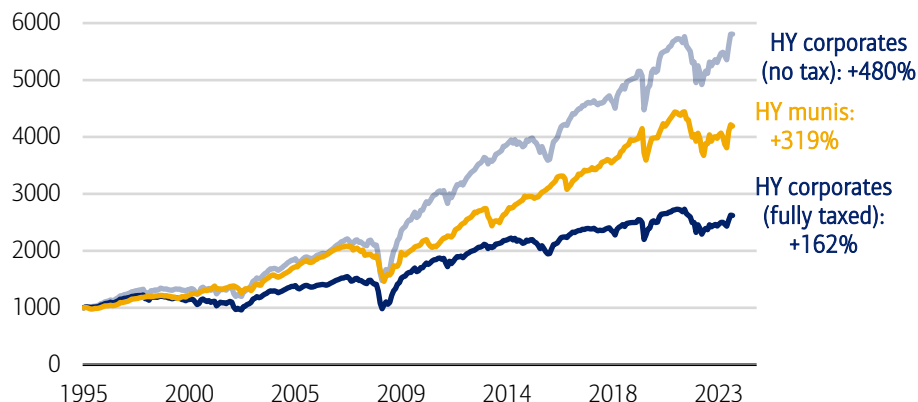
Investors have registered \$195mn of outflows from HY muni ETFs over the past year while piling \$3,130mn into long duration US Treasury bond funds (Exhibit 5). In our view, Treasury bond ETFs have too much inflation risk and will continue to underperform Prudent Yield credit assets. HY muni ETFs are an attractive option for investors looking to extend duration without sacrificing yield or credit quality.

HYMB, HYD, & FMHI are top-rated HY muni picks

Our top-rated muni bond ETFs (HYMB, HYD, FMHI) have the most attractive credit exposures in our coverage with above average yields (Exhibit 1). Exhibit 6 has updated ratings for the 15 municipal bond ETFs in our coverage.

Exhibit 2: High yield munis have outperformed corporates by >150% since Dec '95 net of taxes

Hypothetical growth of \$1000 in HY corporates gross and net of taxes & HY munis



Source: BofA Global Research, Bloomberg, ICE Data Services, LLC. Note: HY corporates = HOAO; HY munis = LMEHTR. "Fully taxed" assumes HY corporate coupon payments are taxed at 37% top ordinary rate and HY munis coupons are not taxed.

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15 February 2024

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United States
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Exhibit 1: Top muni ETF picks

Ticker, rating, tax adjusted yield for top funds

Ticker	Rating	Tax adj. yield	HY or IG
JMST	1-FV	6.3%	IG
MUB	1-FV	5.5%	IG
HYMB	1-FV	8.7%	HY
HYD	1-FV	8.5%	HY
SMMU	1-FV	4.5%	IG
FMHI	1-FV	6.3%	HY

Source: BofA Global Research, Bloomberg; Note: YAS yield. Dividend indicated yield used where not available. Tax rate = 37%.

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HY munis are quintessential Prudent Yield

Tax-adjusted muni yields are hard to beat

The spread between high yield muni bond and high yield corporate bond yields is well above the 5yr average (Exhibit 3).

At 8-9% on a tax-adjusted basis, HY muni ETF yields also look attractive relative to Prudent Yield peers (leveraged loans: 8%; “fallen angel” corporates: 7.5%; EM debt: 7.4%; preferreds: 6.5%; convertibles: 2%).

Our municipal bond strategists think a [delayed Fed cutting cycle](#) and [lower bond volatility](#) give investors a unique opportunity to own HY munis before inflation normalizes & policy rates fall.

Taxes can massively impact returns

Corporate bond coupon payments are usually taxed as ordinary income whether they’re reinvested or not. Most muni bond coupons are exempt from federal, and sometimes state, taxes.

A HY corporate bond investor in the top tax bracket could have seen returns lag HY munis by 150% over the past 30 years after factoring tax payments in (Exhibit 2).

HY munis have similar credit risk to IG corporates

The benchmark HY muni index has become higher quality over the past decade. BB-rated holdings account for about 75% of the weight today, up from just 25% in 2015 (see [Municipals Weekly: Where muni rates are headed in 2024](#)).

Since 1970, BB-rated muni bonds have averaged a 3.4% cumulative default rate over a 10-year period, nearly identical to BBB-rated (investment grade) corporates (Exhibit 4).

Investors can harvest some of the highest muni yields in recent history while keeping credit risk in check. State and local government balance sheets remain strong and default rates through 2024 are expected to be low.

The best yield & credit risk duration can buy

Our top-rated HY muni funds offer double the yields of 7-10yr US Treasuries with a similar 8.5-year duration (Exhibit 6).

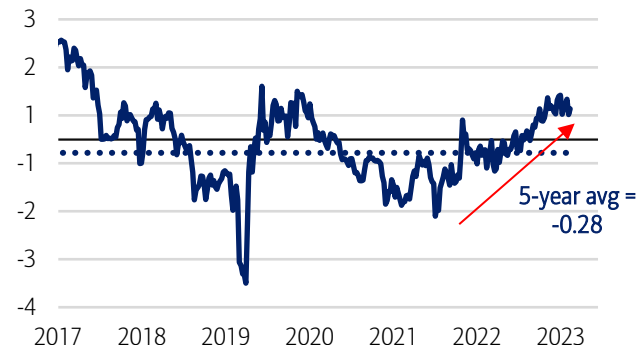
Our Prudent Yield approach to fixed income portfolios typically favors lower duration (interest rate / inflation risk) and higher credit risk. But increasing uncertainty around the timing of Fed cuts and the path of inflation means investors should demand higher yields for taking more duration risk.

HY munis are about 17% of our [Dynamic Prudent Yield strategy for February 2024](#) (see report).

Most investors have shunned HY muni funds in favor of long-term Treasury bonds (Exhibit 5). Funds like TLT have recorded \$3,130mn of inflows since January 2023 despite losing 3.5%. HY muni funds like HYD have seen \$195mn in outflows despite outperforming Treasuries by 5-9% over the same timeframe.

Exhibit 3: Muni tax-adjusted yield is near 5-year relative highs

High yield muni minus high yield corporate YTW, %

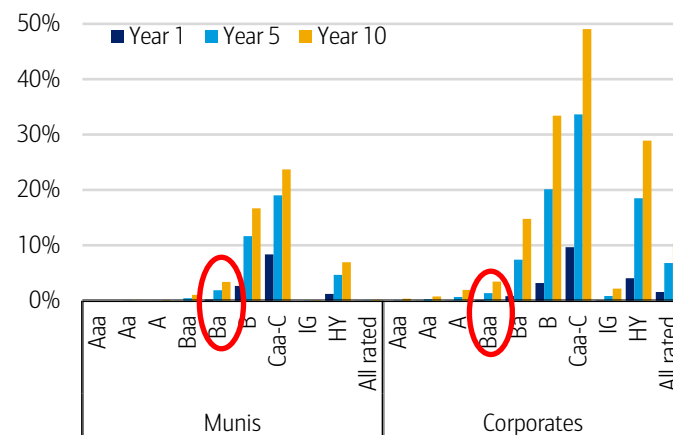


Source: BofA Global Research, Bloomberg, ICE Data Services, LLC. Note: HY muni YTW assumes 37% top tax bracket.

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Exhibit 4: High yield munis have similar default risk to IG corporates

Muni vs corporate cumulative default rates, by rating (1970 to 2021)

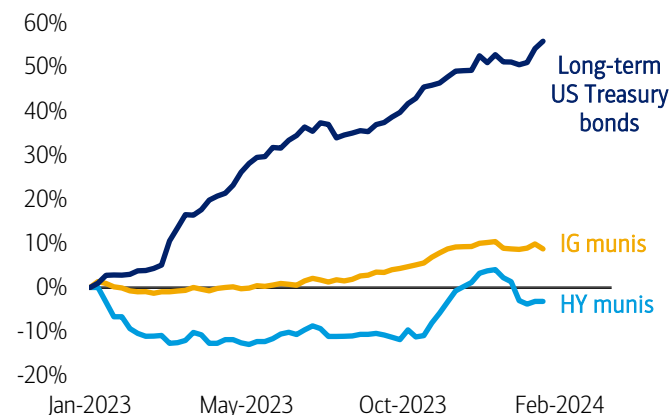


Source: Moody's Investors Service

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Exhibit 5: Investors are betting on the wrong long duration asset

Flows as a % of ETF AUM since January 2023



Source: BofA Global Research, Bloomberg

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Municipal bond ETF ratings

Ratings for municipal bond ETFs stay the same for our 2024 update. Differences in ordering are driven by 1.) changes in price momentum, and 2.) shifts in fund allocations towards higher quality bonds.

Exhibit 6: Municipal bond ETFs – Ratings/Scores/Factors

Summary of Covered ETF efficiency, technical, and fundamental characteristics

Ticker Name	Rating	Total Score	Efficiency			Technical		Fundamental			Market Values		
			Expense ratio	Bid/Ask spreads	Daily value traded (\$mn)	Price momentum	Sortino Ratio (4Y)	Average 12m dividend yield (4Y)	Risk adjusted 12m dividend yield (4Y)	Credit Rating - Highest Allocation	Tax Adjusted 12m Yield	Duration	Fund Style
JMST JPMorgan Ultra-Short Muni Income ETF	1-FV	79	0.18%	0.02%	20	0.0%	0.14	1.4%	0.14	AA (33%)	6.3%	0.5	Active
MUB iShares National Muni Bond ETF	1-FV	56	0.05%	0.01%	482	0.9%	0.01	2.3%	0.04	AA (65%)	5.5%	6.2	Passive
HYMB SPDR Nuveen Bloomberg HY Muni Bond ETF	1-FV	54	0.35%	0.04%	37	1.7%	0.01	4.0%	0.03	BBB (22%)	8.7%	9.0	Passive
HYD VanEck High Yield Muni ETF	1-FV	53	0.32%	0.10%	54	0.9%	0.00	4.2%	0.03	BBB (25%)	8.5%	8.3	Passive
FMHI First Trust Muni High Income ETF	1-FV	50	0.70%	0.18%	5	1.6%	0.01	3.6%	0.06	BB (17%)	6.3%	8.1	Active
SMMU PIMCO Short Term Muni Bond Active ETF	1-FV	50	0.35%	0.17%	3	0.4%	0.06	1.6%	0.08	AA (34%)	4.5%	2.0	Active
VTEB Vanguard Tax-Exempt Bond Index ETF	2-FV	49	0.05%	0.02%	283	0.9%	0.01	2.3%	0.04	AA (64%)	4.8%	6.4	Passive
MUNI PIMCO Intermediate Muni Bond Active ETF	2-FV	46	0.35%	0.04%	13	0.9%	0.02	2.3%	0.06	AA (42%)	5.8%	5.4	Active
SHYD VanEck Short High Yield Muni ETF	2-FV	41	0.35%	0.30%	3	0.3%	0.00	3.0%	0.03	BB (19%)	7.7%	3.7	Passive
FMB First Trust Managed Muni ETF	2-FV	41	0.65%	0.04%	12	1.0%	0.00	2.6%	0.06	AA (36%)	5.0%	6.0	Active
XMPT VanEck CEF Muni Income ETF	3-FV	40	1.81%	0.17%	1	3.2%	-0.02	4.5%	0.04	IG Broad (94%)	7.1%	11.4	Passive
SUB iShares Short-Term National Muni Bond ETF	3-FV	39	0.07%	0.02%	64	0.3%	0.02	1.2%	0.04	AA (56%)	4.4%	1.8	Passive
TFI SPDR Nuveen Bloomberg Muni Bond ETF	3-FV	37	0.23%	0.03%	37	1.1%	-0.01	2.1%	0.04	AA (73%)	5.2%	7.5	Passive
ITM VanEck Intermediate Muni ETF	3-FV	36	0.24%	0.03%	22	0.6%	0.00	2.1%	0.03	AA (57%)	5.3%	5.6	Passive
SHM SPDR Nuveen Bloomberg Short Term MuniETF	3-FV	30	0.20%	0.04%	21	0.4%	0.01	1.0%	0.03	AA (69%)	4.0%	2.6	Passive
Average			0.4%	0.1%	74	0.98%	0.02	2.7%	0.05		5.2%	6	

Source: BofA Global Research, Bloomberg. Total score out of 100 possible points. Note: Tax adjusted 12m yield used 37% tax rate. YAS Yield used unless unavailable. If unavailable, dividend indicated yield used.

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High yield:

HY municipal bonds have outperformed IG municipal bonds by >50% since 1999. While more volatile, HY municipal bond ETFs have larger dividend distributions and longer durations on average.

Unlike HY corporate bond ETFs, HY municipal bond ETFs still have some weight in investment grade muni bonds, as most municipal bonds are investment grade. We evaluate on net HY exposure (HY exposure - IG exposure).

Top rated funds:

- **HYMB (1-FV)**, the SPDR Nuveen Bloomberg High Yield Municipal Bond ETF, is our highest ranking HY muni ETF. HYMB has the longest duration among high yield funds, contributing to its strong price momentum. Its expense ratio is only 0.03% higher than HYD while offering higher liquidity and better risk adjusted returns.
- **HYD (1-FV)**, the VanEck High Yield Muni ETF, has the second highest tax-adjusted yield (8.5%) while offering a below average expense ratio. Currently the fund has its highest allocation to BBB-rated bonds and an 8.3-year duration. HYD's Sortino ratio and risk adjusted yield is in line with other HY muni funds.
- **FMHI (1-FV)**, the First Trust Municipal High Income ETF, has the lowest yield among HY muni funds (6.3%). For investors concerned with excess volatility, the fund's risk adjusted yield (0.06) is higher than average. As an active fund, it has a higher expense ratio (70bps) but has above-average price momentum (1.6%).

Other funds:

- **SHYD (2-FV)**, the VanEck Short High Yield Muni ETF, has the highest bid-ask spread in the group (0.30%) and a lower average 12-month dividend yield than other HY funds.

Investment grade:

Investment grade municipal bond ETFs have strong performance during recessions relative to HY municipal bond ETFs. A flight to quality typically results in IG outperformance relative to HY.

Top rated funds:

- **JMST (1-FV)**, the JPMorgan Ultra-Short Municipal Income ETF, is our top-rated fund. The fund holds ultra-short-term securities, making it less volatile. As a result, the fund has best risk-adjusted dividend yield (0.14) and Sortino ratio (0.14). JMST is an active fund and has a higher expense ratio than passive short-term funds.
- **MUB (1-FV)**, the iShares National Muni Bond ETF, is the most liquid municipal bond ETF. It is one of the cheapest funds with an expense ratio of 7bps. MUB's average dividend yield is in line with average for IG municipal bond ETFs.
- **SMMU (1-FV)**, the PIMCO Short Term Municipal Bond Active Exchange-Traded Fund, is like JTSM but has a higher expense ratio (35bps). Relative to other short-term muni bond ETFs, the fund has a slightly higher average 12-month dividend yield.

Other funds:

- **VTEB (2-FV)**, the Vanguard Tax-Exempt Bond Index ETF, is the second most liquid municipal bond ETF as well as the fund with the lowest expense ratio (5bps). Otherwise, the fund is ranks in line with average technical and fundamental scores.
- **MUNI (2-FV)**, the PIMCO Intermediate Municipal Bond Active ETF, has a slightly above-average Sortino ratio (0.02) and risk-adjusted yield (0.06) but falls short on average 12-month dividend yield (2.2). MUNI is an active fund and has a higher expense ratio than similar passive funds (35bps).
- **FMB (2-FV)**, the First Trust Managed Municipal ETF, has a slightly above-average expense ratio (50bps) but is otherwise average across technical and efficiency factors.
- **XMPT (3-FV)**, the VanEck CEF Muni Income ETF, is the most expensive fund for the group. It has the longest duration and worst Sortino ratio (-0.02). Recently, its long duration has boosted its price momentum to be the best among muni funds (3.3%). The fund holds CEFs and focuses on generating income. As a result, it has the best 12-month average dividend yield (4.5%).
- **SUB (3-FV)**, the iShares Short-Term National Muni Bond ETF, has a low expense ratio (7bps) and is the third most liquid fund. Compared to other short-term funds, SUB does not see the same benefits in risk-adjusted measures. The fund also has the second-lowest average dividend yield (1.2%).
- **TFI (3-FV)**, the SPDR Nuveen Bloomberg Municipal Bond ETF, is a passive fund with below-average expense ratio (23bps) but ranks poorly in risk adjusted returns (-0.01). TFI has a longer duration than similar funds, such as MUB (7.5).
- **ITM (3-FV)**, the VanEck Intermediate Muni ETF, shares many characteristics with TFI. Relative to TFI, ITM has a lower risk-adjusted 12-month dividend yield (0.03) and lower daily value traded volume (\$21mn).
- **SHM (3-FV)**, the SPDR Nuveen Bloomberg Short Term Municipal Bond ETF, has the lowest tax-adjusted yield (2.3%) and 12-month average yield (1.0%). Like SUB, it does not have the same risk-adjusted benefits relative to ultra-short funds, such as JMST, causing it to rank poorly in the model.

Exhibit 7: ETFs mentioned

Ticker, name, price, rating

Ticker	Name	Price	Rating
JMST	JPMorgan Ultra-Short Municipal Income ETF	50.69	1-FV
MUB	iShares National Muni Bond ETF	107.64	1-FV
HYMB	SPDR Nuveen Bloomberg High Yield Municipal Bond ETF	25.38	1-FV
HYD	VanEck High Yield Muni ETF	51.29	1-FV
SMMU	PIMCO Short Term Municipal Bond Active Exchange-Traded Fund	49.90	1-FV
FMHI	First Trust Municipal High Income ETF	47.79	1-FV
VTEB	Vanguard Tax-Exempt Bond Index ETF	50.63	2-FV
MUNI	PIMCO Intermediate Municipal Bond Active Exchange-Traded Fund	52.40	2-FV
SHYD	VanEck Short High Yield Muni ETF	22.07	2-FV
FMB	First Trust Managed Municipal ETF	51.36	2-FV
XMPT	VanEck CEF Muni Income ETF	21.45	3-FV
SUB	iShares Short-Term National Muni Bond ETF	104.90	3-FV
TFI	SPDR Nuveen Bloomberg Municipal Bond ETF	46.60	3-FV
ITM	VanEck Intermediate Muni ETF	46.37	3-FV
SHM	SPDR Nuveen Bloomberg Short Term Municipal Bond ETF	47.62	3-FV

Source: BofA Global Research, Bloomberg

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Buy	80	19.61%	Buy	53	66.25%
Hold	317	77.70%	Hold	241	76.03%
Sell	11	2.70%	Sell	7	63.64%

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