

Investing in America | 2025

It's not what you earn, it's what you keep.®

Municipal bonds can help build communities and investment portfolios

Municipal bonds help build bridges, schools, hospitals, roads and other structures that improve our communities. In addition to enhancing our quality of life, many investors find municipal bond investments to be a valuable addition to their portfolios.

Investing in municipal bonds supports a public purpose

Municipal bonds are debt instruments issued by states, cities, counties, special purpose districts and nonprofit organizations, typically to finance capital improvements, meet cash needs or refinance existing debt. Through municipal bonds, investors lend money to these entities to fund infrastructure projects and support essential services. Owning a municipal bond is similar to owning an IOU. The investor is owed the principal amount of the loan, plus interest, over a given time period. It is important to remember that there are no guarantees of payment.

MILESTONES



OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES.

NOT FDIC INSURED | NO BANK GUARANTEE | MAY LOSE VALUE

Leading the way in municipal bonds

Since 1898, Nuveen has been financing essential municipal bond projects and building lasting value for investors. This municipal bond heritage is reflected in the way portfolios are managed today.



A rich heritage spanning 125+ years remains focused on relative value, principal growth and tax-aware investing.





As one of the industry's largest credit research teams, 25 analysts averaging 18 years of experience are dedicated to municipal investing.





Market power and institutional pricing provide an advantage when evaluating and purchasing bonds.

MILESTONES



The municipal bond market has changed

Investing in municipal bonds has become more complicated in recent years. Understanding the market dynamics may help investors evaluate the need for actively managed municipal bond solutions.



Municipal market changes underscore the need for credit research

Economic uncertainty and changes in credit fundamentals can cause movements in credit spreads, which are the difference between yields of lower- and higher-quality bonds. When spreads shift, opportunities may arise to capture additional yield. Investment managers conduct independent research to manage credit risk.



Bonds are not created equal, even when their ratings are the same

Because the rating scales have changed, bonds with the same credit rating may show a wide yield range, making it difficult to assess each bond. Investment managers do extensive research to determine if a higher-yielding bond is compensating an investor adequately for the risk.



Elevated municipal bond supply is continuing

Municipal bond supply levels are expected to remain robust as additional infrastructure and capital improvement plans come to the market. Going forward, abundant coupons, calls and maturities signal strong reinvestment demand.

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Individual investors are at a pricing disadvantage

There is no central location like an exchange to trade municipal bonds, which can make it challenging for retail investors to obtain the best prices. Buying and selling bonds is generally more expensive for individual investors who trade in smaller blocks of bonds than for institutional investors that buy and sell in bulk.

Capture the tax-exempt advantage with municipal bonds

If you are seeking tax relief, the interest earned on municipal bonds is exempt from regular federal taxation. Additionally, bonds issued from entities within a certain state are often exempt from taxation in that state. Occasionally, bonds issued within a certain municipality or region are exempt from taxes in that municipality, possibly providing triple tax exemption — federal, state and local.

The tax-exempt advantage

Municipal bonds can be advantageous, particularly if you are in a higher tax bracket. To make a fair comparison between a tax-exempt investment like a municipal bond and a taxable investment, you need to adjust the tax-exempt investment's yield to account for money you can save in income taxes, generally at federal and state levels.

TAXABLE-EQUIVALENT YIELDS

What a taxable investment needs to yield to equal the yield of a tax-exempt investment

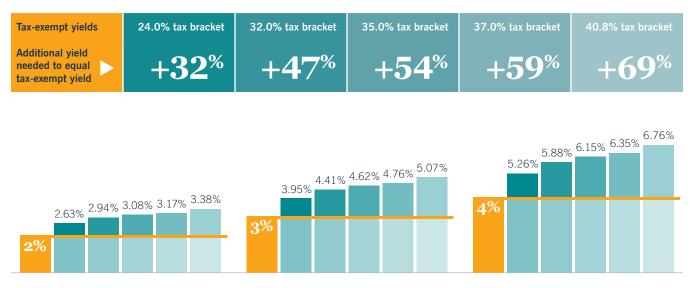


Chart does not represent the yield or past performance of any Nuveen fund. For fund performance visit nuveen.com.

Tax-exempt yields are for illustration only and do not take into account the effects of the federal alternative minimum tax (AMT) or capital gains taxes.

Diversify with municipal bonds to help reduce risk in a portfolio

Two is greater than one

Since different asset classes involve different types of risk, diversifying your portfolio may help reduce overall portfolio volatility.² A balance of equities and municipal bonds has historically lowered the overall investment risk (measured by standard deviation) and provided similar after-tax returns compared with an all-equity portfolio.

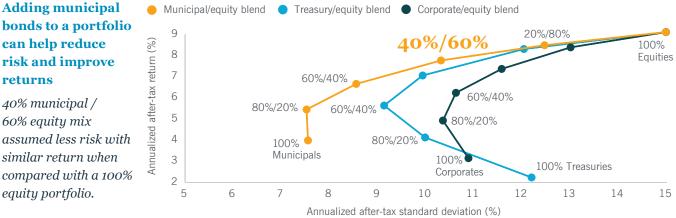
Over the 20-year period from 2005–2024, a portfolio of municipal bonds and equities provided comparable after-tax returns with similar or less risk than equivalent Treasury or corporate blends.

COMBINING ASSET CLASSES CAN HELP BALANCE RISK AND RETURN

Sample blended portfolios, 2005-2024

Adding municipal bonds to a portfolio can help reduce risk and improve returns 40% municipal / 60% equity mix assumed less risk with similar return when

equity portfolio.



2 Diversification does not assure a profit or protect against loss.

Chart does not represent the past performance of any Nuveen fund. For fund performance visit nuveen.com.

Performance data shown represents past performance and does not predict or guarantee future results. Data source: Nuveen, 01 Jan 2005 - 31 Dec 2024. Conclusion based on the following portfolio assumptions and representative indexes: Samples using varying percentages of municipal bonds and equities, in each case totaling 100%, were constructed, and the investment results and volatility determined for every year from 2005 through 2024. Index data source: Bloomberg, L.P. Municipals: Bloomberg Municipal Long Index, Treasuries: Bloomberg U.S. Treasury Long Index, Corporates: Bloomberg U.S. Long Credit Index; Equities: S&P 500® Index.

Different benchmarks, economic periods, methodologies and market conditions will produce different results. There is no assurance that any asset class or index will provide positive performance over time. See page 11 for important information about the study. Two is Greater than One. It is not possible to invest directly in an index.

Dampen volatility by enhancing portfolio diversification

Municipal bonds can act as a diversifier

Municipal bond returns over the last 20 years have shown relatively low correlations with returns of select fixed income and equities. With this in mind, adding municipal bonds to an overall portfolio may help diversify and reduce the return volatility of the portfolio. It is important to remember that correlation patterns can change during periods of market corrections.

MUNICIPAL BOND RETURNS HAVE NOT BEEN CLOSELY CORRELATED WITH OTHER ASSET CLASSES

Correlation to municipal bonds (01 Jan 2005-31 Dec 2024)



Selecting investments that are not highly correlated may help smooth out portfolio volatility

Correlation shows how closely investments move in relation to each other. Allocating to municipal bonds in a portfolio that includes traditional income and equities can diversify the portfolio to reduce risk and act as a hedge against return volatility.

Diversification does not assure a profit or protect against loss.

Chart does not represent the past performance of any Nuveen fund. For fund performance visit nuveen.com.

Performance data shown represents past performance and does not predict or guarantee future results. Data source: Morningstar Direct, 01 Jan 2005 – 31 Dec 2024. Representative indexes: Municipal bonds: Bloomberg U.S. Municipal Bond Index; Investment grade corporate bonds: Bloomberg U.S. Corporate Bond Index; Emerging markets debt: Bloomberg Emerging Markets USD Aggregate Index; Global bonds: Bloomberg Global Aggregate Corporate Index; Long U.S. Treasury: Bloomberg U.S. Treasury Long Index; Non-U.S. equities: MSCI EAFE Index; U.S. equities: S&P 500[®] Index. Different benchmarks, economic periods, methodologies and market conditions will produce different results. See page 11 for important disclosures regarding asset class related risks and definitions of each representative asset class. It is not possible to invest directly in an index.

How do different investment solutions compare?

	Mutual fund	Closed- end fund	Separately managed account	Exchange- traded fund	Interval fund
Actively managed ³	*	٠	٠	*	٠
Tax planning opportunities	0	0	٠	\bigcirc	\bigcirc
Portfolio holdings published to the public	•	•	0	•	٠
Low minimum investment requirement	•	•	0	•	٠
Exchange-traded with intra-day pricing ⁴	0	•	0	•	0
Opportunity for portfolio tailoring or customization	0	0	٠	0	0
Transparency of portfolio transactions	0	0	٠	0	0
Direct ownership of underlying securities	0	0	٠	0	0
Concentrated positions	0	0	٠	0	•
Can employ leverage	•	٠	0	0	•

MUNICIPAL BOND FUNDS MAY ALLOW INVESTORS TO:

Earn tax-exempt income

Realize attractive after-tax returns

Diversify an overall investment portfolio

Reduce overall portfolio volatility

* Exchange-traded funds and mutual funds can be either passively or actively managed.

3 Please review the prospectus or other current information provided by the fund or plan sponsor for details on management fees and other expenses.

Mutual funds, closed-end funds, separately managed accounts, exchange-traded funds and interval funds are different types of investment vehicles with different expense structures and different inflows/outflows and distribution requirements. Shares of exchange-traded funds are bought and sold at market price as opposed to net asset value. As a result, an investor may pay more than net asset value when buying and receive less than net asset value when selling. In addition, brokerage commissions will reduce returns. Fund shares are not individually redeemable directly with the Fund, but blocks of shares may be acquired from the Fund and tendered for redemption to the Fund by certain institutional investors in creation units. A closed-end fund's use of leverage creates the possibility of higher volatility for the fund's per share NAV, market price, distributions and returns. There is no assurance that a fund's leveraging strategy will be successful. Closed-end fund shistorical distribution sources have included net investment income, realized gains and return of capital. Closed-end fund shares may frequently trade at a discount or premium to their net asset value.

⁴ Closed-end funds bought during the initial public offering are purchased at the original/IPO NAV plus a sales charge. Closed-end funds frequently trade at a discount from net asset value. When sold, shares may be worth more or less than the purchase price or the net asset value. A closed-end fund's use of leverage creates the possibility of higher volatility for the fund's per share NAV, market price, distributions and returns.

What are the ways to invest in municipal bonds?

Nuveen offers national and state municipal bond portfolios for investors seeking tax-exempt income.

NATIONAL PORTFOLIOS

MUTUAL FUNDS

- All-American
- High Yield
- Intermediate Duration
- Limited Term
- Short Duration High Yield
- Short Term •

• Long-Term

Strategic Municipal Opportunities

CLOSED-END FUNDS

- AMT-Free Municipal Credit Income
- AMT-Free Municipal Value
- AMT-Free Quality Municipal Income
- **Dynamic Municipal Opportunities**
- Municipal Credit Income
- Municipal Credit Opportunities
- Municipal High Income Opportunity
- Municipal Income
- **Municipal Value**
- Quality Municipal Income
- Select Maturities Municipal
- Select Tax-Free Income Portfolio

INTERVAL FUND

• High Yield

SEPARATELY MANAGED ACCOUNTS

- AMT-Free
- Customized Portfolios
- Intermediate ESG
- Intermediate High-Quality
- Intermediate Term
- Ladder Portfolios
- Limited Maturity
- Long-Term
- **Municipal Total Return**

LIMITED PARTNERSHIPS

- Intermediate Term
- High Yield

- Portfolios are available in 25 states
- 11 state specific and 25 state preference separately managed accounts are offered

Access more information about investment vehicles and state availability at nuveen.com

Offerings listed are as of 31 Dec 2024.

Availability may change without notice. From time to time, we may close or reopen strategies. Certain strategies may not be available to certain investors, or may be available as other investment vehicles not listed. Not all products are available at all firms. Please check with your firm for availability.

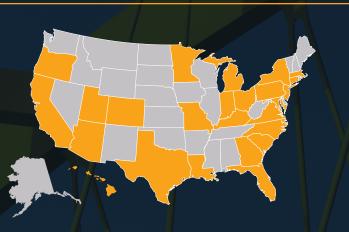
There is no guarantee that any of the strategies will achieve their stated objectives. There are risks inherent in any investment and these risks should be carefully considered before investing. Review the fees and expenses specific to each product as disclosed on nuveen.com.

Mutual funds, closed-end funds, separately managed accounts, exchanged-traded funds, interval funds, and limited partnerships are different types of investment vehicles with different expense structures and different inflows/outflows and distribution requirements. Income may be subject to state and local income taxes. Capital gains, if any, will be subject to capital gains tax.

High Yield

EXCHANGE-TRADED FUNDS

STATE PORTFOLIOS



Active management can add value

Nuveen believes five key differentiators are important to creating portfolio growth.

1

CREDIT RESEARCH

The experienced research team evaluates municipal bonds and sectors, seeking to find value in bonds that the general public may have overlooked.



INSTITUTIONAL ACCESS

Nuveen navigates the inefficient municipal bond market through established relationships with more than 100 national and regional dealers.



INSTITUTIONAL TRADE EXECUTION

A large presence in the market provides greater access to inventory to find bonds in appropriate sizes and at institutional prices.

4

TAX-AWARE INVESTING

The ability to trade at institutional prices allows the team to efficiently capture tax losses and use them to offset gains.



ACTIVE PORTFOLIO OVERSIGHT

By actively trading bonds, the team seeks to sell appreciated bonds, capture gains and purchase bonds that have the potential to enhance overall portfolio returns.

Important information

Important information about the study, Two Is Greater than One

You may request a free copy of the *Two is Greater than One* research study to learn more about the potential benefits of a diversified portfolio that includes municipal bonds.

All investment income generated by the portfolio is reinvested annually, along with the after-tax proceeds of an arbitrarily assumed 20% annualized turnover rate. The allocation between the two assets was allowed to roam within a 1% band around its target before rebalancing. No provision was made for investment fees or commissions. Investment income was taxed at the historically appropriate rate for an individual with \$100,000 in taxable income in year 2024 dollars; net capital gains taxes, if any, were deducted at the rate appropriate for the period. At the end of 2024 the portfolios were fully liquidated to recognize the existing tax liability. Different economic periods and different assumptions, such as tax rate, will have different results.

This study was based on historical data gathered from sources we consider to be reliable and consistent. The methodology applied and results produced by this study indicate past investment performance of market indices over the 01 Jan 2005–31 Dec 2024 time period exclusively and in no way should be considered representative of the past performance of any investment product or predictive of future investment expectations and performance for the municipal market or investment products. Investors should consult with their financial <u>professionals before making any tax or investment</u> decisions.

The various types of investments presented involve different types of risk. Equities can provide higher returns but also have greater volatility than municipal bonds. Municipal and corporate bonds include the individual credit risk of the municipal or corporate borrower and the general interest rate risk of lower bond prices due to rising interest rates. While Treasuries are backed by the full faith and credit of the U.S. Government as to the timely payment of principal and interest, these securities are also subject to interest rate risk.

Asset class related risks

Different types of asset investments have different types of risks, which may provide higher returns but also greater volatility. In general, equity securities tend to be more volatile than fixed income or hybrid securities. Foreign investments may involve exposure to additional risks such as currency fluctuation and political and economic instability. The value of, and income generated by, debt securities will decrease or increase based on changes in market interest rates. High yield corporate bonds are subject to liquidity risk and heightened credit risk. Government bonds are guaranteed as to the timely payment of principal and interest.

Glossary

Correlation is a statistical measure of how two securities move in relation to each other. Perfect positive correlation (a correlation co-efficient of + 1) implies that as one security moves the other security will move in lockstep, in the same direction. Alternatively, perfect negative correlation (a correlation co-efficient of -1) means that securities will move by an equal amount in the opposite direction. If the correlation is 0, the movements of the securities are said to have no correlation; their movements in relation to one another are completely random.

Taxable-equivalent yield is the yield an investor would have to realize on a fully taxable investment to equal the stated yield on a tax-exempt investment, at a specified assumed tax rate. It is calculated by dividing the tax-exempt yield by 1 minus the tax rate.

The **Bloomberg Emerging Markets USD Aggregate Index** is a flagship hard currency Emerging Markets debt benchmark that includes fixed and floating-rate U.S. dollar-denominated debt issued from sovereign, quasi-sovereign, and corporate EM issuers.

The **Bloomberg Global Aggregate Index** is a flagship measure of global investment grade debt from twenty-four local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.

The **Bloomberg Municipal Long Bond Index** is a subset of the Bloomberg Municipal Bond Index including maturities of 22 or more years.

The **Bloomberg U.S. Corporate Bond Index** measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD denominated securities publicly issued by U.S. and non-U.S. industrial, utility and financial issuers.

The **Bloomberg U.S. Long Credit Index** is a subset of the Bloomberg U.S. Credit Index which measures the investment grade, U.S. dollar-denominated, fixed-rate, taxable corporate and government-related bond markets.

The Bloomberg U.S. Municipal Bond Index covers the USD-denominated long-term taxexempt bond market.

The **Bloomberg U.S. Treasury Long Index** includes securities in the long maturity range of the U.S. Treasury Index. Securities must have a maturity of 10 years or more.

The MSCI EAFE Index (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the U.S. & Canada.

The **S&P 500® Index** is widely regarded as the best single gauge of large-cap U.S. equities. The index includes 500 leading companies and captures approximately 80% coverage of available market capitalization.



For more information, contact your financial professional and visit nuveen.com.

Important information on risk

Investing involves risk; principal loss is possible. Debt or fixed income securities are subject to market risk, credit risk, interest rate risk, call risk, tax risk, political and economic risk, and income risk. As interest rates rise, bond prices fall. Credit risk refers to an issuers ability to make interest and principal payments when due. Below investment grade or high yield debt securities are subject to liquidity risk and heightened credit risk. The funds' use of inverse floaters creates effective leverage. Leverage involves the risk that the funds could lose more than its original investment and also increases the funds' exposure to volatility, interest rate risk, and credit risk.

Closed-end fund shares are subject to investment risk, including the possible loss of the entire principal amount that you invest. Common shares frequently trade at a discount to their NAV. At any point in time, your common shares may be worth less than you paid, even after considering the reinvestment of fund distributions.

This material is not intended to be a recommendation or investment advice, does not constitute a solicitation to buy, sell or hold a security or an investment strategy, and is not provided in a fiduciary capacity. The information provided does not take into account the specific objectives or circumstances of any particular investor, or suggest any specific course of action. Investment decisions should be made based on an investor's objectives and circumstances and in consultation with his or her financial professionals.

If evaluating investment companies, please carefully consider the investment objectives, risks, charges and expenses before investing. For this and other information that should be read carefully, please request a prospectus or summary prospectus from your financial professional or Nuveen at 800.257.8787 or visit nuveen.com.

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