

NUVEEN MUNICIPAL HIGH INCOME OPPORTUNITY FUND  
Form N-CSR  
January 09, 2017

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF  
REGISTERED MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-21449

Nuveen Municipal High Income Opportunity Fund  
(Exact name of registrant as specified in charter)

Nuveen Investments  
333 West Wacker Drive  
Chicago, IL 60606  
(Address of principal executive offices) (Zip code)

Gifford R. Zimmerman  
Nuveen Investments  
333 West Wacker Drive  
Chicago, IL 60606  
(Name and address of agent for service)

Registrant's telephone number, including area code: (312) 917-7700

Date of fiscal year end: October 31

Date of reporting period: October 31, 2016

Form N-CSR is to be used by management investment companies to file reports with the Commission not later than 10 days after the transmission to stockholders of any report that is required to be transmitted to stockholders under Rule 30e-1 under the Investment Company Act of 1940 (17 CFR 270.30e-1). The Commission may use the information provided on Form N-CSR in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-CSR, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-CSR unless the Form displays a currently valid Office of Management and Budget ("OMB") control number. Please direct comments concerning the accuracy of the information collection burden estimate and any suggestions for reducing the burden to Secretary, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549-0609. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. ss. 3507.

ITEM 1. REPORTS TO STOCKHOLDERS.

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Chairman's Letter to Shareholders

Dear Shareholders,

After a sluggish first half of 2016, the U.S. economy gained some momentum in the third quarter. In fact, it was the economy's strongest quarterly acceleration in two years, propelled by healthy consumer spending, a temporary surge in exports and a turnaround in inventories. As the year winds down, 2016 looks on track to deliver the same steady-but-slow growth that has characterized the seven-year recovery.

A year ago, the U.S. Federal Reserve (Fed) took the first step toward policy "normalization" by raising its benchmark interest rate at its December 2015 meeting. Speculation about the Fed's intentions since then has been a strong influence on the markets throughout 2016. After remaining on hold for a year, the Fed judged that the economy's modest growth, the return to "full" employment and an uptick in inflation were sufficient to raise the target rate at the December 2016 meeting.

Global conditions continue to look subdued by comparison. Investors continue to adjust to the idea of a slower Chinese economy, which has helped commodity prices stabilize and lift global inflation expectations. The U.K.'s June 23rd "Brexit" vote to leave the European Union introduced a new set of economic and political uncertainties to the already fragile conditions across Europe. Moreover, there are growing concerns that global central banks' unprecedented efforts to revive growth may be showing signs of fatigue. Interest rates are currently negative in Europe and Japan and near or at zero in the U.S., U.K. and elsewhere; nonetheless, growth has remained subdued.

Since the election, U.S. stocks have rallied strongly on expectations that the Republican controlled Congress and Trump administration will pursue more business friendly policies. But the details have yet to be seen. Given muted global growth, the risk of policy errors by central banks around the world, the unfolding Brexit process and an uncertain political outlook (not just in the U.S. but also in Europe), we anticipate that turbulence remains on the horizon for the time being. In this environment, Nuveen remains committed to both managing downside risks and seeking upside potential. If you're concerned about how resilient your investment portfolio might be, we encourage you to talk to your financial advisor. On behalf of the other members of the Nuveen Fund Board, we look forward to continuing to earn your trust in the months and years ahead.

Sincerely,

William J. Schneider

Chairman of the Board

December 22, 2016

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Portfolio Managers' Comments

Nuveen AMT-Free Municipal Credit Income Fund (NVG)

Nuveen Municipal Credit Income Fund (NZF)

Nuveen Municipal High Income Opportunity Fund (NMZ)

These Funds feature portfolio management by Nuveen Asset Management, LLC, an affiliate of Nuveen Investments, Inc. Portfolio managers Paul L. Brennan, CFA, Scott R. Romans, PhD, and John V. Miller, CFA, discuss U.S. economic and municipal market conditions, key investment strategies and the twelve-month performance of these three national Funds.

Effective April 11, 2016, Scott R. Romans, PhD, has assumed portfolio management responsibilities for NZF.

Effective April 11, 2016, a secondary benchmark (60% S&P Municipal Bond Investment Grade Index and 40% S&P Municipal Bond High Yield Index) was added for NVG and NZF. The secondary benchmark was added to better reflect the Funds' mandates in conjunction with the Funds' reorganizations.

Effective May 26, 2016, the investment policy changed for NMZ. The investment policy change allows the Fund to increase the maximum percent allowed to be invested in municipal securities rated below B3/B- from 5% to 10%.

Effective December 28, 2016 (subsequent to the close of this reporting period), Nuveen AMT-Free Credit Income Fund (NVG) changed its name from Nuveen Enhanced AMT-Free Credit Opportunities Fund (NVG) and Nuveen Municipal Credit Income Fund (NZF) changed its name from Nuveen Enhanced Municipal Credit Opportunities Fund (NZF).

FUND REORGANIZATIONS

During August 2015, the Board of Directors/Trustees of the Nuveen Closed-End Funds approved a series of reorganizations for certain Funds (the Target Funds) to create two, larger-national Funds (the Acquiring Funds), which are included in this report.

The reorganizations are as follows:

Target Funds	Symbol	Acquiring Funds	Symbol
Nuveen Municipal Opportunity Fund, Inc.	NIO	Nuveen Dividend Advantage Municipal Income Fund, renamed Nuveen Enhanced AMT-Free Municipal Credit Opportunities Fund	NVG
Nuveen Quality Municipal Fund, Inc.	NQI		
Nuveen Quality Income Municipal Fund, Inc.	NQU		
Nuveen Premium Income Municipal Fund 4, Inc.	NPT	Nuveen Dividend Advantage Municipal Fund 3, renamed Nuveen Enhanced Municipal Credit Opportunities Fund	NZF
Nuveen Dividend Advantage Municipal Fund 2	NXZ		
Nuveen Municipal Advantage Fund, Inc.	NMA		

Certain statements in this report are forward-looking statements. Discussions of specific investments are for illustration only and are not intended as recommendations of individual investments. The forward-looking statements and other views expressed herein are those of the portfolio managers as of the date of this report. Actual future results or occurrences may differ significantly from those anticipated in any forward-looking statements, and the views expressed herein are subject to change at any time, due to numerous market and other factors. The Funds disclaim any obligation to update publicly or revise any forward-looking statements or views expressed herein.

The ratings disclosed are the lowest rating given by one of the following national rating agencies: Standard & Poor's (S&P), Moody's Investors Service, Inc. (Moody's) or Fitch, Inc. (Fitch). Credit ratings are subject to change. AAA, AA, A and BBB are investment grade ratings, while BB, B, CCC, CC, C and D are below investment grade ratings. Certain bonds backed by U.S. Government or agency securities are regarded as having an implied rating equal to the rating of such securities. Holdings designated N/R are not rated by these national rating agencies. Ratings are not covered by the report of independent registered public accounting firm.

Bond insurance guarantees only the payment of principal and interest on the bond when due, and not the value of the bonds themselves, which will fluctuate with the bond market and the financial success of the issuer and the insurer. Insurance relates specifically to the bonds in the portfolio and not to the share prices of a Fund. No representation is made as to the insurers' ability to meet their commitments.

Refer to the Glossary of Terms Used in this Report for further definition of the terms used within this section.

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Portfolio Managers' Comments (continued)

During March, 2016, the reorganizations were approved by shareholders and became effective before the opening of business on April 11, 2016.

See Notes to Financial Statements, Note 1 — General Information and Significant Accounting Policies, Fund Reorganizations for further information.

What factors affected the U.S. economy and the national municipal market during the twelve-month reporting period ended October 31, 2016?

The restrained pace of growth that has defined the U.S. economic recovery since 2009 continued in the twelve-month reporting period. Growth over the previous four calendar quarters averaged below 2% (annualized), as measured by real gross domestic product (GDP), which is the value of goods and services produced by the nation's economy less the value of the goods and services used up in production, adjusted for price changes. For most of the reporting period, consumer spending remained healthy but was offset by the drag from the inventory cycle, lackluster business spending and weak net exports. As a result, GDP growth stayed below 1.5% from the fourth quarter of 2015 through the second quarter of 2016. However, decent consumer spending, an inventory turnaround and a short-term jump in exports contributed to a more robust gain of 3.2% in the third quarter, as reported by the "second" estimate of the Bureau of Economic Analysis.

Consumers, whose purchases comprise the largest component of the U.S. economy, benefited from employment growth and firming wages over the twelve-month reporting period. As reported by the Bureau of Labor Statistics, the unemployment rate was little changed at 4.9% in October 2016 from 5.0% in October 2015, and job gains averaged slightly above 200,000 per month for the past twelve months. Although consumer spending gains were rather muted in the latter half of 2015, spending surged in the second quarter of 2016. Although inflation began to accelerate slightly in the reporting period, the overall level remained low, which also contributed to consumers' willingness to buy. The Consumer Price Index (CPI) rose 1.6% over the twelve-month reporting period ended October 2016 on a seasonally adjusted basis, as reported by the U.S. Bureau of Labor Statistics. The core CPI (which excludes food and energy) increased 2.1% during the same period, slightly above the Fed's unofficial longer term inflation objective of 2.0%. The housing market was another bright spot in the economy. The S&P CoreLogic Case-Shiller U.S. National Home Price Index, which covers all nine U.S. census divisions, recorded a 5.5% annual gain in September 2016 (most recent data available at the time this report was prepared) (effective July 26, 2016, the S&P/Case-Shiller U.S. National Home Price Index was renamed the S&P CoreLogic Case-Shiller U.S. National Home Price Index). The 10-City and 20-City Composites reported year-over-year increases of 4.3% and 5.1%, respectively.

However, business investment remained soft over the reporting period. Corporate earnings growth continued to be constrained by diminished demand expectations amid sluggish U.S. and global growth, the impact of falling commodity prices and a strong U.S. dollar. Additionally, a murky outlook kept capital spending muted. Concerns about financial market turbulence in early 2016, the U.K.'s "Brexit" vote to leave the European Union (EU) and the U.S. presidential election weighed on business sentiment throughout the reporting period.

The consistent growth of the economy prompted the U.S. Federal Reserve (Fed) to raise the Fed funds rate from the zero bound range to a range of 0.25% to 0.50% in December 2015. The widely anticipated move had little impact on the financial markets. Over the remainder of the reporting period, speculation on the timing of future rate hikes drove short-term swings in the markets, including falling bond yields, rallies in the U.S. dollar and bouts of volatility in stock prices. For most of 2016, the Fed kept this rate unchanged due to concerns ranging from low inflation in the U.S. to weakening growth prospects globally and the U.K.'s Brexit vote. However, the third quarter's strong GDP report and an uptick in inflation boosted expectations that the Fed would likely increase the target rate at the December 2016 meeting. As anticipated, subsequent to the close of the reporting period, the Fed raised the rate to a range of 0.50% to 0.75%.

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Other market-moving events during the reporting period included a spike in volatility in January and February 2016 triggered by deteriorating sentiment about China's economy, another sharp downturn in oil prices and concerns about central bank policy both in the U.S. and around the world. The Brexit referendum on June 23 also caught investors off guard. In response, U.K. sterling fell to 30-year lows and global equities tumbled while perceived safe-haven assets such as gold, the U.S. dollar and government bonds saw large inflows. However, the markets stabilized fairly quickly post-Brexit vote, buoyed by reassurances from global central banks and a perception that the temporary price rout presented an attractive buying opportunity. Following a relatively calm July and August 2016, volatility resumed in the final months of the reporting period. Investors worried whether central banks were reaching the limits of their effectiveness as global growth continues to stagnate. The health of the European banking sector came into question, renewing concerns about the potential to trigger a wider crisis. Political uncertainty increased leading up to the November U.S. presidential election, and after the close of the reporting period, the unexpected win of Donald Trump contributed to an initial sell-off across global markets. However, after digesting the "shock", U. S. equities rallied strongly and global developed market stocks pared their losses, while emerging markets, fixed income and gold remained lower.

The broad municipal bond market performed well during the twelve-month reporting period, supported by falling interest rates, a favorable supply-demand balance and generally improving credit fundamentals. Although interest rates began to drift higher in the final month of the reporting period in anticipation of a possible Fed rate hike in December, they still ended at lower than where they started the reporting period. The largest declines were in longer-dated bond yields, while yields on the short end (zero to four years) of the yield curve increased, driven by anticipation of new money market fund regulations that triggered volatility in short-term rates. This caused the municipal yield curve to flatten over the reporting period.

The demand for municipal bonds continued to outpace supply. During the reporting period, municipal bond gross issuance nationwide totaled \$435.6 billion, a 2.9% gain from the issuance for the twelve-month period ended October 31, 2015. Gross issuance remains robust as issuers continue to actively and aggressively refund their outstanding debt given the very low interest rate environment. In these transactions the issuers are issuing new bonds and taking the bond proceeds and redeeming (calling) old bonds. These refunding transactions have ranged from 40%-60% of total issuance over the past few years. Thus, the net issuance (all bonds issued less bonds redeemed) is actually much lower than the gross issuance. In fact, the total municipal bonds outstanding has actually declined in each of the past four calendar years. So, the gross is surging, but the net is not and this has been an overall positive technical factor on municipal bond investment performance.

While supply has tightened, investor demand for municipal bonds has risen. Municipal bond mutual funds reported net inflows in 2015, and the inflows for the first four months of 2016 had already exceeded 2015's total volume for the year. The bouts of heightened volatility across other risky assets, uncertainty about the Fed's rate increases and the low to negative yields of European and Asian bonds have bolstered the appeal of municipal bonds' risk-adjusted returns and tax-equivalent yields. The municipal bond market is less directly influenced by the Fed's rate adjustments and its demand base is largely comprised of U.S. investors, factors which have helped municipal bonds deliver relatively attractive returns with less volatility than other market segments.

The fundamental backdrop also remained favorable for municipal bonds. Despite the U.S. economy's rather sluggish recovery, improving state and local balance sheets have contributed to generally good credit fundamentals. Higher tax revenue growth, better expense management and a more cautious approach to new debt issuance have led to credit upgrades and stable credit outlooks for many state and local issuers. While some pockets of weakness continued to grab headlines, including Illinois, New Jersey and Puerto Rico, their problems were largely contained, with minimal spillover into the broader municipal market.

What key strategies were used to manage these Funds during the twelve-month reporting period ended October 31, 2016?

Municipal market conditions remained favorable over the reporting period, supported by positive technical factors, stable credit fundamentals for municipal issuers and a backdrop of moderate economic growth and low inflation.

During this time, we continued to take a bottom-up approach to discovering sectors that appeared undervalued as well as individual credits that we believed had the potential to perform well over the long term.

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Portfolio Managers' Comments (continued)

Our trading activity continued to focus on pursuing the Funds' investment objectives. We continued to seek bonds in areas of the market that we expected to perform well as the economy continued to improve. The Funds' positioning emphasized intermediate and longer maturities, lower rated credits and sectors offering higher yields. To fund these purchases, we generally reinvested the proceeds from called and maturing bonds. In some cases, we sold bonds that we believed had deteriorating fundamentals or could be traded for a better relative value.

During this reporting period, NVG and NZF enacted changes to their investment strategies that allow the Funds to invest in a higher allocation to municipal securities rated BBB and below. The new mandate is intended to increase the Funds' potential net earnings in exchange for increased credit risk relative to historical levels. To align with this goal, NVG and NZF bought a range of lower rated credits, including tobacco settlement bonds, both Chicago- and Illinois-issued bonds, health care credits, charter school bonds, tax-backed land-secured issues and utility bonds. At the same time, we sold higher rated credits, especially AA rated bonds that were bought at lower embedded yields. NVG also eliminated any bonds subject to the alternative minimum tax (AMT) to complete its transition to an AMT-free Fund. Additionally, for both NVG and NZF, the proceeds from called bonds provided a considerable amount of the funding to invest in new opportunities, and the two Funds also invested the proceeds from incremental preferred share offerings that were conducted as part of the overall management of the Funds' leverage.

In NMZ, we continued to focus on research and the selection of individual credits with the potential for improvement as the key contributors to performance. NMZ emphasized bonds with above-market coupons and stable-to-improving credit fundamentals. Overall, the Fund's portfolio positioning remained relatively stable throughout the reporting period, as we invested across the yield curve and credit spectrum in the key sectors we favor. NMZ also holds bonds that make sinking fund payments, which are monies an issuer sets aside to periodically repay a portion of the bond issue during a bond's lifetime. During this reporting period, NMZ received ample cash from these sinking fund payments, dividend reinvestments and share offerings in the secondary market, as well as from maturing and called bonds, to fund its buying activity.

In terms of NMZ's purchases in this reporting period, we continued to favor areas of the market that have been key long-term overweight positions in the Fund's portfolio, including the industrial development revenue (IDR), land-backed and health care sectors. Our purchases were mainly in the secondary markets, where attractive values could be found among names that we believed suffered from overly negative sentiment, particularly in the first quarter of 2016 when concerns about economic weakness weighed heavily on the markets. We bought bonds issued for Indiana Finance Authority U.S. Steel and Maryland CNX Marine Terminal at deep discounts due to their exposure to commodity prices and the negative sentiment surrounding commodity supply surplus. However, the sentiment turned out to be overly bearish, which helped these bonds perform well in the second half of the reporting period. Another corporate-backed municipal bond we bought at a deep discount was Cook County Illinois Recovery Zone Facility Revenue Bond, Navistar International Corporation Project. Fears of economic recession earlier in 2016 hurt the earnings and credit ratings outlook for Navistar, an international heavy truck manufacturer. Later in the reporting period, the company benefited from positive news surrounding a joint venture with Volkswagen. We also bought Chicago Board of Education local general obligation (GO) bonds, which offered high yields and long maturities, and were available at attractive prices due to heightened concerns about the financial health of the Chicago public school system. Subsequently, the clarification of certain legal issues surrounding the school district's financial problems helped the bond rebound. We continue to own all of these bonds.

As of October 31, 2016, the Funds continued to use inverse floating rate securities. We employ inverse floaters for a variety of reasons, including duration management and income and total return enhancement. NVG also invested in forward interest rates swaps as part of its duration management strategies, to help reduce price volatility risk to movements in U.S. interest rates relative to the Fund's benchmark. Although these swaps had a negative impact on performance, the Fund's overall duration positioning was a positive contributor to performance during this reporting period.

How did the Funds perform during the twelve-month reporting period ended October 31, 2016?

The tables in each Fund's Performance Overview and Holding Summaries section of this report provide the Funds' total returns for the one-year, five-year and ten-year periods ended October 31, 2016. Each Fund's total returns at net asset value (NAV) are compared with the performance of a corresponding market index and Lipper classification

average.

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For the twelve months ended October 31, 2016, the total returns at NAV for all three of these Funds exceeded the return for the national S&P Municipal Bond Index. NVG and NZF outperformed the return for the new secondary benchmark referred to as the NVG and NZF Custom Blended Fund Performance Benchmark, which is composed of 60% S&P Municipal Bond Investment Grade Index and 40% S&P Municipal Bond High Yield Index and outperformed the average return for the Lipper General & Insured Leveraged Municipal Debt Funds Classification Average. NMZ underperformed the return on the S&P Municipal Bond High Yield Index and the return for the Lipper High-Yield Municipal Debt Funds Classification Average.

For NVG and NZF, duration and yield curve positioning was the main positive contributor to performance for the Funds during this reporting period. Consistent with our long term strategy, these Funds tended to have longer durations than the benchmark, with overweightings in the longer parts of the yield curve that performed well and underweightings in the underperforming shorter end of the curve.

Credit ratings allocations also boosted performance of NVG and NZF during this reporting period. The returns of lower quality bonds generally outpaced those of higher quality credits due to investor demand for higher yielding assets and a willingness to increase credit risk because of improving credit fundamentals. The Funds' overweight allocations to the lower quality categories and underweight allocations to AAA and AA rated credits were advantageous to performance.

For NMZ, which is primarily compared to the S&P Municipal Bond High Yield Index, many of the same factors drove its performance, including its longer duration and maturity profile. Credit conditions in the high yield market excluding Puerto Rico continued to be stable over the reporting period, with relatively low defaults in the marketplace and no material impact to NMZ's portfolio. Credit spreads narrowed slightly, which was beneficial to NMZ's performance.

Within the high yield segment of the municipal bond market, tobacco and Puerto Rico bonds continued to be the largest movers during this reporting period. The Fund had no exposure to Puerto Rico credits during this reporting period, which was beneficial to performance because the group underperformed due to the Commonwealth's weakening credit outlook. The tobacco sector, in contrast, bested all other sectors by a wide margin during this reporting period. Tobacco credits benefited from their liquidity during a period of strong investor demand and a surprise uptick in cigarette sales in 2015. The Fund's underweight tobacco exposure was a detractor from relative performance. Although the Fund's tobacco weighting did marginally increase over the reporting period mostly because of market appreciation and to a lesser extent trading activity, it remained well below that of the benchmark index because we consider the high yield benchmark's weight to be too high for NMZ given our current assessment of the sector.

Individual credit selections added value during this reporting period, due to spread narrowing and higher distribution yields across a diverse range of sectors and issues. Among NMZ's top performing bonds for this reporting period was a local GO issued for the Chicago Board of Education. The bond saw a turnaround from its low point in early 2016, as some of the legal and state funding concerns that previously depressed the bond have been alleviated, which led to improving credit conditions and a narrowing in credit spreads. NMZ also benefited from a position in New York Liberty for World Trade Center 3 bonds due to progress in the project's construction and strong leasing activity, as well as by the scarcity value of New York City tax-exempt bonds. The Fund's exposures to U.S. Steel, Maryland CNX Marine Terminal and the Cook County Illinois Recovery Zone Facility Revenue Bond, Navistar International Corporation Project were also advantageous over this reporting period. A rebound in investor sentiment and improved economic data contributed to spread narrowing for these bonds, which buoyed performance.

In addition, the use of regulatory leverage was an important positive factor affecting performance of the three Funds. Leverage is discussed in more detail later in the Fund Leverage section of this report.

#### An Update Involving Puerto Rico

As noted in the Funds' previous shareholder reports, we continue to monitor situations in the broader municipal market for any impact on the Funds' holdings and performance: the ongoing economic problems of Puerto Rico is one such case. Puerto Rico's continued economic weakening, escalating debt service obligations, and long-standing inability to deliver a balanced budget led to multiple downgrades on its debt over the past two years. Puerto Rico has warned investors since 2014 that the island's debt burden may be unsustainable and the Commonwealth has been exploring various strategies to deal with this burden, including Chapter 9

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Portfolio Managers' Comments (continued)

bankruptcy, which is currently not available by law. On June 30, 2016, President Obama signed the Puerto Rico Oversight, Management and Economic Stability Act (PROMESA) into law. The legislation creates a path for Puerto Rico to establish an independent oversight board responsible for managing the government's financial operations and restructure debt. Implementation is expected to take time, as the law focuses on developing a comprehensive five-year fiscal plan.

In terms of Puerto Rico holdings, shareholders should note that, as of the end of this reporting period, NVG and NZF had limited exposure, 0.4% and 0.2%, respectively, which was either insured or investment grade, to Puerto Rico debt, and NMZ did not hold any Puerto Rico bonds. NVG began the reporting period with no exposure to Puerto Rico bonds, but a small position was acquired in the fund reorganization during the reporting period. The Puerto Rico credits offered higher yields, added diversification and triple exemption (i.e., exemption from most federal, state and local taxes). Puerto Rico general obligation debt is currently rated Caa2/CC/CC (below investment grade) by Moody's, S&P and Fitch, respectively, with negative outlooks.

A Note About Investment Valuations

The municipal securities held by the Funds are valued by the Funds' pricing service using a range of market-based inputs and assumptions. A different municipal pricing service might incorporate different assumptions and inputs into its valuation methodology, potentially resulting in different values for the same securities. These differences could be significant, both as to such individual securities, and as to the value of a given Fund's portfolio in its entirety. Thus, the current net asset value of a Fund's shares may be impacted, higher or lower, if the Fund were to change pricing service, or if its pricing service were to materially change its valuation methodology. On October 4, 2016, the Funds' current municipal bond pricing service was acquired by the parent company of another pricing service. The two services have not yet combined their valuation organizations and process, but may do so in the future. Thus there is an increased risk that the organization acting as each Fund's pricing service may change, or that the Funds' pricing service may change its valuation methodology, either of which could have an impact on the net asset value of each Fund's shares.

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Fund Leverage

IMPACT OF THE FUNDS' LEVERAGE STRATEGIES ON PERFORMANCE

One important factor impacting the returns of the Funds relative to their comparative benchmarks was the Funds' use of leverage through their issuance of preferred shares and/or investments in inverse floating rate securities, which represent leveraged investments in underlying bonds. The Funds use leverage because our research has shown that, over time, leveraging provides opportunities for additional income, particularly in the recent market environment where short-term market rates are at or near historical lows, meaning that the short-term rates the Fund has been paying on its leveraging instruments have been much lower than the interest the Fund has been earning on its portfolio of long-term bonds that it has bought with the proceeds of that leverage. However, use of leverage also can expose the Fund to additional price volatility. When a Fund uses leverage, the Fund will experience a greater increase in its net asset value if the municipal bonds acquired through the use of leverage increase in value, but it will also experience a correspondingly larger decline in its net asset value if the bonds acquired through leverage decline in value, which will make the Fund's net asset value more volatile, and its total return performance more variable over time. In addition, income in levered funds will typically decrease in comparison to unlevered funds when short-term interest rates increase and increase when short-term interest rates decrease. Leverage made a positive contribution to the performance of these Funds over this reporting period.

As of October 31, 2016, the Funds' percentages of leverage are as shown in the accompanying table.

	NVG	NZF	NMZ
Effective Leverage*	37.59%	37.06%	34.16%
Regulatory Leverage*	32.89%	34.32%	9.94%

Effective Leverage is a Fund's effective economic leverage, and includes both regulatory leverage and the leverage effects of certain derivative and other investments in a Fund's portfolio that increase the Fund's investment exposure.

\* Currently, the leverage effects of Tender Option Bond (TOB) inverse floater holdings are included in effective leverage values, in addition to any regulatory leverage. Regulatory leverage consists of preferred shares issued 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 forth in the Investment Company Act of 1940.

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## Fund Leverage (continued)

## THE FUNDS' REGULATORY LEVERAGE

As of October 31, 2016, the Funds have issued and outstanding Institutional MuniFund Term Preferred (iMTP) Shares, Variable Rate MuniFund Term Preferred (VMTP) Shares and/or Variable Rate Demand Preferred (VRDP) Shares as shown in the accompanying table.

Fund	iMTP Shares		VMTP Shares		VRDP Shares		Total
	Series	Shares Issued at Liquidation Preference	Series	Shares Issued at Liquidation Preference	Series	Shares Issued at Liquidation Preference	
NVG	—	—	2018 *	\$240,400,000	\$1	\$179,000,000	
	—	—	—	—	2	* 385,400,000	
	—	—	—	—	3	* 667,200,000	
	—	—	—	—	4	180,000,000	
		\$—		\$240,400,000		\$1,411,600,000	\$1,652,000,000
NZF	2017	150,000,000	2019	336,000,000	1	* 268,800,000	
	—	—	—	—	2	* 262,200,000	
	—	—	—	—	3	* 196,000,000	
		\$150,000,000		\$336,000,000		\$727,000,000	\$1,213,000,000
NMZ	—	\$—	2018	\$87,000,000	—	—	\$87,000,000

\* VMTP Shares and VRDP Shares issued in connection with the reorganization.

During the current reporting period, NVG issued an additional \$180,000,000 Series 4 VRDP Shares at liquidation preference, which will be used to invest in additional municipal securities in accordance with its investment objectives and policies and to pay costs associated with the transaction.

Subsequent to the close of the current reporting period, NVG refinanced all of its outstanding Series 3 VRDP Shares with the issuance of new Series 5 and Series 6 VRDP Shares

During the current reporting period, NZF refinanced all of its outstanding Series 2017 VMTP Shares with the issuance of new Series 2019 VMTP Shares. NZF also issued an additional \$255,000,000 Series 2019 VMTP Shares at liquidation preference to be invested in accordance with its investment policies.

Refer to Notes to Financial Statements, Note 4 — Fund Shares, Preferred Shares for further details on iMTP, VMTP and VRDP Shares and each Fund's respective transactions.

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Common Share Information

COMMON SHARE DISTRIBUTION INFORMATION

The following information regarding the Funds' distributions is current as of October 31, 2016. Each Fund's distribution levels may vary over time based on each Fund's investment activity and portfolio investments value changes.

During the current reporting period, each Fund's distributions to common shareholders were as shown in the accompanying table.

Monthly Distributions (Ex-Dividend Date)	Per Common Share Amounts		
	NVG	NZF	NMZ
November 2015	\$0.0630	\$0.0665	\$0.0760
December	0.0645	0.0690	0.0760
January	0.0645	0.0690	0.0760
February	0.0645	0.0690	0.0760
March	0.0645		