

NUVEEN MISSOURI PREMIUM INCOME MUNICIPAL FUND
Form N-CSRS
February 06, 2014

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 811-7616

Nuveen Missouri Premium Income Municipal 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)

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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: May 31

Date of reporting period: November 30, 2013

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,

I am pleased to have this opportunity to introduce myself to you as the new independent chairman of the Nuveen Fund Board, effective July 1, 2013. I am honored to have been selected as chairman, with its primary responsibility to serve the interests of the Nuveen Fund shareholders. My predecessor, Robert Bremner, was the first independent director to serve as chairman of the Board and I, and my fellow Board members, plan to continue his legacy of strong independent oversight of your funds.

The global economy has hit major turning points over the last several months to a year. The developed world is gradually recovering from its financial crisis while the emerging markets appear to be struggling with the downshift of China's growth potential. Japan is entering a new era of growth after decades of economic stagnation and many of the Eurozone nations appear to be exiting their recession. Despite the positive events, there are still potential risks. Middle East tensions, rising oil prices, defaults in Europe and fallout from the financial stress in emerging markets could all reverse the recent progress in the global economy.

On the domestic front, recent events such as the Federal Reserve decision to slow down its bond buying program beginning in January of 2014 and the federal budget compromise that would guide government spending into 2015 are both positives for the economy moving forward. Corporate fundamentals are strong as earnings per share and corporate cash are at the highest level in two decades. Unemployment is trending down and the housing market has experienced a rebound, each assisting the positive economic scenario. However, there are some issues to be watched. Interest rates are expected to increase but significant uncertainty about the timing remains. Partisan politics in Washington D.C. with their troublesome outcomes add to the uncertainties that could cause problems for the economy going forward.

In the near term, governments are focused on economic recovery and the growth of their economies, which could lead to an environment of attractive investment opportunities. Over the long term, the uncertainties mentioned earlier could hinder the potential growth. Because of this, Nuveen's investment management teams work hard to balance return and risk with a range of investment strategies. I encourage you to read the following commentary on the management of your fund.

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 Nuveen Fund Board
January 21, 2014

Portfolio Managers' Comments

Nuveen Georgia Dividend Advantage Municipal Fund 2 (NKG)
Nuveen Maryland Premium Income Municipal Fund (NMY)
Nuveen Missouri Premium Income Municipal Fund (NOM)
Nuveen North Carolina Premium Income Municipal Fund (NNC)
Nuveen Virginia Premium Income Municipal Fund (NPV)

These Funds feature portfolio management by Nuveen Asset Management, LLC, an affiliate of Nuveen Investments, Inc. Portfolio managers Daniel J. Close, CFA, Thomas C. Spalding, CFA, and Christopher L. Drahn, CFA, discuss key investment strategies and the six-month performance of these five Nuveen Funds. Dan has managed the Nuveen Georgia and North Carolina Funds since 2007. Tom assumed portfolio management responsibility for the Maryland and Virginia Funds in 2011, and Chris has managed the Missouri Fund since 2011.

What key strategies were used to manage these Funds during the six-month reporting period ended November 30, 2013?

During the first part of this reporting period, widespread uncertainty about the next step for the Federal Reserve's (Fed) quantitative easing program and the potential impact on the economy and financial markets led to increased market volatility. After surprising the market in September 2013 with its decision to wait for additional evidence of an improving economy before making any adjustments to the program, the Fed announced on December 18 (subsequent to the close of this reporting period) that it would begin tapering its monthly bond-buying program by \$10 billion (to \$75 billion) in January 2014. Political debate over federal spending and headline credit stories involving Detroit and Puerto Rico also contributed to the unsettled environment during this period and prompted an increase in selling by bondholders across the fixed income markets. Although the second half of the period brought some stabilization and a rally in the municipal market, municipal bond prices generally declined for the period as a whole, especially at the longer end of the maturity spectrum, while interest rates rose. During this time, we continued to take a bottom-up approach to discovering sectors that appeared undervalued as well as individual credits that had the potential to perform well over the long term and helped us keep our Funds fully invested.

During this reporting period, the Funds found value in diversified areas of the marketplace. In NKG, we purchased both higher quality issues such as local general obligation (GO) credits and bonds issued for Emory University in Atlanta as well as lower quality issues including industrial development revenue (IDR) bonds for Delta Air Lines, tax

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.

Ratings shown are the highest rating given by one of the following national rating agencies: Standard & Poor's (S&P), Moody's Investors Service, (Moody's) Inc. or Fitch, Inc. (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. 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.

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.

Portfolio Managers' Comments (continued)

increment financing (TIF) district credits, and charter school bonds. During this reporting period, NMY added two new issues: Maryland Health and Higher Educational Facilities Authority revenue bonds for The Johns Hopkins University and Howard County Housing Commission revenue bonds for the Verona at Oakland Mills multi-family housing project in Columbia. With the general decline in Maryland issuance, we also took advantage of greater supply in the health care sector to selectively add other health care names and some territorial paper (Guam and Virgin Islands) that would help us keep our portfolios fully invested. In Missouri, NOM found value in sales tax revenue bonds issued by the Bi-State Development Agency, or Metro, which owns and operates the St. Louis metropolitan region's public transportation system, as well as credits issued by Metropolitan St. Louis Sewer District, the University of Central Missouri and the St. Louis College of Pharmacy. Despite a substantial drop in North Carolina issuance during this period, we continued to find bonds that helped us accomplish our goals for NNC, adding higher education, health-care, water and sewer, multifamily housing, TIF, airport, and GO credits. In Virginia, NPV's purchases during this reporting period focused on health care and single-family housing.

More generally during this reporting period, our emphasis in these Funds was on adding attractive bonds across the credit quality spectrum that we believed had long term potential. For the most part, our purchases were made in the intermediate and longer parts of the municipal yield curve. Because the issuance of new municipal supply in the primary market generally declined during this reporting period, especially in North Carolina and Virginia, we looked to the secondary market as an additional source of attractive opportunities.

Activity during this reporting period was driven primarily by the reinvestment of proceeds from called and matured bonds, which was aimed at keeping the Funds fully invested and supporting their income streams. During the early part of this reporting period, we continued to experience a number of current bond calls resulting from refinancings, which provided liquidity. In the latter months of this reporting period, as interest rates rose, refinancing activity declined. To generate cash for purchases, we sold selected holdings when we found what we believed to be better opportunities in the marketplace. The Funds also sold some positions in territorial bonds, particularly those issued by Puerto Rico. This included NKG's holdings of Virgin Islands public finance authority bonds.

In addition, NOM took advantage of strong retail demand for Missouri paper to carry out some restructuring activity during this period. As interest rates rose, the Fund sold bonds with less advantageous structures (e.g., lower coupons) and reinvested the proceeds at higher yields than the original purchases. This activity was aimed at enhancing NOM's positioning and potentially increasing income distribution to shareholders. An additional benefit was the generation of tax loss carry-forwards that can be used to offset future capital gains.

As of November 30, 2013, all five of these Funds continued to use inverse floating rate securities. We employ inverse floaters for a variety of reasons, including duration management, income enhancement and total return enhancement. During this reporting period, NNC found it advantageous to terminate one of its inverse floating rate trusts following the pre-refunding of the bonds used to create the trust.

How did the Funds perform during the six-month reporting period ended November 30, 2013?

The tables in each Fund's Performance Overview and Holding Summaries section of this report provide the Funds' total returns for the six-month, one-year, five-year, and ten-year periods ended November 30, 2013. Each Fund's returns on common share net asset value (NAV) are compared with the performance of corresponding market indexes and Lipper classification average.

For the six months ended November 30, 2013, the total returns on common share NAV for these five Funds underperformed the returns for their respective state's S&P Municipal Bond Index as well as the national S&P Municipal Bond Index. For the same period, NKG, NOM and NNC outperformed the average return for the Lipper Other States Municipal Debt Funds Classification, while NMY and NPV underperformed this Lipper return. Shareholders should note that the performance of the Lipper Other States classification represents the overall average of returns for funds from multiple states with a wide variety of municipal market conditions making direct comparisons less meaningful.

Key management factors that influenced the Funds' returns during this reporting period included duration and yield curve positioning, credit exposure and sector allocation. In addition, the use of leverage was an important factor affecting the performance of these Funds. Leverage is discussed in more detail later in this report.

As interest rates rose and the yield curve steepened, municipal bonds with shorter maturities generally outperformed those with longer maturities. Overall, credits at the shorter end of the municipal yield curve (maturities of five years and less) posted the best returns during this reporting period, while bonds at the longest end produced the weakest results. In general, the Funds' durations and yield curve positioning were negative for their performance during this reporting period. All of these Funds tended to be overweighted in the longer parts of the yield curve that underperformed and underweighted in the outperforming shorter end of the curve. This detracted from the Funds' performance in a rising interest rate environment.

Credit exposure also factored into the Funds' performance during these six months, as events in the municipal market led investors to avoid risk. High yield bonds came under selling pressure and credit spreads, or the difference in yield spreads between U.S. Treasury securities and comparable investments such as municipal bonds, began to widen. For the reporting period as a whole, AAA-rated bonds generally outperformed all other credit quality categories. However, A-rated bonds performed better than those AA-rated and B-rated credits outperformed BBB-, BB- and non-rated credits. This led to somewhat mixed performance results in terms of credit exposure, some of which can be tied to the performance of Puerto Rican bonds in the BBB-rated credit quality category. Overall, NNC had the heaviest weighting in AAA-rated bonds and the smallest total weighting in BBB-rated and BB-rated bonds among these five Funds, while NMY and NPV held the largest total allocations of BBB-rated and BB-rated bonds.

After underperforming for many months, pre-refunded bonds, which are often backed by U.S. Treasury securities, were among the better performing market segments. The outperformance of these bonds relative to the market can be attributed primarily to their shorter effective maturities and higher credit quality. All of these Funds had holdings of pre-refunded bonds, with NNC having the heaviest allocation of these bonds and NOM the smallest. Housing bonds and GO credits also typically outperformed the general municipal market, while education and water and sewer bonds generally performed in line with the market. NKG also received a positive contribution from its holdings of gas prepayment bonds.

In contrast, revenue bonds as a whole underperformed the municipal market. Among the revenue sectors that generally lagged municipal market performance by the widest margins for this reporting period were industrial development revenue (IDR), health care (including hospitals), utilities and transportation. Tobacco credits backed by the 1998 master tobacco settlement agreement also were among the poorest performing market sectors, due in part to their longer effective durations, lower credit ratings and the tendency of investors to avoid risk. At the beginning of this reporting period, all of these Funds except NOM had allocations of tobacco bonds issued by The Children's Trust Fund (Puerto Rico). In addition, NMY held tobacco credits issued by Guam and the Virgin Islands, and NPV had positions in tobacco bonds issued by Guam and the Tobacco Settlement Financing Corporation of Virginia.

Portfolio Managers' Comments (continued)

During this reporting period, all of the Funds in this report had exposure to Puerto Rico bonds. These bonds were originally added to our portfolios at times when in-state paper was scarce in order to keep the Funds fully invested. In addition, these credits offered higher yields, added diversification, and triple exemption (i.e., exemption from federal, state and local taxes). Much of our Puerto Rico exposure consisted of the sales tax bonds issued by COFINA, which we believe are the best of the Puerto Rico credits, while many of our other Puerto Rico holdings, including Puerto Rico GOs, were insured or otherwise enhanced by being escrowed or pre-refunded. During this reporting period, the Funds took advantage of opportunities to trim or even close out some of their positions in Puerto Rico paper. In addition to the sales of Puerto Rico tobacco bonds mentioned above, NKG and NNC sold their holdings of COFINA bonds in September and NNC also sold its holding of Puerto Rico aqueduct bonds, leaving the Fund with one small holding of escrowed highway and transportation authority bonds. NOM also reduced its exposure to Puerto Rico, selling out of its positions in electric power authority bonds in August and insured GOs at the end of October. NOM's remaining Puerto Rico holdings consist entirely of COFINA sales tax bonds. NMY and NPV, which had a higher exposure to Puerto Rico credits, trimmed their positions in these bonds by selling some of their insured holdings and COFINA bonds during the latter part of the period. In addition, NMY's holding of bonds issued by Puerto Rico Ports Authority for American Airlines made a small positive contribution to the Fund's performance during this period, as the market took a favorable view of the airline's reorganization efforts, emergence from bankruptcy and plans to merge with U.S. Air.

An Update Regarding Puerto Rico

During this reporting period, a factor affecting the Funds' holdings was the downgrade of debt issued by Puerto Rico. In 2012, Moody's downgraded Puerto Rico GO bonds to Baa3 from Baa1, Puerto Rico Sales Tax Financing Corporation (COFINA) senior sales tax revenue bonds to Aa3 from Aa2, and COFINA subordinate sales tax revenue bonds to A3 from A1. In October 2013, Moody's further downgraded the COFINA senior sales tax bonds to A2, while affirming the subordinate bonds at A3. On November 14, 2013, Fitch Ratings announced that it was placing the majority of Puerto Rico issuance—with the exception of the COFINA bonds—on negative credit watch, which implies that another downgrade may be likely. While Fitch currently rates Puerto Rico issuance at BBB-, it affirmed the ratings on COFINA bonds at AA- for the senior bonds and A+ for the subordinate bonds, with stable outlooks. On December 11, 2013 (subsequent to the close of this reporting period), Moody's announced that it also had placed its Baa3 rating on Puerto Rico GOs (and other Puerto Rico issues linked to the GO rating) on review for downgrade. These downgrades were based on Puerto Rico's ongoing economic problems and, in the case of the COFINA bonds, the impact of these problems on the projected growth of sales tax revenues. However, the COFINA bonds were able to maintain a higher credit rating than the GOs because, unlike the revenue streams supporting some Puerto Rican issues, the sales taxes supporting the COFINA bonds cannot be diverted and used to support Puerto Rico's GO bonds. For the six-month reporting period ended November 30, 2013, Puerto Rico paper underperformed the municipal market as a whole.

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 detracted from the performance of the Funds over the reporting period.

As of November 30, 2013, the Funds' percentages of effective and regulatory leverage are as shown in the accompanying table.

	NKG		NMY		NOM		NNC		NPV	
Effective Leverage*	37.40	%	36.72	%	39.39	%	37.24	%	39.46	%
Regulatory Leverage*	34.81	%	33.11	%	36.63	%	35.33	%	34.65	%

* 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.

Fund Leverage (continued)

THE FUNDS' REGULATORY LEVERAGE

As of November 30, 2013, the Funds have issued and outstanding MuniFund Term Preferred (MTP) Shares and Variable Rate Demand Preferred (VRDP) Shares as shown in the accompanying table.

MTP Shares		VRDP Shares					Total
Series	Shares Issued at Liquidation Value	Annual Interest Rate	NYSE/ NYSE MKT Ticker	Series	Shares Issued at Liquidation Value		
NKG	2015	\$ 32,265,000	2.65%	NKG PRC	—\$	—	
	2015-1	\$ 28,340,000	2.65%	NKG PRD	—\$	—	
	2015-2	\$ 14,340,000	2.65%	NKG PRE	—\$	—	
		\$ 74,945,000					\$ 74,945,000
NMY	2015	\$ 38,775,000	2.65%	NMY PRC	—\$	—	
	2016	\$ 35,818,000	2.90%	NMY PRD	—\$	—	
	2015	\$ 26,485,000	2.60%	NMY PRE	—\$	—	
	2015-1	\$ 27,300,000	2.60%	NMY PRF	—\$	—	
	2015-1	\$ 20,700,000	2.65%	NMY PRG	—\$	—	
	2016	\$ 17,066,000	2.85%	NMY PRH			