

NUVEEN ARIZONA DIVIDEND ADVANTAGE MUNICIPAL FUND 3

Form N-Q

June 29, 2010

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM N-Q

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT
COMPANY

Investment Company Act file number 811-21157

Nuveen Arizona Dividend Advantage Municipal Fund 3
(Exact name of registrant as specified in charter)

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

Kevin J. McCarthy
Vice President and Secretary
333 West Wacker Drive, Chicago, Illinois 60606
(Name and address of agent for service)

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

Date of fiscal year end: 7/31

Date of reporting period: 4/30/10

Form N-Q is to be used by management investment companies, other than small business investment companies registered on Form N-5 (§§ 239.24 and 274.5 of this chapter), to file reports with the Commission, not later than 60 days after the close of the first and third fiscal quarters, pursuant to rule 30b1-5 under the Investment Company Act of 1940 (17 CFR 270.30b1-5). The Commission may use the information provided on Form N-Q in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-Q, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-Q 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 the 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. § 3507.

Item 1. Schedule of Investments

Portfolio of Investments (Unaudited)**Nuveen Arizona Dividend Advantage Municipal Fund 3 (NXE)***April 30, 2010*

| Principal Amount (000) | Description (1) |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Consumer Staples – 1.1% (0.9% of Total Investments) |
| \$ 485 | Puerto Rico, The Children’s Trust Fund, Tobacco Settlement Asset-Backed Refunding Bonds, Series 2002, 5.375%, 5/15/33 |
| | Education and Civic Organizations – 14.8% (10.5% of Total Investments) |
| 690 | Arizona Higher Education Loan Authority, Student Loan Revenue Bonds, Series 2007B, Auction Rate Securities, 0.690%, 11/01/41 (Alternative Minimum Tax) (4) |
| 1,250 | Arizona State University, System Revenue Bonds, Series 2005, 5.000%, 7/01/20 – AMBAC Insured |
| 1,130 | Energy Management Services LLC, Arizona State University, Energy Conservation Revenue Bonds, Main Campus Project, Series 2002, 5.250%, 7/01/18 – NPFQ Insured |
| 560 | Pima County Industrial Development Authority, Arizona, Charter School Revenue Bonds, Noah Webster Basic Schools Inc., Series 2004, 6.000%, 12/15/24 |
| 565 | Tucson Industrial Development Authority, Arizona, Charter School Revenue Bonds, Arizona Agribusiness and Equine Center Charter School, Series 2004A, 6.125%, 9/01/34 |
| 2,000 | University of Arizona, Certificates of Participation, Series 2002B, 5.125%, 6/01/20 – AMBAC Insured |
| 6,195 | Total Education and Civic Organizations |
| | Health Care – 29.5% (20.9% of Total Investments) |
| 1,015 | Arizona Health Facilities Authority, Hospital Revenue Bonds, Banner Health Systems, Series 2007A, 5.000%, 1/01/25 |
| 620 | Arizona Health Facilities Authority, Hospital Revenue Bonds, Banner Health Systems, Series 2007B, 1.005%, 1/02/37 |
| 2,390 | Arizona Health Facilities Authority, Hospital Revenue Bonds, Banner Health Systems, Series 2008D, 5.500%, 1/01/38 |
| 625 | Arizona Health Facilities Authority, Revenue Bonds, Blood Systems Inc., Series 2004, 5.000%, 4/01/20 |
| 475 | Glendale Industrial Development Authority, Arizona, Revenue Bonds, John C. Lincoln Health Network, Series 2005B, 5.000%, 12/01/37 |
| 785 | Glendale Industrial Development Authority, Arizona, Revenue Bonds, John C. Lincoln Health Network, Series 2007, 5.000%, 12/01/42 |
| 1,825 | Maricopa County Industrial Development Authority, Arizona, Health Facility Revenue Bonds, Catholic Healthcare West, Series 2004A, 5.375%, 7/01/23 |
| 1,985 | Maricopa County Industrial Development Authority, Arizona, Health Facility Revenue Bonds, Catholic Healthcare West, Series 2007A, 5.250%, 7/01/32 |

- 2,000 Maricopa County Industrial Development Authority, Arizona, Hospital Revenue Bonds, Mayo Clinic Hospital, Series 1998, 5.250%, 11/15/37
- 1,000 Yavapai County Industrial Development Authority, Arizona, Hospital Revenue Bonds, Yavapai Regional Medical Center, Series 2003A, 6.000%, 8/01/33
- 12,720 Total Health Care
 - Housing/Single Family – 3.6% (2.5% of Total Investments)**
 - 1,495 Tucson and Pima County Industrial Development Authority, Arizona, Joint Single Family Mortgage Revenue Bonds, Series 2007B, 5.350%, 6/01/47 (Alternative Minimum Tax)
 - Tax Obligation/General – 2.5% (1.8% of Total Investments)**
 - 1,000 Pinal County Unified School District 1, Florence, Arizona, General Obligation Bonds, Series 2008C, 5.250%, 7/01/28
 - Tax Obligation/Limited – 31.4% (22.3% of Total Investments)**
 - 146 Centerra Community Facilities District, Goodyear, Arizona, General Obligation Bonds, Series 2005, 5.500%, 7/15/29
 - 2,250 DC Ranch Community Facilities District, Scottsdale, Arizona, General Obligation Bonds, Series 2002, 5.000%, 7/15/27 – AMBAC Insured
 - Estrella Mountain Ranch Community Facilities District, Arizona, Special Assessment Bonds, Montecito Assessment District, Series 2007:
 - 251 5.700%, 7/01/27
 - 155 5.800%, 7/01/32
 - 271 Estrella Mountain Ranch Community Facilities District, Goodyear, Arizona, Special Assessment Lien Bonds, Series 2001A, 7.875%, 7/01/25
 - 525 Greater Arizona Development Authority, Infrastructure Revenue Bonds, Series 2006A, 5.000%, 8/01/23 – NPFPG Insured
 - 1,033 Marana, Arizona, Tangerine Farms Road Improvement District Revenue Bonds, Series 2006, 4.600%, 1/01/26
 - 290 Marley Park Community Facilities District, City of Surprise, Arizona, Limited Tax General Obligation Bonds, Series 2008 (Bank Qualified), 6.100%, 7/15/32
 - 490 Merrill Ranch Community Facilities District 1, Florence, Arizona, General Obligation Bonds, Series 2008A, 7.400%, 7/15/33
 - 2,175 Mohave County, Arizona, Certificates of Participation, Series 2004, 5.250%, 7/01/19 – AMBAC Insured
 - 640 Palm Valley Community Facility District 3, Goodyear, Arizona, General Obligation Bonds, Series 2006, 5.300%, 7/15/31
 - 425 Palm Valley Community Facility District 3, Goodyear, Arizona, Limited Tax General Obligation Bonds, Series 2007, 5.800%, 7/15/32
 - 160 Parkway Community Facilities District 1, Prescott Valley, Arizona, General Obligation Bonds, Series 2006, 5.350%, 7/15/31
 - 1,250 Pinal County Industrial Development Authority, Arizona, Correctional Facilities Contract Revenue Bonds, Florence West Prison LLC, Series 2002A, 5.000%, 10/01/18 – ACA Insured
 - 1,130 San Luis Civic Improvement Corporation, Arizona, Municipal Facilities Excise Tax Revenue

Bonds, Series 2005, 5.000%, 7/01/25 – SYNCORA GTY Insured

665 Tartesso West Community Facility District, Buckeye, Arizona, Limited Tax General Obligation Bonds, Series 2007, 5.900%, 7/15/32

1,250 Vistancia Community Facilities District, Arizona, Restricted General Obligation Bonds, Series 2005, 5.750%, 7/15/24

662 Watson Road Community Facilities District, Arizona, Special Assessment Revenue Bonds, Series 2005, 6.000%, 7/01/30

425 Westpark Community Facilities District, Buckeye, Arizona, General Obligation Tax Increment Bonds Series 2006, 5.250%, 7/15/31

14,193 Total Tax Obligation/Limited

Transportation – 13.7% (9.7% of Total Investments)

Phoenix, Arizona, Civic Improvement Corporation, Senior Lien Airport Revenue Bonds, Series 2002B:

1,000 5.750%, 7/01/16 – FGIC Insured (Alternative Minimum Tax)

2,300 5.250%, 7/01/21 – FGIC Insured (Alternative Minimum Tax)

2,450 Tucson Airport Authority Inc., Arizona, Revenue Refunding Bonds, Series 2001B, 5.000%, 6/01/20 – AMBAC Insured (Alternative Minimum Tax)

5,750 Total Transportation

U.S. Guaranteed – 17.6% (12.5% of Total Investments) (5)

300 Arizona Health Facilities Authority, Hospital Revenue Bonds, Catholic Healthcare West, Series 1999A, 6.625%, 7/01/20 (Pre-refunded 7/01/10)

600 Arizona Health Facilities Authority, Hospital System Revenue Bonds, John C. Lincoln Health Network, Series 2000, 6.875%, 12/01/20 (Pre-refunded 12/01/10)

1,575 Maricopa County Union High School District 210, Phoenix, Arizona, General Obligation Bonds, Series 2004A, 5.000%, 7/01/20 (Pre-refunded 7/01/14) – AGM Insured

270 Maricopa County, Arizona, Hospital Revenue Bonds, Sun Health Corporation, Series 2005, 5.000%, 4/01/16 (Pre-refunded 4/01/15)

1,250 Scottsdale Industrial Development Authority, Arizona, Hospital Revenue Bonds, Scottsdale Healthcare, Series 2001, 5.800%, 12/01/31 (Pre-refunded 12/01/11)

2,770 Tempe, Arizona, Excise Tax Revenue Refunding Bonds, Series 2003, 5.000%, 7/01/22 (Pre-refunded 7/01/13)

6,765 Total U.S. Guaranteed

Utilities – 13.6% (9.6% of Total Investments)

1,250 Maricopa County Pollution Control Corporation, Arizona, Revenue Bonds, Arizona Public Service Company – Palo Verde Project, Series 2002A, 5.050%, 5/01/29 – AMBAC Insured

665 Pima County Industrial Development Authority, Arizona, Revenue Bonds, Tucson Electric Power Company, Refunding Series 2008, 5.750%, 9/01/29

1,660 Puerto Rico Electric Power Authority, Power Revenue Bonds, Series 2005RR, 5.000%, 7/01/26 – SYNCORA GTY Insured

270 Salt River Project Agricultural Improvement and Power District, Arizona, Electric System Revenue Bonds, Series 2002B, 5.000%, 1/01/22

775 Salt River Project Agricultural Improvement and Power District, Arizona, Electric System

Revenue Bonds, Tender Option Bond Trust 09-9W, 17.076%, 1/01/38 (IF)

1,165 Salt Verde Financial Corporation, Arizona, Senior Gas Revenue Bonds, Citigroup Energy Inc
Prepay Contract Obligations, Series 2007, 5.000%, 12/01/37

5,785 Total Utilities

Water and Sewer – 13.1% (9.3% of Total Investments)

955 Goodyear, Arizona, Water and Sewer Revenue Obligations, Series 2010, 5.625%, 7/01/39

405 Oro Valley Municipal Property Corporation, Arizona, Senior Lien Water Revenue Bonds, Series
2003, 5.000%, 7/01/23 – NPFPG Insured

1,000 Phoenix Civic Improvement Corporation, Arizona, Junior Lien Wastewater System Revenue
Refunding Bonds, Series 2001, 5.125%, 7/01/21 – FGIC Insured

2,000 Phoenix Civic Improvement Corporation, Arizona, Junior Lien Water System Revenue Bonds, Series
2002, 5.000%, 7/01/18 – FGIC Insured

Surprise Municipal Property Corporation, Arizona, Wastewater System Revenue Bonds, Series 2007:

425 4.700%, 4/01/22

490 4.900%, 4/01/32

330 Yuma County Industrial Development Authority, Arizona, Exempt Revenue Bonds, Far West Water &
Sewer Inc. Refunding, Series 2007A, 6.375%, 12/01/37 (Alternative Minimum Tax)

5,605 Total Water and Sewer

\$ 59,993 Total Investments (cost \$59,786,790) – 140.9%

Other Assets Less Liabilities – 2.2%

Preferred Shares, at Liquidation Value – (43.1)% (6)

Net Assets Applicable to Common Shares - 100%

Fair Value Measurements

In determining the value of the Fund’s investments, various inputs are used. These inputs are summarized in the three broad levels listed below:

Level 1 – Quoted prices in active markets for identical securities.

Level 2 – Other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).

Level 3 – Significant unobservable inputs (including management’s assumptions in determining the fair value of investments).

The inputs or methodology used for valuing securities are not an indication of the risk associated with investing in those securities. The following is a summary of the Fund’s fair value measurements as of April 30, 2010:

| | Level 1 | Level 2 | Level 3 | Total |
|--------------|---------|---------|---------|-------|
| Investments: | | | | |

Municipal Bonds \$ — \$59,480,774 \$619,241 \$60,100,015

The following is a reconciliation of the Fund's Level 3 investments held at the beginning and end of the measurement period:

| | Level 3 Municipal Bonds |
|----------------------------------------------------------|------------------------------------|
| Balance at the beginning of period | \$546,011 |
| Gains (losses): | |
| Net realized gains (losses) | — |
| Net change in unrealized appreciation (depreciation) | 73,230 |
| Net purchases at cost (sales at proceeds) | — |
| Net discounts (premiums) | — |
| Net transfers in to (out of) at end of period fair value | — |
| Balance at the end of period | \$619,241 |

Income Tax Information

The following information is presented on an income tax basis. Differences between amounts for financial statement and federal income tax purposes are primarily due to timing differences in recognizing taxable market discount, timing differences in recognizing certain gains and losses on investment transactions and the treatment of investments in inverse floating rate securities reflected as financing transactions, if any. To the extent that differences arise that are permanent in nature, such amounts are reclassified within the capital accounts on the Statement of Assets and Liabilities presented in the annual report, based on their federal tax basis treatment; temporary differences do not require reclassification. Temporary and permanent differences do not impact the net asset value of the Fund.

At April 30, 2010, the cost of investments was \$59,767,835.

Gross unrealized appreciation and gross unrealized depreciation of investments at April 30, 2010, were as follows:

| | |
|-----------------------------------------------------------|--------------|
| Gross unrealized: | |
| Appreciation | \$ 1,809,440 |
| Depreciation | (1,477,260) |
| Net unrealized appreciation (depreciation) of investments | \$ 332,180 |

- (1) All percentages shown in the Portfolio of Investments are based on net assets applicable to Common shares unless otherwise noted.
- (2) Optional Call Provisions: Dates (month and year) and prices of the earliest optional call or redemption. There may be other call provisions at varying prices at later dates. Certain mortgage-backed securities may be subject to periodic principal paydowns.
- (3) Ratings: Using the higher of Standard & Poor's Group ("Standard & Poor's") or Moody's Investor Service, Inc. ("Moody's") rating. Ratings below BBB by Standard & Poor's or Baa by Moody's are considered to be below investment grade.

- (4) Investment valued at fair value using methods determined in good faith by, or at the discretion of, the Board of Trustees. For fair value measurement disclosure purposes, investment categorized as Level 3.
- (5) Backed by an escrow or trust containing sufficient U.S. Government or U.S. Government agency securities which ensure the timely payment of principal and interest. Such investments are normally considered to be equivalent to AAA rated securities.
- (6) Preferred Shares, at Liquidation Value as a percentage of Total Investments is 30.6%.

N/R Not rated.

(IF) Inverse floating rate investment.

Item 2. Controls and Procedures.

- a. The registrant's principal executive and principal financial officers, or persons performing similar functions, have concluded that the registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the "1940 Act") (17 CFR 270.30a-3(c))) are effective, as of a date within 90 days of the filing date of this report that includes the disclosure required by this paragraph, based on their evaluation of the controls and procedures required by Rule 30a-3(b) under the 1940 Act (17 CFR 270.30a-3(b)) and Rule 13a-15(b) or 15d-15(b) under the Securities Exchange Act of 1934 (17 CFR 240.13a-15(b) or 240.15d-15(b)).

- b. There were no changes in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act (17 CFR 270.30a-3(d)) that occurred during the registrant's last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the registrant's internal control over financial reporting.

Item 3. Exhibits.

File as exhibits as part of this Form a separate certification for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2(a) under the 1940 Act (17 CFR 270.30a-2(a)), exactly as set forth below: See EX-99 CERT attached hereto.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

(Registrant) Nuveen Arizona Dividend Advantage Municipal Fund 3

By (Signature and Title) /s/ Kevin J. McCarthy
Kevin J. McCarthy
Vice President and Secretary

Date June 29, 2010

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By (Signature and Title) /s/ Gifford R. Zimmerman
Gifford R. Zimmerman
Chief Administrative Officer (principal executive officer)

Date June 29, 2010

By (Signature and Title) /s/ Stephen D. Foy
Stephen D. Foy
Vice President and Controller (principal financial officer)

Date June 29, 2010