NUVEEN ARIZONA DIVIDEND ADVANTAGE MUNICIPAL FUND 3 Form N-Q December 30, 2010

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

FORM N-O

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: 10/31/10

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) October 31, 2010

		Optional		
Principal		Call		
Amount	5 1 1 4	Provisions	Ratings	
(000)	Description (1)	(2)	(3) V	'alue
	Consumer Staples – 1.1% (0.8% of Total Investments)			
	Puerto Rico, The Children's Trust Fund, Tobacco Settlement	5/12 at		
\$ 485	Asset-Backed Refunding Bonds,	100.00	BBB	\$ 486,373
	Series 2002, 5.375%, 5/15/33 Education and Givia Oversitations 16.5% (11.0% of Tatal			
	Education and Civic Organizations – 16.5% (11.9% of Total			
	Investments)	2/11 -4		
600	Arizona Higher Education Loan Authority, Student Loan Revenue	3/11 at	A	567 407
090	Bonds, Series 2007B, Auction Pete Sequeities 0.660%, 11/01/41 (Alternative Minimum Tay) (4)	100.00	A	567,497
	Rate Securities, 0.660%, 11/01/41 (Alternative Minimum Tax) (4)	7/15 -4		
1.250	Arizona State University, System Revenue Bonds, Series 2005,	7/15 at	1.2	1 220 725
1,230	5.000%, 7/01/20 – AMBAC Insured	100.00	Aa3	1,320,725
1 120	Energy Management Services LLC, Arizona State University, Energy	7/12 at	A A	1 100 241
1,130	Conservation Revenue Bonds,	100.00	AA-	1,198,241
	Main Campus Project, Series 2002, 5.250%, 7/01/18 – NPFG Insured	<i>5 1</i> 20 - 4		
000	Glendale Industrial Development Authority, Arizona, Revenue	5/20 at	4	025 (41
900	Bonds, Midwestern University,	100.00	A–	925,641
	Series 2010, 5.125%, 5/15/40	10/14		
500	Pima County Industrial Development Authority, Arizona, Charter	12/14 at	DDD	565 650
360	School Revenue Bonds, Noah	100.00	BBB-	565,650
	Webster Basic Schools Inc., Series 2004, 6.000%, 12/15/24	0/14		
	Tucson Industrial Development Authority, Arizona, Charter School	9/14 at	DDD	5.65 510
565	Revenue Bonds, Arizona	100.00	BBB-	567,718
	Agribusiness and Equine Center Charter School, Series 2004A,			
	6.125%, 9/01/34	6410		
2 000	University of Arizona, Certificates of Participation, Series 2002B,	6/12 at		2 106 220
2,000	5.125%, 6/01/20 –	100.00	AA-	2,106,220
7.005	AMBAC Insured			7.051.600
7,095	Total Education and Civic Organizations			7,251,692
	Health Care – 29.1% (21.0% of Total Investments)	1/17		
1.015	Arizona Health Facilities Authority, Hospital Revenue Bonds, Banner	1/17 at		1.056.450
1,015	Health Systems, Series	100.00	A+	1,056,453
	2007A, 5.000%, 1/01/25	1.45		
620	Arizona Health Facilities Authority, Hospital Revenue Bonds, Banner			414644
620	Health Systems, Series	100.00	A+	414,644
	2007B, 1.004%, 1/02/37	1/10		
0.000	Arizona Health Facilities Authority, Hospital Revenue Bonds, Banner			0.510.504
2,390	Health Systems, Series	100.00	A+	2,512,534
<i>(</i> 0 <i>5</i>	2008D, 5.500%, 1/01/38		A	(11 501
625			A	644,581

	Arizona Health Facilities Authority, Revenue Bonds, Blood Systems Inc., Series 2004, 5.000%, 4/01/20	4/14 at 100.00		
	Glendale Industrial Development Authority, Arizona, Revenue	12/15 at		
475	Bonds, John C. Lincoln Health	100.00	BBB	450,685
.,,	Network, Series 2005B, 5.000%, 12/01/37	100.00	222	.50,005
	Glendale Industrial Development Authority, Arizona, Revenue	12/17 at		
785	Bonds, John C. Lincoln Health	100.00	BBB	735,066
	Network, Series 2007, 5.000%, 12/01/42			,
	Maricopa County Industrial Development Authority, Arizona, Health	7/14 at		
1,825	Facility Revenue Bonds,	100.00	A	1,903,147
	Catholic Healthcare West, Series 2004A, 5.375%, 7/01/23			
	Maricopa County Industrial Development Authority, Arizona, Health	7/17 at		
1,985	Facility Revenue Bonds,	100.00	A	2,039,905
	Catholic Healthcare West, Series 2007A, 5.250%, 7/01/32			
	Maricopa County Industrial Development Authority, Arizona,	5/11 at		
2,000	Hospital Revenue Bonds, Mayo Clinic	100.00	Aa2	2,001,260
	Hospital, Series 1998, 5.250%, 11/15/37			
	Yavapai County Industrial Development Authority, Arizona, Hospital	8/13 at		
1,000	Revenue Bonds, Yavapai	100.00	Baa2	1,013,800
	Regional Medical Center, Series 2003A, 6.000%, 8/01/33			
12,720	Total Health Care			12,772,075
	Housing/Single Family – 3.3% (2.4% of Total Investments)	6117		
1 420	Tucson and Pima County Industrial Development Authority, Arizona,	6/17 at		1 447 201
1,420	Joint Single Family Mortgage Paragraph Paragraph Spring 2007P 5 250% 6/01/47 (Alternative	101.00	Aaa	1,447,321
	Revenue Bonds, Series 2007B, 5.350%, 6/01/47 (Alternative			
	Minimum Tax) Tax Obligation/General – 2.5% (1.8% of Total Investments)			
	Pinal County Unified School District 1, Florence, Arizona, General	7/18 at		
1,000	Obligation Bonds, Series	100.00	A	1,081,140
1,000	2008C, 5.250%, 7/01/28	100.00	71	1,001,140
	Tax Obligation/Limited – 31.5% (22.8% of Total Investments)			
	Centerra Community Facilities District, Goodyear, Arizona, General	7/15 at		
142	Obligation Bonds, Series	100.00	N/R	119,303
	2005, 5.500%, 7/15/29			- ,
	DC Ranch Community Facilities District, Scottsdale, Arizona,	7/13 at		
2,250	General Obligation Bonds, Series	100.00	A1	2,256,323
	2002, 5.000%, 7/15/27 – AMBAC Insured			
	Estrella Mountain Ranch Community Facilities District, Arizona,			
	Special Assessment Bonds,			
	Montecito Assessment District, Series 2007:			
		1/17 at		
250	5.700%, 7/01/27	100.00	N/R	197,918
		1/17 at		
155	5.800%, 7/01/32	100.00	N/R	117,310
257	Estrella Mountain Ranch Community Facilities District, Goodyear,	7/12 at	N/D	262.204
257	Arizona, Special Assessment	100.00	N/R	262,384
	Lien Bonds, Series 2001A, 7.875%, 7/01/25	0/16 -+		
505	Greater Arizona Development Authority, Infrastructure Revenue	8/16 at	AA-	554 100
525	Bonds, Series 2006A, 5.000%, 8/01/23 – NPFG Insured	100.00	AA-	554,122
	0/01/25 - MTO HISUICU			

1,033	Marana, Arizona, Tangerine Farms Road Improvement District Revenue Bonds, Series 2006, 4.600%, 1/01/26	7/16 at 100.00	A2	1,025,139
290	Marley Park Community Facilities District, City of Surprise, Arizona, Limited Tax General Obligation Bonds, Series 2008 (Bank Qualified), 6.100%, 7/15/32	7/17 at 100.00	N/R	258,979
490	Merrill Ranch Community Facilities District 1, Florence, Arizona,	7/18 at 100.00	N/R	498,423
2,175	Mohave County, Arizona, Certificates of Participation, Series 2004, 5.250%, 7/01/19 – AMBAC Insured	7/14 at 100.00	N/R	2,342,300
640	Palm Valley Community Facility District 3, Goodyear, Arizona, General Obligation Bonds, Series 2006, 5.300%, 7/15/31	7/16 at 100.00	N/R	519,488
425	Palm Valley Community Facility District 3, Goodyear, Arizona, Limited Tax General Obligation Bonds, Series 2007, 5.800%, 7/15/32	7/17 at 100.00	N/R	365,496
160	Parkway Community Facilities District 1, Prescott Valley, Arizona, General Obligation Bonds, Series 2006, 5.350%, 7/15/31	7/16 at 100.00	N/R	130,738
1,250	Pinal County Industrial Development Authority, Arizona, Correctional Facilities Contract Revenue Bonds, Florence West Prison LLC, Series 2002A, 5.000%,	No Opt. Call	BBB-	1,252,063
1,130	10/01/18 – ACA Insured San Luis Civic Improvement Corporation, Arizona, Municipal Facilities Excise Tax Revenue Bonds, Series 2005, 5.000%, 7/01/25 – SYNCORA GTY Insured	7/15 at 100.00	A+	1,170,590
665	Tartesso West Community Facility District, Buckeye, Arizona, Limited Tax General Obligation Bonds, Series 2007, 5.900%, 7/15/32	7/17 at 100.00	N/R	579,215
1,250	Vistancia Community Facilities District, Arizona, Restricted General Obligation Bonds, Series 2005, 5.750%, 7/15/24	7/15 at 100.00	A1	1,330,850
639	Watson Road Community Facilities District, Arizona, Special Assessment Revenue Bonds, Series 2005, 6.000%, 7/01/30	7/16 at 100.00	N/R	538,262
425	Westpark Community Facilities District, Buckeye, Arizona, General Obligation Tax Increment Bonds Series 2006, 5.250%, 7/15/31	7/16 at 100.00	N/R	342,673
14,151	Total Tax Obligation/Limited Transportation – 13.3% (9.6% of Total Investments) Phoenix, Arizona, Civic Improvement Corporation, Senior Lien Airport Revenue Bonds, Series 2002B:			13,861,576
1,000	5.750%, 7/01/16 – FGIC Insured (Alternative Minimum Tax)	7/12 at 100.00 7/12 at	AA-	1,049,580
2,300	5.250%, 7/01/21 – FGIC Insured (Alternative Minimum Tax)	100.00	AA-	2,345,930
2,450	Tucson Airport Authority Inc., Arizona, Revenue Refunding Bonds, Series 2001B, 5.000%,	6/11 at 100.00	A1	2,462,372

5 750	6/01/20 – AMBAC Insured (Alternative Minimum Tax)			5 057 000
3,730	Total Transportation U.S. Guaranteed – 13.9% (10.0% of Total Investments) (5)			5,857,882
	Arizona Health Facilities Authority, Hospital System Revenue Bonds,	12/10 at		
600	John C. Lincoln Health	102.00	BBB (5)	615,330
000	Network, Series 2000, 6.875%, 12/01/20 (Pre-refunded 12/01/10)	102.00	BBB (c)	010,000
	Maricopa County Union High School District 210, Phoenix, Arizona,	7/14 at		
1,575	· · · · · · · · · · · · · · · · · · ·	100.00	AA + (5)	1,815,440
	Series 2004A, 5.000%, 7/01/20 (Pre-refunded 7/01/14) – AGM			
	Insured			
	Maricopa County, Arizona, Hospital Revenue Bonds, Sun Health	4/15 at		
270	Corporation, Series 2005, 5.000%,	100.00	N/R(5)	313,616
	4/01/16 (Pre-refunded 4/01/15)	10/11		
250	Scottsdale Industrial Development Authority, Arizona, Hospital	12/11 at	N/D (5)	267.220
250	Revenue Bonds, Scottsdale Haalthaara, Sariaa 2001, 5,8000/, 12/01/21 (Pro refunded 12/01/11)	101.00	N/R (5)	267,230
	Healthcare, Series 2001, 5.800%, 12/01/31 (Pre-refunded 12/01/11) Tempe, Arizona, Excise Tax Revenue Refunding Bonds, Series 2003,	7/13 at		
2,770	5.000%, 7/01/22	100.00	AAA	3,089,849
2,770	(Pre-refunded 7/01/13)	100.00	7 17 17 1	3,007,017
5,465	Total U.S. Guaranteed			6,101,465
,	Utilities – 13.6% (9.8% of Total Investments)			, ,
	Maricopa County Pollution Control Corporation, Arizona, Revenue	11/12 at		
1,250	Bonds, Arizona Public Service	100.00	Baa2	1,222,800
	Company – Palo Verde Project, Series 2002A, 5.050%, 5/01/29 –			
	AMBAC Insured			
665	Pima County Industrial Development Authority, Arizona, Revenue	1/15 at	DDD	600 222
665	Bonds, Tucson Electric Power	100.00	BBB-	688,222
	Company, Refunding Series 2008, 5.750%, 9/01/29 Puerto Rico Electric Power Authority, Power Revenue Bonds, Series	7/15 at		
1 660	2005RR, 5.000%, 7/01/26 –	100.00	A3	1,707,194
1,000	SYNCORA GTY Insured	100.00	AJ	1,707,174
	Salt River Project Agricultural Improvement and Power District,	1/13 at		
270	Arizona, Electric System	100.00	Aa1	295,507
	Revenue Bonds, Series 2002B, 5.000%, 1/01/22			
	Salt River Project Agricultural Improvement and Power District,	1/18 at		
775	Arizona, Electric System	100.00	Aa1	949,623
	Revenue Bonds, Tender Option Bond Trust 09-9W, 17.009%,			
	1/01/38 (IF)	N. 0		
1 165	Salt Verde Financial Corporation, Arizona, Senior Gas Revenue	No Opt.	A	1 100 610
1,103	Bonds, Citigroup Energy Inc Prepay Contract Obligations, Series 2007, 5.000%, 12/01/37	Call	A	1,100,610
5,785	Total Utilities			5,963,956
3,703	Water and Sewer – 13.7% (9.9% of Total Investments)			3,703,730
	Goodyear, Arizona, Water and Sewer Revenue Obligations, Series	7/20 at		
955	2010, 5.625%, 7/01/39	100.00	A2	970,586
	Oro Valley Municipal Property Corporation, Arizona, Senior Lien	7/13 at		
405	Water Revenue Bonds, Series	100.00	AA-	419,616
	2003, 5.000%, 7/01/23 – NPFG Insured			
1 000	Phoenix Civic Improvement Corporation, Arizona, Junior Lien	7/11 at		1.001.110
1,000	Wastewater System Revenue	100.00	AA+	1,021,140
	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:	7/12 at 100.00	AAA	2,124,220
		4/14 at		
425	4.700%, 4/01/22	100.00 4/17 at	N/R	430,075
400	4.900%, 4/01/32	4/1 / at 100.00	N/R	470,023
490	Yuma County Industrial Development Authority, Arizona, Exempt	100.00 12/17 at	IN/IX	470,023
615	Revenue Bonds, Far West Water &	100.00	N/R	582,362
013	Sewer Inc. Refunding, Series 2007A, 6.375%, 12/01/37 (Alternative	100.00	11/10	362,362
	Minimum Tax)			
5,890	Total Water and Sewer			6,018,022
,	Total Investments (cost \$59,452,602) – 138.5%		60,841,502	
	Other Assets Less Liabilities – 3.4%			1,482,790
	Auction Rate Preferred Shares, at Liquidation Value – (41.9)% (6)		(18,400,000)
	_			\$
	Net Assets Applicable to Common Shares – 100%			43,924,292

Fair Value Measurements

In determining the fair 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 methodologies 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 October 31, 2010:

	Level 1	Level 2	Level 3	Total
Investments:				
Municipal Bonds	\$ —	\$60,274,005	\$567,497	\$60,841,502

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 \$567,346
Gains (losses):

Net realized gains (losses)

Net change in unrealized appreciation (depreciation)

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

\$567,497

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 October 31, 2010, the cost of investments was \$59,427,560.

Gross unrealized appreciation and gross unrealized depreciation of investments at October 31, 2010, were as follows:

Gross unrealized:

Appreciation \$2,287,124

Depreciation (873,182)

Net unrealized appreciation (depreciation) of investments \$1,413,942

- (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 highest of Standard & Poor's Group ("Standard & Poor's"), Moody's Investor Service, Inc. ("Moody's") or Fitch, Inc. ("Fitch") rating. Ratings below BBB by Standard & Poor's, Baa by Moody's or BBB by Fitch are considered to be below investment grade. Holdings designated N/R are not rated by any of these national rating agencies.
- (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) Auction Rate Preferred shares, at Liquidation Value as a percentage of Total Investments is 30.2%. 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 December 30, 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 December 30, 2010

By (Signature and Title) /s/ Stephen D. Foy Stephen D. Foy

Vice President and Controller (principal financial officer)

Date December 30, 2010