

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 811-21211

Nuveen Insured New York Tax-Free Advantage Municipal Fund
(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: 9/30

Date of reporting period: 12/31/09

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 Insured New York Tax-Free Advantage Municipal Fund (NRK)***December 31, 2009***Principal****Amount (000) Description (1)****Consumer Staples 3.3% (2.1% of Total Investments)**

\$ 1,500	New York Counties Tobacco Trust III, Tobacco Settlement Pass-Through Bonds, Series 2003, 5.750%, 6/01/33
300	Puerto Rico, The Children's Trust Fund, Tobacco Settlement Asset-Backed Refunding Bonds, Series 2002, 5.375%, 5/15/33
1,800	Total Consumer Staples

Education and Civic Organizations 24.0% (15.6% of Total Investments)

2,000	Dormitory Authority of the State of New York, Insured Revenue Bonds, Long Island University, Series 2003A, 5.000%, 9/01/32 RAAI Insured
2,000	Dormitory Authority of the State of New York, Insured Revenue Bonds, Mount Sinai School of Medicine, Series 1994A, 5.150%, 7/01/24 NPFG Insured
1,000	Dormitory Authority of the State of New York, Lease Revenue Bonds, State University Dormitory Facilities, Series 2003B, 5.250%, 7/01/32 (Mandatory put 7/01/13) SYNCORA GTY Insured
410	Dormitory Authority of the State of New York, Lease Revenue Bonds, State University Dormitory Facilities, Series 2006A, 5.000%, 7/01/31 NPFG Insured
1,000	Dormitory Authority of the State of New York, Revenue Bonds, Mount St. Mary College, Series 2003, 5.000%, 7/01/32 RAAI Insured
2,500	Dormitory Authority of the State of New York, Revenue Bonds, Rochester Institute of Technology, Series 2002A, 5.250%, 7/01/22 AMBAC Insured
	Dormitory Authority of the State of New York, Revenue Bonds, Rochester Institute of Technology, Series 2006A:
100	5.250%, 7/01/20 AMBAC Insured
80	5.250%, 7/01/21 AMBAC Insured
225	Madison County Industrial Development Agency, New York, Civic Facility Revenue Bonds, Colgate University, Tender Option Bond Trust 3127, 12.821%, 7/01/40 BHAC Insured (IF)
300	New York City Industrial Development Agency, New York, Payment in Lieu of Taxes Revenue Bonds, Queens Baseball Stadium Project, Series 2009, 6.125%, 1/01/29 AGC Insured
495	New York City Industrial Development Agency, New York, Revenue Bonds, Yankee Stadium Project Pilot, Series 2009A, 7.000%, 3/01/49 AGC Insured
	New York City Industrial Development Authority, New York, PILOT Revenue Bonds, Yankee Stadium Project, Series 2006:
170	5.000%, 3/01/31 FGIC Insured
1,425	5.000%, 3/01/36 NPFG Insured

840	4.500%, 3/01/39	FGIC Insured
12,545	Total Education and Civic Organizations	
	Health Care 23.0% (14.9% of Total Investments)	
2,000	Dormitory Authority of the State of New York, FHA-Insured Mortgage Hospital Revenue Bonds, Lutheran Medical Center, Series 2003, 5.000%, 8/01/31 NPFPG Insured	
3,000	Dormitory Authority of the State of New York, FHA-Insured Mortgage Hospital Revenue Bonds, St. Barnabas Hospital, Series 2002A, 5.000%, 2/01/31 AMBAC Insured	
345	Dormitory Authority of the State of New York, FHA-Insured Mortgage Revenue Bonds, Hudson Valley Hospital Center, Series 2007, 5.000%, 8/15/27 FSA Insured	
1,000	Dormitory Authority of the State of New York, FHA-Insured Revenue Bonds, Montefiore Medical Center, Series 2005, 5.000%, 2/01/22 FGIC Insured	
255	Dormitory Authority of the State of New York, Revenue Bonds, Health Quest System Inc., Series 2007B, 5.125%, 7/01/37 AGC Insured	
25	Dormitory Authority of the State of New York, Revenue Bonds, Memorial Sloan-Kettering Cancer Center, Series 2003-1, 5.000%, 7/01/21 NPFPG Insured	
810	Dormitory Authority of the State of New York, Revenue Bonds, New York and Presbyterian Hospital, Series 2004A, 5.250%, 8/15/15 FSA Insured	
750	Dormitory Authority of the State of New York, Revenue Bonds, South Nassau Communities Hospital, Series 2003B, 5.500%, 7/01/23	
305	Dormitory Authority of the State of New York, Revenue Bonds, The New York and Presbyterian Hospital Project, Series 2007, 5.000%, 8/15/36 FSA Insured	
500	New York City Health and Hospitals Corporation, New York, Health System Revenue Bonds, Series 2002A, 5.500%, 2/15/17 FSA Insured	
2,640	New York City Health and Hospitals Corporation, New York, Health System Revenue Bonds, Series 2003A, 5.250%, 2/15/21 AMBAC Insured	
11,630	Total Health Care	
	Long-Term Care 0.6% (0.4% of Total Investments)	
300	Dormitory Authority of the State of New York, GNMA Collateralized Revenue Bonds, Cabrini of Westchester Project, Series 2006, 5.200%, 2/15/41	
	Tax Obligation/General 4.1% (2.7% of Total Investments)	
1,000	Nassau County, New York, General Obligation Bonds, General Improvement Series 2009C, 5.000%, 10/01/29 AGC Insured	
535	New York City, New York, General Obligation Bonds, Fiscal Series 1998H, 5.125%, 8/01/25 MBIA Insured	
225	New York City, New York, General Obligation Bonds, Fiscal Series 2006C, 5.000%, 8/01/16 FSA Insured	
250	New York City, New York, General Obligation Bonds, 5.000%, 11/01/20 FSA Insured (UB)	
2,010	Total Tax Obligation/General	
	Tax Obligation/Limited 52.8% (34.3% of Total Investments)	
2,695	Buffalo Fiscal Stability Authority, New York, Sales Tax Revenue State Aid Secured Bonds, Series 2004A, 5.250%, 8/15/12 NPFPG Insured	

1,000	Dormitory Authority of the State of New York, Master Lease Program Revenue Bonds, Nassau County Board of Cooperative Educational Services, Series 2009A, 5.000%, 8/15/28	AGC Insured
3,000	Dormitory Authority of the State of New York, Revenue Bonds, School Districts Financing Program, Series 2002D, 5.250%, 10/01/23	NPFG Insured
1,000	Dormitory Authority of the State of New York, Revenue Bonds, School Districts Financing Program, Series 2009A, 5.625%, 10/01/29	AGC Insured
340	Erie County Industrial Development Agency, New York, School Facility Revenue Bonds, Buffalo City School District, 5.750%, 5/01/27	FSA Insured (UB)
1,085	Erie County Industrial Development Agency, New York, School Facility Revenue Bonds, Buffalo City School District, Series 2007A, 5.750%, 5/01/28	FSA Insured (UB)
2,055	Hudson Yards Infrastructure Corporation, New York, Revenue Bonds, Series 2006A, 5.000%, 2/15/47	FGIC Insured
1,000	Metropolitan Transportation Authority, New York, State Service Contract Refunding Bonds, Series 2002A, 5.000%, 7/01/25	FGIC Insured
560	Monroe Newpower Corporation, New York, Power Facilities Revenue Bonds, Series 2003, 5.500%, 1/01/34	
	New York City Sales Tax Asset Receivable Corporation, New York, Dedicated Revenue Bonds, Local Government Assistance Corporation, Series 2008, Trust 2901:	
610	5.000%, 10/15/25	NPFG Insured (UB)
555	5.000%, 10/15/26	NPFG Insured (UB)
740	New York City Transitional Finance Authority, New York, Building Aid Revenue Bonds, Fiscal Series 2007S-2, 5.000%, 1/15/28	FGIC Insured
3,000	New York City Transitional Finance Authority, New York, Future Tax Secured Bonds, Fiscal Series 2003C, 5.250%, 8/01/18	AMBAC Insured
2,000	New York City Transitional Finance Authority, New York, Future Tax Secured Refunding Bonds, Fiscal Series 2003D, 5.000%, 2/01/22	NPFG Insured
280	New York Convention Center Development Corporation, Hotel Fee Revenue Bonds, Tender Option Bonds Trust 3095, 13.403%, 11/15/44	AMBAC Insured (IF)
1,290	New York State Environmental Facilities Corporation, State Personal Income Tax Revenue Bonds, Series 2002A, 5.000%, 1/01/23	FGIC Insured
950	New York State Thruway Authority, Highway and Bridge Trust Fund Bonds, Second General, Series 2005B, 5.500%, 4/01/20	AMBAC Insured
1,200	New York State Tobacco Settlement Financing Corporation, Tobacco Settlement Asset-Backed and State Contingency Contract-Backed Bonds, Series 2003A-1, 5.250%, 6/01/20	AMBAC Insured
750	New York State Tobacco Settlement Financing Corporation, Tobacco Settlement Asset-Backed and State Contingency Contract-Backed Bonds, Series 2003B-1C, 5.500%, 6/01/21	
1,860	New York State Urban Development Corporation, Service Contract Revenue Bonds, Correctional and Youth Facilities, Series 2002A, 5.500%, 1/01/17 (Mandatory put 1/01/11)	
25,970	Total Tax Obligation/Limited	
	Transportation 12.5% (8.1% of Total Investments)	
1,000	Metropolitan Transportation Authority, New York, Transportation Revenue Refunding Bonds,	

Series 2002A, 5.000%, 11/15/25 FGIC Insured

1,875 New York State Thruway Authority, General Revenue Bonds, Series 2005F, 5.000%, 1/01/20
AMBAC Insured

3,000 New York State Thruway Authority, General Revenue Bonds, Series 2005G, 5.000%, 1/01/32
FSA Insured

140 New York State Thruway Authority, General Revenue Bonds, Series 2007H, 5.000%, 1/01/25
FGIC Insured

170 Port Authority of New York and New Jersey, Consolidated Revenue Bonds, One Hundred Forty
Eighth Series 2008, Trust 2920, 17.292%, 8/15/32 FSA Insured (IF)

6,185 Total Transportation

U.S. Guaranteed 20.9% (13.6% of Total Investments) (4)

1,185 Dormitory Authority of the State of New York, FHA-Insured Nursing Home Mortgage Revenue Bonds,
Shorefront Jewish Geriatric Center Inc., Series 2002, 5.200%, 2/01/32 (Pre-refunded 2/01/13)

500 Dormitory Authority of the State of New York, Revenue Bonds, North Shore Long Island Jewish
Group, Series 2003, 5.375%, 5/01/23 (Pre-refunded 5/01/13)

85 Erie County Water Authority, New York, Water Revenue Bonds, Series 1990B, 6.750%, 12/01/14
AMBAC Insured (ETM)

3,500 New York State Thruway Authority, Highway and Bridge Trust Fund Bonds, Series 2002B, 5.000%,
4/01/20 (Pre-refunded 4/01/12) AMBAC Insured

500 New York State Urban Development Corporation, State Personal Income Tax Revenue Bonds, State
Facilities and Equipment, Series 2002C-1, 5.500%, 3/15/21 (Pre-refunded 3/15/13) FGIC Insured

2,000 Power Authority of the State of New York, General Revenue Bonds, Series 2002A, 5.000%,
11/15/20 (Pre-refunded 11/15/12)

1,975 Triborough Bridge and Tunnel Authority, New York, General Purpose Revenue Bonds, Series 2002A,
5.125%, 1/01/31 (Pre-refunded 1/01/12) MBIA Insured

9,745 Total U.S. Guaranteed

Utilities 4.5% (2.9% of Total Investments)

Long Island Power Authority, New York, Electric System General Revenue Bonds, Series 2006A:

1,130 5.000%, 12/01/23 FGIC Insured

870 5.000%, 12/01/25 FGIC Insured

125 Long Island Power Authority, New York, Electric System General Revenue Bonds, Series 2006B,
5.000%, 12/01/35 CIFG Insured

110 Power Authority of the State of New York, General Revenue Bonds, Series 2006A, 5.000%,
11/15/19 FGIC Insured

2,235 Total Utilities

Water and Sewer 1.0% (0.6% of Total Investments)

495 New York City Municipal Water Finance Authority, New York, Water and Sewer System Revenue
Bonds, 5.000%, 6/15/36 NPFG Insured (UB)

\$ 72,915 Total Long-Term Municipal Bonds (cost \$73,451,918)

Short-Term Investments 7.5% (4.8% of Total Investments)

Euro Dollar Time Deposit 7.5% (4.8% of Total Investments)

\$ 3,853 State Street Bank Euro Dollar Time Deposit, 0.010%, 1/04/10
 Total Short-Term Investments (cost \$3,852,784)
 Total Investments (cost \$77,304,702) 154.2%
 Floating Rate Obligations (4.6)%
 Other Assets Less Liabilities 2.6%
 Auction Rate Preferred Shares, at Liquidation Value (52.2)%
 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 December 31, 2009:

	Level 1	Level 2	Level 3	Total
Investments:				
Municipal Bonds	\$	\$75,880,726	\$	\$75,880,726
Short-Term Investments	3,852,784			3,852,784
Total	\$3,852,784	\$75,880,726	\$	\$79,733,510

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 December 31, 2009, the cost of investments was \$75,390,488.

Gross unrealized appreciation and gross unrealized depreciation of investments at December 31, 2009, were as follows:

Gross unrealized:

Appreciation	\$2,855,688
Depreciation	(906,735)
Net unrealized appreciation (depreciation) of investments	\$1,948,953

At least 80% of the Fund's net assets are invested in municipal securities that guarantee the timely payment of principal and interest.

- (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.

The Portfolio of Investments may reflect the ratings on certain bonds whose insurer has experienced downgrades as of the end of the reporting period. Subsequent to the reporting period, and during the period this Portfolio of Investments was prepared, there may have been reductions to the ratings of certain bonds resulting from changes to the ratings of the underlying insurers both during the period and after period end. Such reductions would likely reduce the effective rating of many of the bonds insured by that insurer or insurers presented at period end.

- (4) 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.
- (5) Auction Rate Preferred Shares, at Liquidation Value as a percentage of Total Investments is 33.9%.

N/A Not applicable.

N/R Not rated.

(ETM) Escrowed to maturity.

(IF) Inverse floating rate investment.

(UB) Underlying bond of an inverse floating rate trust reflected as a financing transaction.

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 Insured New York Tax-Free Advantage Municipal Fund

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

Date March 1, 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 March 1, 2010

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

Date March 1, 2010