

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No.)

Pioneer Municipal High Income Trust

(Name of Issuer)

Auction Rate Preferred

(Title of Class of Securities)

723763207
(See Item 2(e))

(CUSIP Number)

December 31, 2009

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
 Rule 13d-1(c)
 Rule 13d-1(d)

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 723763207

- 1. NAMES OF REPORTING PERSONS
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

Bank of America Corporation 56-0906609

- 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
(a)
(b)

- 3. SEC USE ONLY

- 4. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

- 5. SOLE VOTING POWER

0

- NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

6. SHARED VOTING POWER

456

- 7. SOLE DISPOSITIVE POWER

0

- 8. SHARED DISPOSITIVE POWER

456

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

456

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

[]

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11.3%

12. TYPE OF REPORTING PERSON

HC

CUSIP No. 723763207

1. NAMES OF REPORTING PERSONS
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

Merrill Lynch, Pierce, Fenner & Smith, Inc. 13-5674085

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) []
(b) []

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5. SOLE VOTING POWER

0

NUMBER OF SHARES 6. SHARED VOTING POWER

BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH 208

7. SOLE DISPOSITIVE POWER

0

8. SHARED DISPOSITIVE POWER

208

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

208

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

[]

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

5.2%

12. TYPE OF REPORTING PERSON

BD, IA

1. NAMES OF REPORTING PERSONS
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

Bank of America, N.A. 94-1687665

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)
(b)

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5. SOLE VOTING POWER

0

6. SHARED VOTING POWER

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY EACH
REPORTING
PERSON WITH

248

7. SOLE DISPOSITIVE POWER

0

8. SHARED DISPOSITIVE POWER

248

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

248

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

6.1%

12. TYPE OF REPORTING PERSON

BK

Item 1(a). Name of Issuer:

Pioneer Municipal High Income Trust

Item 1(b). Address of Issuer's Principal Executive Offices:

60 State Street, 19th Floor
Boston, MA 02109

Item 2(a). Names of Person Filing:

Bank of America Corporation ("Bank of America")
Merrill Lynch, Pierce, Fenner & Smith, Inc. ("MLPFS")
Bank of America, N.A. ("BANA")

Item 2(b). Address of Principal Business Office, or if None, Residence:

The address of the principal business office of Bank of America and BANA is:

Bank of America Corporate Center

100 North Tryon Street
Charlotte, North Carolina 28255

The address of the principal business office of MLPFS is:

4 World Financial Center
250 Vesey Street
New York, New York 10080

Item 2(c). Citizenship:

See Item 4 of Cover Pages

Item 2(d). Title of Class of Securities:

Auction Rate Preferred

Item 2(e). CUSIP Numbers:

723763207

Item 3. If This Statement is Filed Pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing Is a:

- (a) Broker or dealer registered under Section 15 of the Exchange Act;
- (b) Bank as defined in Section 3(a)(6) of the Exchange Act;
- (c) Insurance company as defined in Section 3(a)(19) of the Exchange Act;
- (d) Investment company registered under Section 8 of the Investment Company Act;
- (e) An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
- (h) A savings association as defined in Section 3(b) of the Federal

CUSIP No. 723763207

Deposit Insurance Act;

- (i) A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act;
- (j) Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

With respect to the beneficial ownership of the reporting person, see Items 5 through 11 of the cover pages to this Schedule 13G, which are incorporated herein by reference.

The number of shares reported herein represents combined holdings in multiple series of auction rate preferred securities of the issuer, which are treated herein as one class of securities in accordance with the Securities and Exchange Commission's Auction Rate Securities Global Exemptive Relief no action letter issued on September 22, 2008.

(a) Amount beneficially owned:

See Item 9 of Cover Pages

(b) Percent of class:

See Item 11 of Cover Pages

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote:

- (ii) Shared power to vote or to direct the vote:
- (iii) Sole power to dispose or to direct the disposition of:
- (iv) Shared power to dispose or to direct the disposition of:

See Items 5-8 of Cover Pages

Item 5. Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than 5 percent of the class of securities, check the following []

Item 6. Ownership of More Than Five Percent on Behalf of Another Person.

Not Applicable

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company.

With respect to the beneficial ownership of the reporting person, see Items 5 through 11 of the cover pages to this Schedule 13G, which are incorporated herein by reference.

CUSIP No. 723763207

Item 8. Identification and Classification of Members of the Group.

Not Applicable

Item 9. Notice of Dissolution of Group.

Not Applicable

Item 10. Certifications.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: January 19, 2010

Bank of America Corporation
Bank of America, N.A.

By: /s/ Angelina L. Richardson

Name: Angelina L. Richardson
Title: Vice President

Merrill Lynch, Pierce, Fenner & Smith, Inc.

By: /s/ Robert M. Shine

Name: Robert M. Shine
Title: Attorney-In-Fact

EXHIBIT 99.1 - JOINT FILING AGREEMENT

The undersigned hereby agree that they are filing this statement jointly pursuant to Rule 13d-1(k)(1). Each of them is responsible for the timely filing of such Schedule 13G and any amendments thereto, and for the completeness and accuracy of the information concerning such person contained therein; but none of them is responsible for the completeness or accuracy of the information concerning the other persons making the filing, unless such person knows or has reason to believe that such information is inaccurate.

In accordance with Rule 13d-1(k)(1) promulgated under the Securities and Exchange Act of 1934, as amended, the undersigned hereby agree to the joint filing with each other on behalf of each of them to such a statement on Schedule 13G with respect to the common stock beneficially owned by each of them. This Joint Filing Agreement shall be included as an exhibit to such Schedule 13G.

Dated: January 19, 2010

Bank of America Corporation
Bank of America, N.A.

By: /s/ Angelina L. Richardson

Angelina L. Richardson
Vice President

Merrill Lynch, Pierce, Fenner & Smith, Inc.

By: /s/ Robert M. Shine

Robert M. Shine
Attorney-In-Fact