

PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST
 Form 3
 February 10, 2009

FORM 3 UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

OMB APPROVAL

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INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,
 Section 17(a) of the Public Utility Holding Company Act of 1935 or Section
 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person * UBS AG (Last) (First) (Middle) BAHNHOFSTRASSE 45, PO BOX CH-8021 (Street) ZURICH, V8 (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 01/31/2009	3. Issuer Name and Ticker or Trading Symbol PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST [MAV]	4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner <input type="checkbox"/> Officer <input type="checkbox"/> Other (give title below) (specify below)	5. If Amendment, Date Original Filed(Month/Day/Year)	6. Individual or Joint/Group Filing(Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person
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Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Auction Preferred Stock ⁽³⁾	2,073 ⁽²⁾	I	By subsidiary - see footnote ⁽¹⁾

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

SEC 1473 (7-02)

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Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)	3. Title and Amount of Securities Underlying Derivative Security (Instr. 4) Title	4. Conversion or Exercise Price of Derivative	5. Ownership Form of Derivative Security:	6. Nature of Indirect Beneficial Ownership (Instr. 5)
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Date Exercisable	Expiration Date	Amount or Number of Shares	Security	Direct (D) or Indirect (I) (Instr. 5)
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Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
UBS AG BAHNHOFSTRASSE 45 PO BOX CH-8021 ZURICH, V8	^	^ X	^	^

Signatures

/s/ Anthony DeFilippis 02/10/2009
 **Signature of Reporting Person Date

/s/ Joseph Gallichio 02/10/2009
 **Signature of Reporting Person Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, *see* Instruction 5(b)(v).
 - ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) This Statement is filed by UBS AG for the benefit and on behalf of UBS Securities LLC and UBS Financial Services Inc., two-wholly owned subsidiaries of UBS AG to which UBS AG has delegated portions of its performance obligations with respect to the Auction Rate Securities Rights issued by UBS AG to certain clients and pursuant to which the securities reported herein have been purchased from such clients.
- (2) Pursuant to the Global Relief Letter referred to below, this filing reports holdings of the Series of Auction Preferred Stock identified in Item 1 of this Table I on an aggregated basis.
- (3) (CUSIP No[s]. 723762209, 723762308)

Remarks:
 The Shares reported herein represent UBS AG's combined holdings in multiple series of auction preferred securities treated herein as one class of securities in accordance with the Auction Rate Securities -- Global Relief Letter issued by the staff of the Securities and Exchange Commission (SEC) on September 1, 2009, which undertakes to provide, upon request by the SEC staff, the issuer, or a security holder of the issue, the number of securities identified in Table I purchased and sold at each different price and date on which beneficial ownership exceeded ten percent and January 31, 2009, as required by the Global Relief Letter.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *See* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.