

PIONEER MUNICIPAL HIGH INCOME 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 *		2. Date of Event Requiring Statement	3. Issuer Name and Ticker or Trading Symbol	
Â UBS AG		(Month/Day/Year)	PIONEER MUNICIPAL HIGH INCOME TRUST [MHI]	
(Last)	(First)	01/31/2009	4. Relationship of Reporting Person(s) to Issuer	5. If Amendment, Date Original Filed(Month/Day/Year)
BAHNHOFSTRASSE 45,Â PO BOX CH-8021			(Check all applicable)	
(Street)			<input type="checkbox"/> Director	<input checked="" type="checkbox"/> 10% Owner
ZURICH,Â V8Â			<input type="checkbox"/> Officer	<input type="checkbox"/> Other
(City)	(State)	(Zip)	(give title below)	(specify below)
			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	

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⁾	1,428 ⁽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)

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

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 Security	5. Ownership Form of Derivative Security: Direct (D)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
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Date	Expiration	Amount or	or Indirect
Exercisable	Date	Number of	(I)
		Shares	(Instr. 5)

Reporting Owners

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

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]. 723763207, 723763306)

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Remarks:
 TheÂ SharesÂ reportedÂ hereinÂ representÂ UBSÂ AG'sÂ combinedÂ holdingsÂ inÂ multipleÂ seriesÂ ofÂ auctionÂ pref...
 areÂ treatedÂ hereinÂ asÂ oneÂ classÂ ofÂ securitiesÂ inÂ accordanceÂ withÂ theÂ AuctionÂ RateÂ SecuritiesÂ --Â Glob...
 ReliefÂ Letter")Â issuedÂ byÂ theÂ staffÂ ofÂ theÂ SecuritiesÂ andÂ ExchangeÂ CommissionÂ (SEC)Â onÂ SeptemberÂ ...
 undertakesÂ toÂ provide,Â uponÂ requestÂ byÂ theÂ SECÂ staff,Â theÂ issuer,Â orÂ aÂ securityÂ holderÂ ofÂ theÂ issue...
 theÂ numberÂ ofÂ securitiesÂ identifiedÂ inÂ TableÂ IÂ purchasedÂ andÂ soldÂ atÂ eachÂ differentÂ priceÂ andÂ dateÂ ...
 onÂ whichÂ beneficialÂ ownershipÂ exceededÂ tenÂ percentÂ andÂ JanuaryÂ 31,Â 2009,Â asÂ requiredÂ byÂ theÂ Glob...

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.