UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No. 1)*

PIONEER MUNICIPAL HIGH INCOME ADVANTAGE FUND, INC.

(Name of Issuer)

VARIABLE RATE MUNIFUND TERM PREFERRED SHARES (Title of Class of Securities)

723762407 (CUSIP Number)

Bank of America Corporation Bank of America Corporate Center 100 North Tryon Street Charlotte, North Carolina 28255

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

January 24, 2024

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box \Box .

*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 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 ("Act") 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).

	NAMES OF REPORTING PERSONS				
1	Bank of A	Bank of America Corporation 56-0906609			
2	CHECK	THE API	PROPRIATE BOX IF A MEMBER OF A GROUP	(a) □ (b) ⊠	
	(b)				
3	SEC USE ONLY				
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) WC				
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)				
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware				
		7	SOLE VOTING POWER 0		
NUMBER OF S BENEFICIA	LLY EACH		SHARED VOTING POWER 1,400		
REPORTING P.			SOLE DISPOSITIVE POWER 0		
		10	SHARED DISPOSITIVE POWER 1,400		
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,400				
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)				
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 100%				
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) HC				

1	NAMES OF REPORTING PERSONS Banc of America Preferred Funding Corporation 75-2939570			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) □ (b) ⊠			
3	SEC USE ONLY			
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) WC			
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)			
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware			
NUMBER OF SHARE BENEFICIALLY OWNED BY EACH REPORTING PERSO WITH		7 8 9 10	SOLE VOTING POWER 0 SHARED VOTING POWER 1,400 SOLE DISPOSITIVE POWER 0 SHARED DISPOSITIVE POWER 1,400	
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,400			
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)			
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 100%			
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO			

Item 1 Security and Issuer

This Amendment No. 1 (this "Amendment") amends, as set forth below, the statement on Schedule 13D, dated May 30, 2023 and filed with the SEC on June 7, 2023 (the "Original Schedule 13D"), for Bank of America Corporation ("BAC") and Banc of America Preferred Funding Corporation ("BAPFC") (collectively, the "Reporting Persons") with respect to the Variable Rate MuniFund Term Preferred Shares, Series 2021 (CUSIP No. 723762407) ("VMTP Shares") of Pioneer Municipal High Income Advantage Fund, Inc. (the "Issuer").

This Amendment is being filed in relation to the Acknowledgement and Consent of Waiver Concerning Variable Rate MuniFund Term Preferred Shares, Series 2021, dated January 24, 2024, entered into pursuant to the terms of the governing documents of the VMTP Shares of the Issuer (the "Waiver").

Item 2 Identity and Background

(a) Item 2 of the Original Schedule 13D is hereby amended by deleting Schedule I and Schedule II referenced therein and replacing them with Schedule I and Schedule II included with this Amendment.

Item 6 Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Item 6 of the Original Schedule 13D is hereby amended by adding the following at the end thereof:

"The Waiver, dated as of January 24, 2024, has been entered into between the Issuer and BAPFC to waive theIssuer's obligation to comply with the Liquidity Requirement as defined therein for the period beginning on and including February 2, 2024 and continuing to and including March 4, 2024.

Item 7 Material to be Filed as Exhibits

Item 7 of the Original Schedule 13D is hereby amended by deleting Exhibit 99.1 and Exhibit 99.2 thereto and the insertion of the following exhibits:

"Exhibit	Description of Exhibit
99.1	Joint Filing Agreement
99.2	Limited Power of Attorney
99.6	Acknowledgement and Consent of Waiver Concerning Variable Rate MuniFund Term Preferred Shares, Series 2021, dated January 24, 2024"

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.

Date: January 26, 2024

BANK OF AMERICA CORPORATION

By: /s/ Michael Jentis

Name: Michael Jentis
Title: Attorney-in-fact

BANC OF AMERICA PREFERRED FUNDING CORPORATION

By: /s/ Michael Jentis

Name: Michael Jentis
Title: Authorized Signatory

LIST OF EXHIBITS

Exhibit	Description of Exhibit
<u>99.1</u>	Joint Filing Agreement
<u>99.2</u>	Limited Power of Attorney
<u>99.6</u>	Acknowledgement and Consent of Waiver Concerning Variable Rate MuniFund Term Preferred Shares, Series 2021, dated January 24, 2024

SCHEDULE I

EXECUTIVE OFFICERS AND DIRECTORS OF REPORTING PERSONS

The following sets forth the name and present principal occupation of each executive officer and director of Bank of America Corporation. The business address of each of the executive officers and directors of Bank of America Corporation is Bank of America Corporate Center, 100 North Tryon Street, Charlotte, North Carolina 28255.

Name	Position with Bank of America Corporation	Principal Occupation
Brian T. Moynihan	Chairman of the Board, Chief Executive Officer and Director	Chairman of the Board and Chief Executive Officer of Bank of America Corporation
Paul M. Donofrio	Vice Chair	Vice Chair of Bank of America Corporation
Thong M. Nguyen	Vice Chair, Head of Global Strategy & Enterprise Platforms	Vice Chair, Head of Global Strategy & Enterprise Platforms of Bank of America Corporation
Catherine P. Bessant	Vice Chair, Global Strategy	Vice Chair, Global Strategy of Bank of America Corporation
Bruce R. Thompson	Vice Chair, Head of Enterprise Credit	Vice Chair, Head of Enterprise Credit of Bank of America Corporation
Dean C. Athanasia	President, Regional Banking	President, Regional Banking of Bank of America Corporation
James P. DeMare	President, Global Markets	President, Global Markets of Bank of America Corporation
Kathleen A. Knox	President, The Private Bank	President, The Private Bank of Bank of America Corporation
Matthew M. Koder	President, Global Corporate and Investment Banking	President, Global Corporate and Investment Banking of Bank of America Corporation
Bernard A. Mensah	President, International; CEO, Merrill Lynch International	President, International of Bank of America Corporation and CEO, Merrill Lynch International

Lindsay DeNardo Hans	President, Co-Head Merrill Wealth Management	President, Co-Head Merrill Wealth Management of Bank of America Corporation
Eric Schimpf	President, Co-Head Merrill Wealth Management	President, Co-Head Merrill Wealth Management of Bank of America Corporation
Aditya Bhasin	Chief Technology and Information Officer	Chief Technology and Information Officer of Bank of America Corporation
D. Steve Boland	Chief Administrative Officer	Chief Administrative Officer of Bank of America Corporation
Alastair Borthwick	Chief Financial Officer	Chief Financial Officer of Bank of America Corporation
Sheri Bronstein	Chief Human Resources Officer	Chief Human Resources Officer of Bank of America Corporation
Geoffrey Greener	Chief Risk Officer	Chief Risk Officer of Bank of America Corporation
Thomas M. Scrivener	Chief Operations Executive	Chief Operations Executive of Bank of America Corporation
Lauren A. Mogensen	Global General Counsel	Global General Counsel of Bank of America Corporation
Lionel L. Nowell, III	Lead Independent Director	Lead Independent Director, Bank of America Corporation; Former Senior Vice President and Treasurer, PepsiCo, Inc.
Sharon L. Allen	Director	Former Chairman of Deloitte LLP
Jose E. Almeida	Director	Chairman, President and Chief Executive Officer of Baxter International Inc.
Pierre J.P. de Weck ¹	Director	Former Chairman and Global Head of Private Wealth Management, Deutsche Bank AG
Arnold W. Donald	Director	Former President and Chief Executive Officer, Carnival Corporation & Carnival ple

¹ Mr. de Weck is a citizen of Switzerland.

Linda P. Hudson	Director	Former Executive Officer, The Cardea Group, LLC and Former President and Chief Executive Officer of BAE Systems, Inc.
Monica C. Lozano	Director	Chief Executive Officer, College Futures Foundation and Former Chairman, US Hispanic Media Inc.; Lead Independent Director, Target Corporation
Denise L. Ramos	Director	Former Chief Executive Officer and President of ITT Inc.
Clayton S. Rose	Director	President of Bowdoin College
Michael D. White	Director	Lead Director of Kimberly-Clark Corporation; Former Chairman, President, and Chief Executive Officer of DIRECTV
Thomas D. Woods ²	Director	Former Vice Chairman and Senior Executive Vice President of Canadian Imperial Bank of Commerce; Former Chairman, Hydro One Limited
Maria T. Zuber	Director	Vice President for Research and E.A., Griswold Professor of Geophysics, MIT

² Mr. Woods is a citizen of Canada.

The following sets forth the name and present principal occupation of each executive officer and director of Banc of America Preferred Funding Corporation. The business address of each of the executive officers and directors of Banc of America Preferred Funding Corporation is 214 North Tryon Street, Charlotte, North Carolina 28255.

Name	Position with Banc of America Preferred Funding <u>Corporation</u>	Principal Occupation
John J. Lawlor	Director and President	Managing Director, Municipal Markets and Public Sector Banking Executive of BofA Securities, Inc. and Bank of America, National Association
Edward H. Curland	Director and Managing Director	Managing Director, Municipal Markets Executive for Trading of BofA Securities, Inc. and Bank of America, National Association
James Duffy	Managing Director	Director; MBAM BFO, The CFO Group of Bank of America, National Association
Michael I. Jentis	Managing Director	Managing Director, Head of Sales – Public Finance of BofA Securities, Inc. and Bank of America, National Association
Mona Payton	Managing Director	Managing Director, Municipal Markets Executive for Short-Term Trading of BofA Securities, Inc. and Bank of America, National Association
Edward J. Sisk	Director and Managing Director	Managing Director, Public Finance Executive of BofA Securities, Inc. and Bank of America, National Association
John B. Sprung	Director	Corporate Director
David A. Stephens	Director and Managing Director	Managing Director, Executive for Public Finance and Public Sector Credit Products of BofA Securities, Inc. and Bank of America, National Association

SCHEDULE II

LITIGATION SCHEDULE

Bank of America Corporation and certain of its affiliates, including BofA Securities, Inc. ("BofA Securities," successor in interest to Merrill Lynch, Pierce, Fenner & Smith Incorporated) and Bank of America, N.A., have been involved in a number of civil proceedings and regulatory actions which concern matters arising in connection with the conduct of its business. Certain of such proceedings have resulted in findings of violations of federal or state securities laws. Such proceedings are reported and summarized in the BofA Securities Form BD as filed with the SEC, which descriptions are hereby incorporated by reference.

JOINT FILING AGREEMENT

Pursuant to and in accordance with the Securities Exchange Act of 1934, as amended (the **Exchange Act**"), and the rules and regulations thereunder, each party hereto hereby agrees to the joint filing, on behalf of each of them, of any filing required by such party under Section 13 or Section 16 of the Exchange Act or any rule or regulation thereunder (including any amendment, restatement, supplement, and/or exhibit thereto) with the Securities and Exchange Commission (and, if such security is registered on a national securities exchange, also with the exchange), and further agrees to the filing, furnishing, and/or incorporation by reference of this agreement as an exhibit thereto. This agreement shall remain in full force and effect until revoked by any party hereto in a signed writing provided to each other party hereto, and then only with respect to such revoking party.

IN WITNESS WHEREOF, each party hereto, being duly authorized, has caused this agreement to be executed and effective as of the date set forth below.

Date: January 26, 2024

BANK OF AMERICA CORPORATION

By: /s/ Michael Jentis
Name: Michael Jentis
Title: Attorney-in-fact

BANC OF AMERICA PREFERRED FUNDING CORPORATION

By: /s/ Michael Jentis

Name: Michael Jentis
Title: Authorized Signatory

BANK OF AMERICA CORPORATION

LIMITED POWER OF ATTORNEY

BANK OF AMERICA CORPORATION, a Delaware corporation (the "Corporation"), does hereby make, constitute, and appoint Michael Jentis as an attorney-in-fact for the Corporation acting for the Corporation and in the Corporation's name, place and stead, for the Corporation's use and benefit, to bind the Corporation by his execution of those agreements, forms and documents related specifically to Section 13 and Section 16 of the Securities Exchange Act of 1934.

Any documents executed by the attorney-in-fact in accordance with this Limited Power of Attorney shall fully bind and commit the Corporation and all other parties to such documents may rely upon the execution thereof by the attorney-in-fact as if executed by the Corporation and as the true and lawful act of the Corporation.

This Limited Power of Attorney shall automatically terminate as to the authority of Michael Jentis upon the earlier of the attorney-in-fact's resignation or termination from or transfer out of Global Banking and Markets – Municipal Banking and Markets; however, any such resignation, termination or transfer shall have no impact on any documents or instruments executed by the attorney-in-fact named above for the Corporation prior to such resignation, termination or transfer.

IN WITNESS WHEREOF, this Power of Attorney has been executed and delivered by the Corporation to the Attorney-in-Fact on this 27th day of May, 2020.

BANK OF AMERICA CORPORATION

By: /s/ Ellen A. Perrin
Ellen A. Perrin
Associate General Counsel and Senior Vice President

January 24, 2024

Banc of America Preferred Funding Corporation One Bryant Park 1111 Avenue of the Americas, 3rd Floor New York, New York 10036

Re: Acknowledgement and Consent of Waiver Concerning Variable Rate MuniFund Term Preferred Shares, Series 2021 ("2021 VMTP Shares") of Pioneer Municipal High Income Advantage Fund, Inc. (the "Fund")

Ladies and Gentlemen:

This letter serves to document the mutual understandings and agreements of the Fund and Banc of America Preferred Funding Corporation (<u>*BAPFC</u>"), as the sole Designated Owner of the Fund's 2021 VMTP Shares, to waive and modify certain terms and conditions of the 2021 VMTP Shares.

WHEREAS, BAPFC is the Designated Owner of 100% of the currently outstanding 2021 VMTP Shares of the Fund issued pursuant to the terms of the Articles Supplementary of the Fund with respect to the Variable Rate MuniFund Term Preferred Shares, effective as of April 21, 2021, as the same may be amended, restated, supplemented or otherwise modified from time to time in accordance with the terms thereof, including, without limitation, the amendment and restatement effective as of May 30, 2023 (the "Articles") with respect to the Variable Rate MuniFund Term Preferred Shares, Series 2021;

WHEREAS, Section 2.12 of the Articles requires that on or prior to the Liquidity Account Initial Date with respect to any series of VMTP Shares, the Fund shall cause the Custodian to segregate from the Fund's other assets an amount of Liquidity Account Investments with a Market Value equal to at least 110% of the Term Redemption Amount with respect to such Series (the "Liquidity Requirement"), and with respect to the 2021 VMTP Shares the current Liquidity Account Initial Date is February 2, 2024;

WHEREAS, the Fund and BAPFC have agreed and desire to effect an an amendment and waiver with respect to current Liquidity Account Initial Date.

NOW, THEREFORE, the parties hereto agree as follows:

BAPFC and the Fund hereby agree to waive the Fund's obligation to comply with the Liquidity Requirement with respect to the 2021 VMTP Shares for the period beginning on and including February 2, 2024 and continuing to and including March 4, 2024. For the avoidance of doubt, such waiver period will terminate following March 4, 2024 and the Liquidity Requirement will be applicable to the 2021 VMTP Shares beginning March 5, 2024.

By its signature below, each of BAPFC and the Fund provides its consent, agreement and acknowledgement with respect to the waiver set forth herein.

Capitalized terms used herein but not defined herein shall have the meanings given to them in the Articles.

BAPFC certifies that it is the sole Designated Owner of all outstanding 2021 VMTP Shares of the Fund as of the date hereof.

This letter shall be construed in accordance with and governed by the domestic law of the State of New York.

The Fund and BAPFC hereby waive trial by jury in any action, proceeding or counterclaim brought by either of the parties hereto against any other on any matters whatsoever arising out of or in any way connected with this letter.

Except for the waiver provided herein, the terms of the Articles and other transaction documents remain in full force and effect.

The Fund agrees to pay the reasonable costs and expenses incurred by BAPFC in connection with this letter, including fees of outside counsel to BAPFC.

This letter may be signed in counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. Any counterpart or other signature delivered by facsimile or by electronic mail shall be deemed for all purposes as being a good and valid execution and delivery of this letter by that party. The parties hereto further acknowledge and agree that this letter may be signed and/or transmitted by e-mail or a .pdf document or using electronic signature technology (e.g., via DocuSign, Adobesign, or other electronic signature technology), and that such signed electronic record shall be valid and as effective to bind the party so signing as a paper copy bearing such party's handwritten signature. The parties further consent and agree that (i) to the extent a party signs this letter using electronic signature technology, by clicking "SIGN", such party is signing this letter electronically; and (ii) the electronic signatures appearing on this letter shall be treated, for purposes of validity, enforceability and admissibility, the same as handwritten signatures.

[Signature Page Follows]

[MAV - Liquidity Account Waiver]

Very truly yours,

PIONEER MUNICIPAL HIGH INCOME ADVANTAGE FUND, INC.

By: /s/ Anthony Koenig

Name: Anthony J. Koenig, Jr. Title: Treasuer

Acknowledged, Agreed and Consented to:

Banc of America Preferred Funding Corporation, as sole Designated Owner of the Fund's 2021 VMTP Shares

By: /s/ Michael Jentis

Name: Michael Jentis Title: Managing Director

[MAV - Liquidity Account Waiver]