## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No. 4)\*

## NUVEEN MUNICIPAL HIGH INCOME OPPORTUNITY FUND

(Name of Issuer)

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

670682889 (CUSIP Number)

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

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

April 19, 2021

(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	America Co	prporation 56-0906609			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP  (a) □  (b) ⊠					
3	SEC USE ONLY					
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) OO					
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 SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		7 8 9 10	SOLE VOTING POWER  0 SHARED VOTING POWER  870 SOLE DISPOSITIVE POWER  0 SHARED DISPOSITIVE POWER  870			
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 870					
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) 33.85%					
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)  OO			
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 SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		7 8 9 10	SOLE VOTING POWER  0 SHARED VOTING POWER  870 SOLE DISPOSITIVE POWER  0 SHARED DISPOSITIVE POWER  870	
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 870			
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) 33.85%			
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO			

#### Item 1 Security and Issuer

This Amendment No. 4 (this "Amendment") amends, as set forth below, the statement on Schedule 13D, dated December 21, 2012 and filed with the SEC on December 28, 2012 (the "Original Schedule 13D"), as amended by Amendment No. 1 dated July 15, 2013 and filed with the SEC on July 17, 2013 ('Amendment No. 1''), as further amended by Amendment No. 2 dated July 1, 2015 and filed with the SEC on July 2, 2015 ("Amendment No. 2"), and as further amended by Amendment No. 3 dated February 26, 2018 and filed with the SEC on February 27, 2018 ("Amendment No. 3"), for Bank of America Corporation ("BAC") and Banc of America Preferred Funding Corporation ("BAPFC") (collectively, the "Reporting Persons") with respect to the adjustable rate munifund term preferred shares ("AMTP Shares") of Nuveen Municipal High Income Opportunity Fund (the "Issuer").

This Amendment is being filed to report a change in the Reporting Persons' ownership percentage of the Issuer as a result of the issuance of additional AMTP Shares of the Issuer to a holder that is not affiliated with the Reporting Persons (the "Issuance").

## Item 2 Identity and Background

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 4 Purpose of Transaction

Item 4 of the Original Schedule 13D is hereby amended by adding the following paragraph at the end thereof:

"As a result of the Issuance, there has been a change in the Reporting Persons' ownership percentage of the Issuer."

## 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 inserting the following exhibits in their place:

"Exhibit Description of Exhibit

99.1 Joint Filing Agreement

99.2 Limited Power of Attorney"

## 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: April 21, 2021

## 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

99.1 Joint Filing Agreement

<u>99.2</u> Limited Power of Attorney

## 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, President and Director	Chairman of the Board, Chief Executive Officer, and President of Bank of America Corporation
Dean C. Athanasia	President, Retail and Preferred & Small Business Banking	President, Retail and Preferred & Small Business Banking of Bank of America Corporation
Catherine P. Bessant	Chief Operations and Technology Officer	Chief Operations and Technology Officer of Bank of America Corporation
Sheri Bronstein	Chief Human Resources Officer	Chief Human Resources Officer of Bank of America Corporation
Paul M. Donofrio	Chief Financial Officer	Chief Financial Officer of Bank of America Corporation
Geoffrey Greener	Chief Risk Officer	Chief Risk Officer of Bank of America Corporation
Kathleen A. Knox	President, Private Bank	President, Private Bank of Bank of America Corporation
David Leitch	Global General Counsel	Global General Counsel of Bank of America Corporation
Thomas K. Montag	Chief Operating Officer	Chief Operating Officer of Bank of America Corporation
Thong M. Nguyen	Vice Chairman	Vice Chairman of Bank of America Corporation
Andrew M. Sieg	President, Merrill Lynch Wealth Management	President, Merrill Lynch Wealth Management
Andrea B. Smith	Chief Administrative Officer	Chief Administrative Officer of Bank of America Corporation
Sharon L. Allen	Director	Former Chairman of Deloitte LLP
Susan S. Bies	Director	Former Member, Board of Governors of the Federal Reserve System
Jack O. Bovender, Jr.	Lead Independent Director	Former Chairman and Chief Executive Officer of HCA Inc.

Frank P. Bramble, Sr.	Director	Former Executive Vice Chairman, MBNA Corporation
Pierre de Weck <sup>1</sup>	Director	Former Chairman and Global Head of Private Wealth Management, Deutsche Bank AG
Arnold W. Donald	Director	President and Chief Executive Officer, Carnival Corporation & Carnival plc
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.
Thomas J. May	Director	Former Chairman, President, and Chief Executive Officer of Eversource Energy
Lionel L. Nowell, III	Director	Former Senior Vice President and Treasurer, PepsiCo Inc.
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 <sup>2</sup>	Director	Former Vice Chairman and Senior Executive Vice President of Canadian Imperial Bank of Commerce; Former Chairman, Hydro One Limited
R. David Yost	Director	Former Chief Executive Officer of AmerisourceBergen Corp.
Maria T. Zuber	Director	Vice President for Research and E.A., Griswold Professor of Geophysics, MIT
<sup>1</sup> Mr. de Weck is a citizen of Switzerland	I.	

<sup>&</sup>lt;sup>2</sup> 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.

	Position with Banc of America Preferred	
<u>Name</u>	<b>Funding Corporation</b>	Principal Occupation
John J. Lawlor	Director and President	Managing Director, Municipal Markets and Public Sector Banking Executive of Merrill Lynch, Pierce, Fenner & Smith Incorporated and Bank of America, National Association
Edward H. Curland	Director and Managing Director	Managing Director, Municipal Markets Executive for Trading of Merrill Lynch, Pierce, Fenner & Smith Incorporated and Bank of America, National Association
James Duffy	Director	Director; MBAM BFO, The CFO Group of Bank of America, National Association
Peter Liu	Managing Director	Director; Global Markets Risk, Senior Manager Global Risk of Bank of America, National Association
Michael I. Jentis	Managing Director	Managing Director, Head of Sales – Public Finance of Merrill Lynch, Pierce, Fenner & Smith Incorporated and Bank of America, National Association
Mona Payton	Managing Director	Managing Director, Municipal Markets Executive for Short-Term Trading of Merrill Lynch, Pierce, Fenner & Smith Incorporated and Bank of America, National Association
Edward J. Sisk	Director and Managing Director	Managing Director, Public Finance Executive of Merrill Lynch, Pierce, Fenner & Smith Incorporated 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 Merrill Lynch, Pierce, Fenner & Smith Incorporated and Bank of America, National Association

## **SCHEDULE II**

#### **LITIGATION SCHEDULE**

New York Attorney General Investor Protection Bureau Masking Settlement 3/22/2018

On March 22, 2018, the Attorney General of the State of New York Investor Protection Bureau ("NYAG") alleged that Bank of America Corporation ("BAC") and Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") (1) concealed from its institutional clients that orders were routed to and executed by "electronic liquidity providers," (2) misstated the composition of orders and trades in its dark pool, and (3) did not accurately describe its use of a proprietary "venue ranking" analysis, in violation of the Martin Act and Executive Law § 63(12). In connection with the agreement, BAC and MLPF&S agreed (1) not to engage, or attempt to engage, in conduct in violation of any applicable laws, including but not limited to the Martin Act and Executive Law § 63(12); (2) to pay a penalty in the amount of \$42,000,000; and (3) provide the NYAG a summary of the review of its electronic trading policies and procedures.

NOTE: In addition, Bank of America Corporation and certain of its affiliates, including MLPF&S and BANA, 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 MLPF&S 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: April 21, 2021

## 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