

CITY OF CHICAGO **ECONOMIC DISCLOSURE STATEMENT and AFFIDAVIT**

| EDS # 192995 |
|--|
| SECTION I GENERAL INFORMATION |
| A. Legal name of the Disclosing Party submitting the EDS: |
| American Traffic Solutions, Inc. |
| Enter d/b/a if applicable: |
| Verra Mobility |
| The Disclosing Party submitting this EDS is: |
| the Applicant |
| B. Business address of the Disclosing Party: |
| 1150 N Alma School Mesa, AZ 85201 United States |
| C. Telephone: |
| 210-268-0398 |
| Fax: |
| D. Name of contact person: Cara Ann Williams |
| |
| F. Brief description of contract, transaction or other undertaking (referred to below as the "Matter") to which this EDS pertains: |

AUTOMATED SPEED ENFORCEMENT PROGRAM-CITY OF CHICAGO

| G. Which City agency or department is requesting this EDS? |
|---|
| DEPT OF PROCUREMENT SERVICES |
| Specification Number |
| 105615 |
| Contract (PO) Number |
| 28009 |
| Revision Number |
| 3 |
| Release Number |
| 0 |
| User Department Project Number |
| SECTION II DISCLOSURE OF OWNERSHIP INTERESTS |
| A. NATURE OF THE DISCLOSING PARTY |
| 1. Indicate the nature of the Disclosing Party: |
| Privately held business corporation |
| Is the Disclosing Party incorporated or organized in the State of Illinois? |
| No |
| State or foreign country of incorporation or organization: |
| Kansas |
| Registered to do business in the State of Illinois as a foreign entity? |
| Yes |
| B. DISCLOSING PARTY IS A LEGAL ENTITY: |
| 1.a.1 Does the Disclosing Party have any directors? |
| Yes |

1.a.3 List below the full names and titles of all executive officers and all directors, if any, of the entity. Do not include any directors who have no power to select the entity's officers.

Officer/Director: David Roberts

Title: President & CEO

Role: Both

Officer/Director: Jonathan Baldwin

Title: Executive Vice President

Role: Officer

Officer/Director: Craig Conti

Title: Chief Financial Officer and Treasurer

Role: Both

Officer/Director: Scott Lindstedt

Title: Senior Vice President, Finance

Role: Officer

Officer/Director: Kristen Young

Title: Assistant Secretary

Role: Officer

Officer/Director: Lewis Miller

Title: Senior Vice President, Operations

Role: Officer

2. Ownership Information

Please provide ownership information concerning each person or entity that holds, or is anticipated to hold (see next paragraph), a direct or indirect beneficial interest in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a limited liability company, or interest of a beneficiary of a trust, estate, or other similar entity. Note: Each legal entity below may be required to submit an EDS on its own behalf.

Please disclose present owners below. Please disclose anticipated owners in an attachment submitted through the "Additional Info" tab. "Anticipated owner" means an individual or entity in existence at the time application for City action is made, which is not an applicant or owner at such time, but which the applicant expects to assume a legal status, within six months of the time the City action occurs, that would render such

individual or entity an applicant or owner if they had held such legal status at the time application was made.

• VM Consolidated, Inc. - 100.0% - EDS 194115

o Greenlight Acquisition Corporation - 100.0% - EDS 194116

- Verra Mobility Corporation - 100.0% - EDS 194117

Owner Details

Name Business Address

Greenlight Acquisition 1150 N Alma School

Corporation Mesa, AZ

United States

Verra Mobility Corporation 1150 N Alma School

Mesa, AZ United States

VM Consolidated, Inc. 1150 N. Alma School Rd.

Mesa, AZ United States

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

A. Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS?

No

B. Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS?

No

D. Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code ("MCC")) in the Disclosing Party?

No

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll.

If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

1. Has the Disclosing Party retained or does it anticipate retaining any legal entities in connection with the Matter?

Yes

2. List below the names of all legal entities which are retained parties.

Name: Banner Personnel Service Inc.

Anticipated/Retained: Retained

Business Address: 1101 W. 31st

#170

Downers Grove, IL 60515 United States

Relationship: Subcontractor - MWDBE

Fees \$250,000

(\$\$ or %):

Estimated/Paid: Estimated

Name: City Lights
Anticipated/Retained: Retained

Business Address: 9993 Virginia Avenue

Chicago, IL 60415 United States

Relationship: Subcontractor - MWDBE

Fees \$300,000

(\$\$ or %):

Estimated/Paid: Estimated

Name: Wynndalco Enterprise, LLC

Anticipated/Retained: Retained

Business Address: 515 Factory Road

Addison, IL 60101 United States

Relationship: Subcontractor - MWDBE

Fees \$1.5M

(\$\$ or %):

Estimated/Paid: Estimated

3. Has the Disclosing Party retained or does it anticipate retaining any persons in connection with the Matter?

Yes

4. List below the names of all persons who are retained parties.

Name: Mike Alvarez

Anticipated/Retained: Retained

Business Address: 6139 Kilpatrick Avenue

Chicago, IL 60646 United States

Relationship: Lobbyist

Fees \$5,000 Monthly

(\$\$ or %):

Estimated/Paid: Paid

Name: Djavan Conway

2 July 101

Anticipated/Retained: Retained

Business Address: 1245 S. Michigan Avenue

Suite 165

Chicago, IL 60605 United States

Relationship: Consultant

Fees \$7,500 monthly

(\$\$ or %):

Estimated/Paid: Paid

Name: John R. Daley

Anticipated/Retained: Retained

Business Address: 3530 S. Halstead Street

Chicago, IL 60609 United States

Relationship: Consultant

Fees \$7,500 monthly

(\$\$ or %):

Estimated **Estimated/Paid:**

Name:

King & Spalding, LLC Retained

Anticipated/Retained:

Business Address: 110 N Wacker Drive

Suite 3800

Chicago, IL 60606 United States

Relationship: Attorney \$6,478.00 Fees

(\$\$ or %):

Estimated/Paid: Paid

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage of any child support obligations by any Illinois court of competent jurisdiction?

No

B. FURTHER CERTIFICATIONS

1. [This certification applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e. an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

I am unable to certify the above to be true

Explain:

See additional info tab attachment.

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

I certify the above to be true

- 3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:
 - a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
 - b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
 - c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
 - d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
 - e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

I certify the above to be true

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapter 2-56 (Inspector General) and Chapter 2-156 (Governmental Ethics).

I certify the above to be true

- 5. Neither the Disclosing Party, nor any <u>Contractor</u>, nor any <u>Affiliated Entity</u> of either the Disclosing Party or any <u>Contractor</u>, nor any <u>Agents</u> have, during the 5 years before the date of this EDS, or, with respect to a <u>Contractor</u>, an <u>Affiliated Entity</u>, or an <u>Affiliated Entity</u> of a <u>Contractor</u> during the 5 years before the date of such <u>Contractor's</u> or <u>Affiliated Entity's</u> contract or engagement in connection with the Matter:
 - a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or

- any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

I certify the above to be true

- 6. Neither the Disclosing Party, nor any <u>Affiliated Entity</u> or <u>Contractor</u>, or any of their employees, officials, <u>agents</u> or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of
 - bid-rigging in violation of 720 ILCS 5/33E-3;
 - bid-rotating in violation of 720 ILCS 5/33E-4; or
 - any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

I certify the above to be true

7. Neither the Disclosing Party nor any <u>Affiliated Entity</u> is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

I certify the above to be true

8. [FOR APPLICANT ONLY]

- i. Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and
- ii. the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City.

NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

I certify the above to be true

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM")

I certify the above to be true

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/ subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

I certify the above to be true

11. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago.

None

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

The Disclosing Party certifies, as defined in MCC Section 2-32-455(b), the Disclosing Party

is not a "financial institution"

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a

financial interest in his or her own name or in the name of any other person or entity in the Matter?

No

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

If the Disclosing Party cannot make this verification, the Disclosing Party must disclose all required information in the space provided below or in an attachment in the "Additional Info" tab. Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

I can make the above verification

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

Is the Matter federally funded? For the purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

No

SECTION VII - FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

- A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from

the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

I acknowledge and consent to the above

The Disclosing Party understands and agrees that:

- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/ or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. NOTE: With respect to Matters subject to MCC Chapter 1-23, Article I (imposing PERMANENT INELIGIBILITY for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

I acknowledge and consent to the above

APPENDIX A - FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS AND DEPARTMENT HEADS

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof

currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a, if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

No

APPENDIX B - BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

No

APPENDIX C-PROHIBITION ON WAGE & SALARY HISTORY SCREENING

This Appendix is to be completed only by an Applicant that is completing this EDS as a "contractor" as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant

to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants' wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

Yes

ADDITIONAL INFO

Please add any additional explanatory information here. If explanation is longer than 1000 characters, you may add an attachment below. Please note that your EDS, including all attachments, becomes available for public viewing upon contract award. Your attachments will be viewable "as is" without manual redaction by the City. You are responsible for redacting any non-public information from your documents before uploading.

List of vendor attachments uploaded by City staff

None.

List of attachments uploaded by vendor

Page 2.B.1 Additional Info

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable appendices, are true, accurate and complete as of the date furnished to the City. Submission of this form constitutes making the oath associated with notarization.

/s/ 04/01/2024
Cara Ann Williams
Contracts Manager
American Traffic Solutions, Inc.

This is a printed copy of the Economic Disclosure Statement, the original of which is filed electronically with the City of Chicago. Any alterations must be made electronically, alterations on this printed copy are void and of no effect.

Chicago EDS

Page 2. B.1. Additional Info

In 2019, we self-reported to New York City Department of Transportation (NYCDOT) that certain of our camera installation practices involving conduit depth and grounding wire fell short of our requirements and our own standards of excellence—though did not impact program performance. On March 22, 2021, Verra Mobility and the New York City Department of Investigation entered into a Certification and Monitor Agreement, pursuant to which, among other things, Verra Mobility agreed to complete remediation work, engaged an independent monitor, and agreed to comply with certain installation practices and to implement certain compliance measures required by NYCDOT. To date, all accessible sites have been remediated. The term of the Certification and Monitor Agreement ends upon the expiration of the current photo enforcement agreements between Verra Mobility and NYCDOT, which expires December 31, 2024. Verra Mobility has the right to petition to terminate the Certification and Monitor Agreement three years from March 22, 2021.



CITY OF CHICAGO ECONOMIC DISCLOSURE STATEMENT and AFFIDAVIT Related to Contract/Amendment/Solicitation EDS # 194115

SECTION I -- GENERAL INFORMATION

D. Name of contact person:

Cara Ann Williams

| A. Legal name of the Disclosing Party submitting the EDS: |
|--|
| VM Consolidated, Inc. |
| Enter d/b/a if applicable: |
| The Disclosing Party submitting this EDS is: a legal entity currently holding an interest in the Applicant |
| The Disclosing Party holds an interest in |
| American Traffic Solutions, Inc. and EDS is 192995 |
| B. Business address of the Disclosing Party: |
| 1150 N. Alma School Rd. Mesa, AZ 85201 United States |
| C. Telephone: |
| 210-268-0398 |
| Fax: |
| |

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

Privately held business corporation

Is the Disclosing Party incorporated or organized in the State of Illinois?

No

State or foreign country of incorporation or organization:

Delaware

Registered to do business in the State of Illinois as a foreign entity?

No

- B. DISCLOSING PARTY IS A LEGAL ENTITY:
- 1.a.1 Does the Disclosing Party have any directors?

Yes

1.a.3 List below the full names and titles of all executive officers and all directors, if any, of the entity. Do not include any directors who have no power to select the entity's officers.

Officer/Director: David Roberts

Title: President & CEO

Role: Both

Officer/Director: Craig Conti

Title: Chief Financial Officer and Treasurer

Role: Both

Officer/Director: Raphael Avraham

Title: Secretary
Role: Officer

2. Ownership Information

Please confirm ownership information concerning each person or entity that having a direct or indirect beneficial interest in excess of 7.5% of the Disclosing Party (your entity). Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a limited lability company, or interest of a beneficiary of a trust, estate, or other similar entity. Note: Each legal entity below may be required to submit an EDS on its own behalf.

As reported by the Disclosing Party, the immediate owner(s) of the Disclosing Party is/ are listed below:

• Greenlight Acquisition Corporation - 100.0%

• Verra Mobility Corporation - 100.0%

Owner Details

Name Business Address

Greenlight Acquisition 1150 N Alma School

Corporation Mesa, AZ

United States

Verra Mobility Corporation 1150 N Alma School

Mesa, AZ United States

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

A. Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS?

No

B. Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS?

No

D. Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code ("MCC")) in the Disclosing Party?

No

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage of any child support obligations by any Illinois court of competent jurisdiction?

No

B. FURTHER CERTIFICATIONS

1. [This certification applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e. an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

I am unable to certify the above to be true

Explain:

Please see additional info tab.

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

I certify the above to be true

- 3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:
 - a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;

- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

I certify the above to be true

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapter 2-56 (Inspector General) and Chapter 2-156 (Governmental Ethics).

I certify the above to be true

- 5. Neither the Disclosing Party, nor any <u>Contractor</u>, nor any <u>Affiliated Entity</u> of either the Disclosing Party or any <u>Contractor</u>, nor any <u>Agents</u> have, during the 5 years before the date of this EDS, or, with respect to a <u>Contractor</u>, an <u>Affiliated Entity</u>, or an <u>Affiliated Entity</u> of a <u>Contractor</u> during the 5 years before the date of such <u>Contractor's</u> or <u>Affiliated Entity's</u> contract or engagement in connection with the Matter:
 - a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
 - agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
 - c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
 - d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

I certify the above to be true

- 6. Neither the Disclosing Party, nor any <u>Affiliated Entity</u> or <u>Contractor</u>, or any of their employees, officials, <u>agents</u> or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of
 - bid-rigging in violation of <u>720 ILCS 5/33E-3</u>;
 - bid-rotating in violation of <u>720 ILCS 5/33E-4</u>; or
 - any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

I certify the above to be true

7. Neither the Disclosing Party nor any <u>Affiliated Entity</u> is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

I certify the above to be true

11. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago.

None

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

The Disclosing Party certifies, as defined in MCC Section 2-32-455(b), the Disclosing Party

is not a "financial institution"

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

If the Disclosing Party cannot make this verification, the Disclosing Party must disclose all required information in the space provided below or in an attachment in the "Additional Info" tab. Failure to comply with these disclosure requirements may make

any contract entered into with the City in connection with the Matter voidable by the City.

The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

I can make the above verification

SECTION VII - FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

- A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

I acknowledge and consent to the above

The Disclosing Party understands and agrees that:

- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/ or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended

- to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. NOTE: With respect to Matters subject to MCC Chapter 1-23, Article I (imposing PERMANENT INELIGIBILITY for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

I acknowledge and consent to the above

APPENDIX A - FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS AND DEPARTMENT HEADS

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a, if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief

financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

No

APPENDIX B - BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416??

No

ADDITIONAL INFO

Please add any additional explanatory information here. If explanation is longer than 1000 characters, you may add an attachment below. Please note that your EDS, including all attachments, becomes available for public viewing upon contract award. Your attachments will be viewable "as is" without manual redaction by the City. You are responsible for redacting any non-public information from your documents before uploading.

List of attachments uploaded by vendor

Page 2.B.1 Additional Info

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable appendices, are true, accurate and complete as of the date furnished to the City. Submission of this form constitutes making the oath associated with notarization.

/s/ 04/01/2024 Cara Ann Williams Contracts Manager VM Consolidated, Inc.

This is a printed copy of the Economic Disclosure Statement, the original of which is filed electronically with the City of Chicago. Any alterations must be made electronically, alterations on this printed copy are void and of no effect.

Chicago EDS

Page 2. B.1. Additional Info

In 2019, we self-reported to New York City Department of Transportation (NYCDOT) that certain of our camera installation practices involving conduit depth and grounding wire fell short of our requirements and our own standards of excellence—though did not impact program performance. On March 22, 2021, Verra Mobility and the New York City Department of Investigation entered into a Certification and Monitor Agreement, pursuant to which, among other things, Verra Mobility agreed to complete remediation work, engaged an independent monitor, and agreed to comply with certain installation practices and to implement certain compliance measures required by NYCDOT. To date, all accessible sites have been remediated. The term of the Certification and Monitor Agreement ends upon the expiration of the current photo enforcement agreements between Verra Mobility and NYCDOT, which expires December 31, 2024. Verra Mobility has the right to petition to terminate the Certification and Monitor Agreement three years from March 22, 2021.



CITY OF CHICAGO ECONOMIC DISCLOSURE STATEMENT and AFFIDAVIT Related to Contract/Amendment/Solicitation EDS # 194116

SECTION I -- GENERAL INFORMATION

D. Name of contact person:

Cara Ann Williams

| A. Legal name of the Disclosing Party submitting the EDS: |
|---|
| Greenlight Acquisition Corporation |
| Enter d/b/a if applicable: |
| The Disclosing Party submitting this EDS is: |
| a legal entity currently holding an interest in the Applicant |
| The Disclosing Party holds an interest in |
| American Traffic Solutions, Inc. and EDS is 192995 |
| B. Business address of the Disclosing Party: |
| 1150 N Alma School Mesa, AZ 85201 United States |
| C. Telephone: |
| 210-268-0398 |
| Fax: |
| |

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

Privately held business corporation

Is the Disclosing Party incorporated or organized in the State of Illinois?

No

State or foreign country of incorporation or organization:

Delaware

Registered to do business in the State of Illinois as a foreign entity?

No

- B. DISCLOSING PARTY IS A LEGAL ENTITY:
- 1.a.1 Does the Disclosing Party have any directors?

Yes

1.a.3 List below the full names and titles of all executive officers and all directors, if any, of the entity. Do not include any directors who have no power to select the entity's officers.

Officer/Director: David Roberts

Title: President and CEO

Role: Both

Officer/Director: Craig Conti

Title: Chief Financial Officer and Treasurer

Role: Both

Officer/Director: Raphael Avraham

Title: Secretary
Role: Officer

2. Ownership Information

Please confirm ownership information concerning each person or entity that having a direct or indirect beneficial interest in excess of 7.5% of the Disclosing Party (your entity). Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a limited lability company, or interest of a beneficiary of a trust, estate, or other similar entity. Note: Each legal entity below may be required to submit an EDS on its own behalf.

As reported by the Disclosing Party, the immediate owner(s) of the Disclosing Party is/are listed below:

• Verra Mobility Corporation - 100.0%

Owner Details

Name Business Address

Verra Mobility Corporation 1150 N Alma School

Mesa, AZ United States

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

A. Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS?

No

B. Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS?

No

D. Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code ("MCC")) in the Disclosing Party?

No

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage of any child support obligations by any Illinois court of competent jurisdiction?

No

B. FURTHER CERTIFICATIONS

1. [This certification applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e. an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

I am unable to certify the above to be true

Explain:

See additional info tab attachment.

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

I certify the above to be true

- 3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:
 - a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
 - b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of

- federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

I certify the above to be true

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapter 2-56 (Inspector General) and Chapter 2-156 (Governmental Ethics).

I certify the above to be true

- 5. Neither the Disclosing Party, nor any <u>Contractor</u>, nor any <u>Affiliated Entity</u> of either the Disclosing Party or any <u>Contractor</u>, nor any <u>Agents</u> have, during the 5 years before the date of this EDS, or, with respect to a <u>Contractor</u>, an <u>Affiliated Entity</u>, or an <u>Affiliated Entity</u> of a <u>Contractor</u> during the 5 years before the date of such <u>Contractor's</u> or <u>Affiliated Entity's</u> contract or engagement in connection with the Matter:
 - a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
 - agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
 - c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
 - d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

I certify the above to be true

6. Neither the Disclosing Party, nor any <u>Affiliated Entity</u> or <u>Contractor</u>, or any of their employees, officials, <u>agents</u> or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of

- bid-rigging in violation of 720 ILCS 5/33E-3;
- bid-rotating in violation of <u>720 ILCS 5/33E-4</u>; or
- any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

I certify the above to be true

7. Neither the Disclosing Party nor any <u>Affiliated Entity</u> is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

I certify the above to be true

11. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago.

None

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

The Disclosing Party certifies, as defined in MCC Section 2-32-455(b), the Disclosing Party

is not a "financial institution"

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

If the Disclosing Party cannot make this verification, the Disclosing Party must disclose all required information in the space provided below or in an attachment in the "Additional Info" tab. Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

I can make the above verification

SECTION VII - FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

- A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

I acknowledge and consent to the above

The Disclosing Party understands and agrees that:

- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/ or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which

- it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. NOTE: With respect to Matters subject to MCC Chapter 1-23, Article I (imposing PERMANENT INELIGIBILITY for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

I acknowledge and consent to the above

APPENDIX A - FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS AND DEPARTMENT HEADS

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a, if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

No

APPENDIX B - BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

No

ADDITIONAL INFO

Please add any additional explanatory information here. If explanation is longer than 1000 characters, you may add an attachment below. Please note that your EDS, including all attachments, becomes available for public viewing upon contract award. Your attachments will be viewable "as is" without manual redaction by the City. You are responsible for redacting any non-public information from your documents before uploading.

List of attachments uploaded by vendor

Page 2.B.1 Additional Info

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable appendices, are true, accurate and complete as of the date furnished to the City. Submission of this form constitutes making the oath associated with notarization.

/s/ 04/01/2024 Cara Ann Williams Contracts Manager

Greenlight Acquisition Corporation

This is a printed copy of the Economic Disclosure Statement, the original of which is filed electronically with the City of Chicago. Any alterations must be made electronically, alterations on this printed copy are void and of no effect.

Chicago EDS

Page 2. B.1. Additional Info

In 2019, we self-reported to New York City Department of Transportation (NYCDOT) that certain of our camera installation practices involving conduit depth and grounding wire fell short of our requirements and our own standards of excellence—though did not impact program performance. On March 22, 2021, Verra Mobility and the New York City Department of Investigation entered into a Certification and Monitor Agreement, pursuant to which, among other things, Verra Mobility agreed to complete remediation work, engaged an independent monitor, and agreed to comply with certain installation practices and to implement certain compliance measures required by NYCDOT. To date, all accessible sites have been remediated. The term of the Certification and Monitor Agreement ends upon the expiration of the current photo enforcement agreements between Verra Mobility and NYCDOT, which expires December 31, 2024. Verra Mobility has the right to petition to terminate the Certification and Monitor Agreement three years from March 22, 2021.



CITY OF CHICAGO ECONOMIC DISCLOSURE STATEMENT and AFFIDAVIT Related to Contract/Amendment/Solicitation EDS # 194117

SECTION I -- GENERAL INFORMATION

D. Name of contact person:

Melissa Correa

| A. Legal name of the Disclosing Party submitting the EDS: |
|---|
| Verra Mobility Corporation |
| Enter d/b/a if applicable: |
| The Disclosing Party submitting this EDS is: |
| a legal entity currently holding an interest in the Applicant |
| The Disclosing Party holds an interest in |
| American Traffic Solutions, Inc. and EDS is 192995 |
| B. Business address of the Disclosing Party: |
| 1150 N Alma School Mesa, AZ 85201 United States |
| C. Telephone: |
| 904-469-1266 |
| Fax: |

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

Publicly registered business corporation

Is the Disclosing Party incorporated or organized in the State of Illinois?

No

State or foreign country of incorporation or organization:

Delaware

Registered to do business in the State of Illinois as a foreign entity?

No

- B. DISCLOSING PARTY IS A LEGAL ENTITY:
- 1.a.1 Does the Disclosing Party have any directors?

Yes

1.a.3 List below the full names and titles of all executive officers and all directors, if any, of the entity. Do not include any directors who have no power to select the entity's officers.

Officer/Director: David Roberts

Title: President and Chief Executive Officer

Role: Both

Officer/Director: John Rexford

Title: Director Role: Director

Officer/Director: Cynthia Russo Director

Title: Director
Role: Director

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Officer/Director: Douglas Davis

Title: Director Role: Director

Officer/Director: Patrick Byrne

Title: Chairman Role: Director

Officer/Director: Michael Huerta

Title: Director Role: Director

Officer/Director: Sarah Farrell
Title: Director
Role: Director

Officer/Director: Craig Conti

Title: Chief Financial Officer and Treasurer

Role: Officer

Officer/Director: Raphael Avraham
Title: Assistant Secretary

Role: Officer

Officer/Director: Jonathan Keyser

Title: Secretary
Role: Officer

2. Ownership Information

Please confirm ownership information concerning each person or entity that having a direct or indirect beneficial interest in excess of 7.5% of the Disclosing Party (your entity). Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a limited lability company, or interest of a beneficiary of a trust, estate, or other similar entity. Note: Each legal entity below may be required to submit an EDS on its own behalf.

As reported by the Disclosing Party, the immediate owner(s) of the Disclosing Party is/ are listed below:

• BlackRock Inc - 13.43%

• The Vanguard Group, Inc. - 10.23%

Owner Details

Name Business Address

BlackRock Inc Levl 18, 120 Collins Street

Melbourne, VIC

Australia

The Vanguard Group, Inc. 100 Vanguard Blvd.

Malvern, PA United States

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

A. Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS?

No

B. Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS?

No

D. Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code ("MCC")) in the Disclosing Party?

No

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage of any child support obligations by any Illinois court of competent jurisdiction?

No

B. FURTHER CERTIFICATIONS

1. [This certification applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this

EDS, neither the Disclosing Party nor any Affiliated Entity has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e. an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

I am unable to certify the above to be true

Explain:

See attached additional information.

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

I certify the above to be true

- 3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:
 - a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
 - b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
 - c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
 - d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
 - e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

I certify the above to be true

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC <u>Chapter 2-56 (Inspector General)</u> and <u>Chapter 2-156 (Governmental Ethics)</u>.

I certify the above to be true

- 5. Neither the Disclosing Party, nor any <u>Contractor</u>, nor any <u>Affiliated Entity</u> of either the Disclosing Party or any <u>Contractor</u>, nor any <u>Agents</u> have, during the 5 years before the date of this EDS, or, with respect to a <u>Contractor</u>, an <u>Affiliated Entity</u>, or an <u>Affiliated Entity</u> of a <u>Contractor</u> during the 5 years before the date of such <u>Contractor's</u> or <u>Affiliated Entity's</u> contract or engagement in connection with the Matter:
 - a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
 - agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
 - c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
 - d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

I certify the above to be true

- 6. Neither the Disclosing Party, nor any <u>Affiliated Entity</u> or <u>Contractor</u>, or any of their employees, officials, <u>agents</u> or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of
 - bid-rigging in violation of <u>720 ILCS 5/33E-3</u>;
 - bid-rotating in violation of 720 ILCS 5/33E-4; or
 - any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

I certify the above to be true

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

I certify the above to be true

11. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at

any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago.

None

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

The Disclosing Party certifies, as defined in MCC Section 2-32-455(b), the Disclosing Party

is not a "financial institution"

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

If the Disclosing Party cannot make this verification, the Disclosing Party must disclose all required information in the space provided below or in an attachment in the "Additional Info" tab. Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

I can make the above verification

SECTION VII - FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the

- City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

I acknowledge and consent to the above

The Disclosing Party understands and agrees that:

- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/ or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. NOTE: With respect to Matters subject to MCC Chapter 1-23, Article I (imposing PERMANENT INELIGIBILITY for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

I acknowledge and consent to the above

APPENDIX A - FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS AND DEPARTMENT HEADS

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a, if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

No

APPENDIX B - BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to Section 2-92-416 of the Municipal Code?

No

ADDITIONAL INFO

Please add any additional explanatory information here. If explanation is longer than 1000 characters, you may add an attachment below. Please note that your EDS, including all attachments, becomes available for public viewing upon contract award. Your attachments will be viewable "as is" without manual redaction by the City. You are responsible for redacting any non-public information from your documents before uploading.

Verra Mobility Corporation is registered with the Securities and Exchange Commission (SEC) and makes periodic filings under the Securities Exchange Act of 1934, as amended, and certain of its securities are registered under the Securities Act of 1933, as amended. Shares of Verra Mobility Class A Common Stock are traded on Nasdaq under the trading symbol VRRM. Verra Mobility Corporation has reported its beneficial ownership based on filings with the SEC. Verra Mobility Corporation has made its responses to the questions in this Economic Disclosure Statement as to itself and where applicable its subsidiaries. As a publicly traded entity, Verra Mobility Corporation does not make any representations in this Economic Disclosure Statement on behalf of its shareholders. Blackrock is not an investment advisor. The BlackRock 10K form attached is the most recent. See attached document for explanation on address discrepancy. Vanguard is an investment advisor company.

List of attachments uploaded by vendor

Page 2.B.1 Additional Info BlackRock 10K Form Vanguard ADV Form BlackRock Address Issues

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable appendices, are true, accurate and complete as of the date

furnished to the City. Submission of this form constitutes making the oath associated with notarization.

/s/ 04/11/2024 Cara Ann Williams Contracts Manager Verra Mobility Corporation

This is a printed copy of the Economic Disclosure Statement, the original of which is filed electronically with the City of Chicago. Any alterations must be made electronically, alterations on this printed copy are void and of no effect.

Chicago EDS

Page 2. B.1. Additional Info

In 2019, we self-reported to New York City Department of Transportation (NYCDOT) that certain of our camera installation practices involving conduit depth and grounding wire fell short of our requirements and our own standards of excellence—though did not impact program performance. On March 22, 2021, Verra Mobility and the New York City Department of Investigation entered into a Certification and Monitor Agreement, pursuant to which, among other things, Verra Mobility agreed to complete remediation work, engaged an independent monitor, and agreed to comply with certain installation practices and to implement certain compliance measures required by NYCDOT. To date, all accessible sites have been remediated. The term of the Certification and Monitor Agreement ends upon the expiration of the current photo enforcement agreements between Verra Mobility and NYCDOT, which expires December 31, 2024. Verra Mobility has the right to petition to terminate the Certification and Monitor Agreement three years from March 22, 2021.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

| (Mark One |) |
|-----------|---|
|-----------|---|

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2023 TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from Commission File No. 001-33099

BlackRock

BlackRock, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization) 32-0174431

(I.R.S. Employer Identification No.)

50 Hudson Yards, New York, NY 10001 (Address of Principal Executive Offices) (212) 810-5300

(Registrant's telephone number, including area code) Securities registered pursuant to Section 12(b) of the Act:

| Title of each class | Trading Symbol(s) | Name of each exchange on which registered |
|---|------------------------------------|---|
| Common Stock, \$.01 par value | BLK | New York Stock Exchange |
| 1.250% Notes due 2025 | BLK25 | New York Stock Exchange |
| Securities regis | tered pursuant to Section None | 12(g) of the Act: |
| Indicate by check mark if the registrant is a well-known, seasone | d issuer, as defined in Rule 405 o | f the Securities Act. Yes ⊠ No □ |
| Indicate by check mark if the registrant is not required to file repo | orts pursuant to Section 13 or Sec | ion 15(d) of the Act. Yes □ No ⊠ |
| Indicate by check mark whether the registrant (1) has filed all repreceding 12 months (or for such shorter period that the registr past 90 days. Yes \boxtimes No \square | | |
| Indicate by check mark whether the registrant has submitted ele S-T (§ 232.405 of this chapter) during the preceding 12 months (| , , | |

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ⊠ Accelerated filer □ Non-accelerated filer □ Smaller reporting company □

Emerging growth company □

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. 🗵

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. \Box

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). \square

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes 🗆 No 🗵

The aggregate market value of the voting common stock held by nonaffiliated of the vot

As of January 31, 2024, there were 148,942,491 shares of the registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents are incorporated by reference herein:

Portions of the definitive Proxy Statement of BlackRock, Inc. to be filed pursuant to Regulation 14A of the general rules and regulations under the Securities Exchange Act of 1934, as amended, for the 2024 annual meeting of stockholders ("Proxy Statement") are incorporated by reference into Part III of this Form 10-K.

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PART I

Item 1. Business

OVERVIEW

BlackRock, Inc. (together, with its subsidiaries, unless the context otherwise indicates, "BlackRock" or the "Company") is a leading publicly traded investment management firm with \$10.0 trillion of assets under management ("AUM") at December 31, 2023. With approximately 19,800 employees in more than 30 countries who serve clients in over 100 countries across the globe, BlackRock provides a broad range of investment management and technology services to institutional and retail clients worldwide.

BlackRock's diverse platform of alpha-seeking active, index and cash management investment strategies across asset classes enables the Company to offer choice and tailor investment and asset allocation solutions for clients. Product offerings include single- and multi-asset portfolios investing in equities, fixed income, alternatives and money market instruments. Products are offered directly and through intermediaries in a variety of vehicles, including open-end and closed-end mutual funds, iShares® and BlackRock exchange-traded funds ("ETFs"), separate accounts, collective trust funds and other pooled investment vehicles. BlackRock also offers technology services, including the investment and risk management technology platform, Aladdin®, Aladdin Wealth, eFront, and Cachematrix, as well as advisory services and solutions to a broad base of institutional and wealth management clients. The Company is highly regulated and manages its clients' assets as a fiduciary. The Company does not engage in proprietary trading activities that could conflict with the interests of its clients.

BlackRock serves a diverse mix of institutional and retail clients across the globe. Clients include tax-exempt institutions, such as defined benefit and defined contribution pension plans, charities, foundations and endowments; official institutions, such as central banks, sovereign wealth funds, supranationals and other government entities; taxable institutions, including insurance companies, financial institutions, corporations and third-party fund sponsors, and retail intermediaries.

BlackRock maintains a significant global sales and marketing presence that is focused on establishing and maintaining retail and institutional investment management and technology service relationships by marketing its services to investors directly and through third-party distribution relationships, including financial professionals and pension consultants.

BlackRock is an independent, publicly traded company, with no single majority shareholder and over 85% of its Board of Directors consisting of independent directors.

Management seeks to deliver value for stockholders over time by, among other things, capitalizing on BlackRock's differentiated competitive position, including:

- the Company's longstanding model of client choice, through which it offers a wide range of index, active, and whole portfolio solutions across broad markets, themes, regions, and investment styles:
- the Company's focus on strong investment performance, seeking the best risk-adjusted returns for client portfolios, within the mandates given by clients, to help them meet their investment objectives;
- the Company's research, data and analytics, which are at the center of BlackRock's investment approach and processes. They inform BlackRock's pursuit of the best risk-adjusted returns, and underpin product creation and innovation;
- the Company's global reach and commitment to best practices around the world, with approximately 55% of employees outside the United States ("US") serving clients locally and supporting local investment capabilities. Approximately 40% of total AUM is managed for clients domiciled outside the US:
- the Company's differentiated client relationships and fiduciary focus, which enable effective positioning toward changing client needs and industry trends including the secular shift to ETFs; growing allocations to private markets, such as infrastructure and private credit; increasing demand for outsourcing and whole portfolio solutions using index, active and illiquid alternatives products; anticipated reallocations to fixed income; demand for high-performing active strategies; interest in sustainable investment strategies; and a continued focus on income and retirement; and
- the Company's longstanding commitment to innovation, technology services and the continued development of, and increased interest in, BlackRock technology products and solutions, including Aladdin, Aladdin Wealth, eFront, and Cachematrix. This commitment is further extended by minority investments in financial technology and digital distribution providers, data and whole portfolio capabilities including Upvest, Avaloq, Human Interest, Circle, SpiderRock Advisors, Clarity AI, Envestnet, Acorns, Scalable Capital and iCapital.

BlackRock operates in a global marketplace impacted by changing market dynamics and economic uncertainty, factors that can significantly affect earnings and stockholder returns in any given period.

The Company's ability to increase revenue, earnings and stockholder value over time is predicated on its ability to generate new business, including business in Aladdin and other technology products and services. New business efforts depend on BlackRock's ability to achieve clients' investment objectives, in a manner consistent with their risk preferences, to deliver excellent client service and to innovate in technology to serve clients' evolving needs. All of these efforts require the commitment and contributions of BlackRock employees. Accordingly, the ability to attract, develop and retain qualified professionals is critical to the Company's long-term success.

FINANCIAL HIGHLIGHTS

(in millions, except per share data)

| GAAP: | 2023 | | 2022 | | 2021 | | 2020 | 2019 | |
|--|--------------|----|--------|----|--------|----|--------|------|--------|
| Total revenue | \$ 17,859 | \$ | 17,873 | \$ | 19,374 | \$ | 16,205 | \$ | 14,539 |
| Operating income | \$ 6,275 | \$ | 6,385 | \$ | 7,450 | \$ | 5,695 | \$ | 5,551 |
| Operating margin | 35.1 % | | 35.7 % | | 38.5 % | | 35.1 % | | 38.2 % |
| Nonoperating income (expense) ⁽¹⁾ | \$ 706 | \$ | 89 | \$ | 419 | \$ | 475 | \$ | 186 |
| Net income attributable to BlackRock, Inc. | \$ 5,502 | \$ | 5,178 | \$ | 5,901 | \$ | 4,932 | \$ | 4,476 |
| Diluted earnings per common share | \$ 36.51 | \$ | 33.97 | \$ | 38.22 | \$ | 31.85 | \$ | 28.43 |

(in millions, except per share data)

| As adjusted ⁽²⁾ : | 2023 | 2022 | 2021 | 2020 | 2019 |
|--|-------------|-------------|-------------|-------------|-------------|
| Operating income | \$ 6,593 | \$ 6,711 | \$ 7,747 | \$ 6,433 | \$ 5,784 |
| Operating margin | 41.7 % | 42.8 % | 46.8 % | 46.0 % | 45.5 % |
| Nonoperating income (expense) ⁽¹⁾ | \$ 648 | \$ 89 | \$ 419 | \$ 353 | \$ 186 |
| Net income attributable to BlackRock, Inc. | \$ 5,692 | \$ 5,391 | \$ 6,254 | \$ 5,352 | \$ 4,664 |
| Diluted earnings per common share | \$ 37.77 | \$ 35.36 | \$ 40.51 | \$ 34.57 | \$ 29.62 |

(1) Net of net income (loss) attributable to noncontrolling interests (redeemable and nonredeemable).

Beginning in the first quarter of 2022, BlackRock updated the definitions of operating income, as adjusted, operating margin, as adjusted, and net income attributable to BlackRock, Inc., as adjusted, to include new adjustments. Such measures have been recast for all prior periods to reflect the inclusion of such new adjustments. In addition, beginning in the first quarter of 2023, BlackRock updated the definitions of its non-GAAP financial measures to exclude the impact of market valuation changes on certain deferred cash compensation plans which the Company began economically hedging in 2023. For further information on non-GAAP financial measures and for as adjusted items for 2023 and 2022, see Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations — Non-GAAP Financial Measures. For further information on non-GAAP financial measures and for as adjusted items for 2021, 2020 and 2019, see Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations — Non-GAAP Financial Measures, of the Company's Annual Report on Form 10-K for the year ended December 31, 2022.

ASSETS UNDER MANAGEMENT

The Company's AUM by product type for the years 2019 through 2023 is presented below.

| | December 31, | | | | | | | | | | | |
|-----------------|------------------|----|-----------|----|------------|----|-----------|----|-----------|-------------------------------|--|--|
| (in millions) | 2023 | | 2022 | | 2021 | | 2020 | | 2019 | 5-Year CAGR ⁽¹⁾ | | |
| Equity | \$ 5,293,344 | \$ | 4,435,354 | \$ | 5,342,360 | \$ | 4,419,806 | \$ | 3,820,329 | 12 % | | |
| Fixed income | 2,804,026 | | 2,536,823 | | 2,822,041 | | 2,674,488 | | 2,315,392 | 8 % | | |
| Multi-asset | 870,804 | | 684,904 | | 816,494 | | 658,733 | | 568,121 | 14 % | | |
| Alternatives | 275,984 | | 266,210 | | 264,881 | | 235,042 | | 178,072 | 14 % | | |
| Long-term | 9,244,158 | | 7,923,291 | | 9,245,776 | | 7,988,069 | | 6,881,914 | 11 % | | |
| Cash management | 764,837 | | 671,194 | | 755,057 | | 666,252 | | 545,949 | 11 % | | |
| Advisory | _ | | _ | | 9,310 | | 22,359 | | 1,770 | _ | | |
| Total | \$ 10,008,995 | \$ | 8,594,485 | \$ | 10,010,143 | \$ | 8,676,680 | \$ | 7,429,633 | 11 % | | |

(1) Percentage represents compound annual growth rate ("CAGR") over a five-year period (December 31, 2018 – December 31, 2023).

Component changes in AUM by product type for the five years ended December 31, 2023 are presented below.

| (in millions) | December 31, 2018 | | Net inflows (outflows) Acquisitions ⁽¹⁾ | | | Market change | | | FX impact | | ecember 31, 2023 | |
|-----------------|----------------------|-----------|--|-----------|----|------------------|----|-----------|--------------|-----------|---------------------|------------|
| Equity | \$ | 3,035,825 | \$ | 272,642 | \$ | 41,324 | \$ | 2,015,984 | \$ | (72,431) | \$ | 5,293,344 |
| Fixed income | | 1,884,417 | | 1,044,744 | | _ | | (68,551) | | (56,584) | | 2,804,026 |
| Multi-asset | | 461,884 | | 243,942 | | _ | | 178,501 | | (13,523) | | 870,804 |
| Alternatives | | 143,358 | | 93,248 | | 2,177 | | 37,779 | | (578) | | 275,984 |
| Long-term | | 5,525,484 | | 1,654,576 | | 43,501 | | 2,163,713 | | (143,116) | | 9,244,158 |
| Cash management | | 448,565 | | 302,338 | | _ | | 11,654 | | 2,280 | | 764,837 |
| Advisory | | 1,769 | | (2,421) | | _ | | 618 | | 34 | | |
| Total | \$ | 5,975,818 | \$ | 1,954,493 | \$ | 43,501 | \$ | 2,175,985 | \$ | (140,802) | \$ | 10,008,995 |

⁽¹⁾ Amounts include the following: (a) net AUM from the acquisition of Aperio Group, LLC ("Aperio Transaction") in February 2021, and (b) net AUM from the acquisition of Kreos Capital in August 2023 (the "Kreos Transaction").

⁽²⁾ BlackRock reports its financial results in accordance with accounting principles generally accepted in the United States ("GAAP"); however, management believes evaluating the Company's ongoing operating results may be enhanced if investors have additional non-GAAP financial measures.

AUM represents the broad range of financial assets managed for clients on a discretionary basis pursuant to investment management and trust agreements that are expected to continue for at least 12 months. In general, reported AUM reflects the valuation methodology that corresponds to the basis used for determining revenue (for example, net asset value). Reported AUM does not include assets for which BlackRock provides risk management or other forms of nondiscretionary advice, or assets that the Company is retained to manage on a short-term, temporary basis.

Investment management fees are typically earned as a percentage of AUM. BlackRock also earns performance fees on certain portfolios relative to an agreed-upon benchmark or return hurdle. On some products, the Company also may earn securities lending revenue. In addition, BlackRock offers its proprietary Aladdin investment system as well as risk management, outsourcing, advisory and other technology services, to institutional investors and wealth management intermediaries. Revenue for these services may be based on several criteria including value of positions, number of users, implementation go-lives and software solution delivery and support.

At December 31, 2023, total AUM was \$10.0 trillion, representing a CAGR of 11% over the last five years. AUM growth during the period was achieved through the combination of net market valuation gains, net inflows and acquisitions, including the net AUM impact from the Aperio Transaction, which added \$41.3 billion of AUM in February 2021, and the Kreos Transaction, which added \$2.2 billion of AUM in August 2023. Our AUM mix encompasses a broadly diversified product range, as described below.

The Company considers the categorization of its AUM by client type, product type, investment style, and client region useful to understanding its business. The following discussion of the Company's AUM will be organized as follows:

| Client Type | Product Type | Investment Style | Client Region |
|-----------------------------------|-------------------------------------|----------------------------------|---|
| Retail | Equity | Active | Americas |
| • ETFs | Fixed Income | Index and ETFs | Europe, the Middle East and Africa ("EMEA") |
| Institutional | Multi-asset | | Asia-Pacific |
| | Alternatives | | |
| | Cash Management | | |

CLIENT TYPE

BlackRock serves a diverse mix of institutional and retail clients across the globe, with a regionally focused business model. BlackRock leverages the benefits of scale across global investment, risk and technology platforms while at the same time using local distribution presence to deliver solutions for clients. Furthermore, our structure facilitates strong teamwork globally across both functions and regions in order to enhance our ability to leverage best practices to serve our clients and continue to develop our talent.

Clients include tax-exempt institutions, such as defined benefit and defined contribution pension plans, charities, foundations and endowments; official institutions, such as central banks, sovereign wealth funds, supranationals and other government entities; taxable institutions, including insurance companies, financial institutions, corporations and third-party fund sponsors, and retail intermediaries.

ETFs are a growing component of both institutional and retail client portfolios. However, as ETFs are traded on exchanges, complete transparency on the ultimate end-client is unavailable. Therefore, ETFs are presented as a separate client type below, with investments in ETFs by institutions and retail clients excluded from figures and discussions in their respective sections.

AUM by investment style and client type at December 31, 2023 is presented below.

| (in millions) | Retail | ETFs | Institutional | Total | | |
|-----------------|---------------|-----------------|-----------------|------------------|--|--|
| Active | \$ 708,510 | \$ _ | \$ 1,912,668 | \$ 2,621,178 | | |
| Non-ETF Index | 221,187 | _ | 2,902,494 | 3,123,681 | | |
| ETFs | _ | 3,499,299 | _ | 3,499,299 | | |
| Long-term | 929,697 | 3,499,299 | 4,815,162 | 9,244,158 | | |
| Cash management | 9,142 | _ | 755,695 | 764,837 | | |
| Total | \$ 938,839 | \$ 3,499,299 | \$ 5,570,857 | \$ 10,008,995 | | |

Retail

BlackRock serves retail investors globally through a wide array of products across the investment spectrum, including separate accounts, openend and closed-end funds, unit trusts and private investment funds. Retail investors are served principally through intermediaries, including broker-dealers, banks, trust companies, insurance companies and independent financial advisors. Technology solutions, digital distribution tools and a shift toward portfolio construction are increasing the number of financial advisors and end-retail investors using BlackRock products.

Retail represented 10% of long-term AUM at December 31, 2023 and 31% of long-term investment advisory and administration fees (collectively "base fees") and securities lending revenue for 2023.

ETFs have a significant retail component but are shown separately below. With the exclusion of ETFs, the majority of retail AUM is comprised of active mutual funds. In the aggregate, active and index mutual funds totaled \$705 billion, or approximately 75%, of retail long-term AUM at year-end, with the remainder invested in private investment funds and separately managed accounts. Approximately 75% of retail long-term AUM is invested in active products.

Component changes in retail long-term AUM for 2023 are presented below.

| (in millions) | Dec | ember 31, 2022 | Net inflows (outflows) | Market change | FX impact | December 31, 2023 | | |
|---------------|-----|-------------------|------------------------|------------------|--------------|----------------------|---------|--|
| Equity | \$ | 370,612 | \$ 2,810 | \$ 58,248 | \$ 4,064 | \$ | 435,734 | |
| Fixed income | | 299,114 | (2,471) | 11,821 | 4,335 | | 312,799 | |
| Multi-asset | | 125,168 | (236) | 14,022 | 583 | | 139,537 | |
| Alternatives | | 48,581 | (8,576) | 1,286 | 336 | | 41,627 | |
| Total | \$ | 843,475 | \$ (8,473) | \$ 85,377 | \$ 9,318 | \$ | 929,697 | |

The retail client base is diversified geographically, with 69% of long-term AUM managed for investors based in the Americas, 26% in EMEA and 5% in Asia-Pacific at year-end 2023.

- <u>US retail</u> long-term net outflows of \$5 billion were driven by outflows from alternatives, fixed income and multi-asset of \$6 billion, \$2 billion and \$1 billion, respectively, partially offset by equity net inflows of \$5 billion. Alternatives and fixed income net outflows were primarily from rising-rate-sensitive strategies, including event driven, multi-strategy credit and unconstrained bond funds. Multi-asset net outflows were driven by world allocation and multi-asset income strategies. Equity net inflows of \$5 billion reflected flows in Aperio, BlackRock's customized index equity solution.
- <u>International retail</u> long-term net outflows of \$4 billion were driven by alternatives and equity net outflows of \$2 billion each, primarily due to redemptions from event driven and unconstrained strategies.

ETFs

BlackRock is the leading ETF provider in the world with \$3.5 trillion of AUM as of December 31, 2023. BlackRock generated ETF net inflows of \$186 billion in 2023. The majority of ETF AUM and net inflows represent the Company's index-tracking iShares-branded ETFs. The Company also offers active BlackRock-branded ETFs that seek outperformance and/or differentiated outcomes and certain iShares-branded ETFs that seek defined outcomes.

Fixed income ETF net inflows of \$112 billion were diversified across exposures, led by flows into treasury, core and corporate credit ETFs. Equity ETF net inflows of \$81 billion were driven by flows into core ETFs, as well as continued client use of BlackRock's broad-based precision exposure ETFs to express risk preferences and make tactical allocation changes during the year. Alternative ETFs had net outflows of \$6 billion, primarily driven by commodities funds.

ETFs represented 38% of long-term AUM at December 31, 2023 and 43% of long-term base fees and securities lending revenue for 2023.

Component changes in ETFs AUM for 2023 are presented below.

| (in millions) | De | cember 31, 2022 | Net inflows (outflows) | Market change | FX impact | December 31, 2023 | | |
|-----------------------------|----|--------------------|---------------------------|------------------|--------------|----------------------|-----------|--|
| Equity | \$ | 2,081,742 | \$ 81,223 | \$ 362,885 | \$ 6,781 | \$ | 2,532,631 | |
| Fixed income | | 758,093 | 111,956 | 24,544 | 3,810 | | 898,403 | |
| Multi-asset | | 8,875 | (746) | 949 | 62 | | 9,140 | |
| Alternatives ⁽¹⁾ | | 60,900 | (6,491) | 4,626 | 90 | | 59,125 | |
| Total | \$ | 2,909,610 | \$ 185,942 | \$ 393,004 | \$ 10,743 | \$ | 3,499,299 | |

(1) Amounts include commodity ETFs.

BlackRock's ETF product range offers investors a precise, transparent and efficient way to gain exposure to a full range of asset classes and global markets that have been difficult for many investors to access, as well as the liquidity required to make adjustments to their exposures quickly and cost-efficiently.

- <u>US ETF</u> AUM ended 2023 at \$2.6 trillion with \$103 billion of net inflows, led by net inflows into fixed income and core equity ETFs and partially offset by outflows from precision exposure ETFs.
- International ETF AUM ended 2023 at \$945 billion with \$83 billion of net inflows, diversified across product categories, and led by net inflows into fixed income, core equity and sustainable ETFs.
- * Regional ETF amounts based on jurisdiction of product, not underlying client.

Institutional

BlackRock serves institutional investors on six continents in sub-categories including: pensions, endowments and foundations, official institutions, and financial institutions; institutional AUM is diversified across product and region.

Component changes in institutional long-term AUM for 2023 are presented below.

| (in millions) | De- | cember 31, 2022 | et inflows outflows) | Ace | quisition ⁽¹⁾ | Market change | FX impact | De | ecember 31, 2023 |
|-----------------|-----|--------------------|-----------------------------|-----|--------------------------|------------------|--------------|----|---------------------|
| Active: | | | | | | | | | |
| Equity | \$ | 168,734 | \$ (13,301) | \$ | _ | \$ 29,088 | \$ 2,167 | \$ | 186,688 |
| Fixed income | | 774,955 | 4,714 | | _ | 53,538 | 3,616 | | 836,823 |
| Multi-asset | | 544,469 | 85,665 | | _ | 79,644 | 7,404 | | 717,182 |
| Alternatives | | 153,433 | 10,028 | | 2,177 | 4,925 | 1,417 | | 171,980 |
| Active subtotal | | 1,641,591 | 87,106 | | 2,177 | 167,195 | 14,604 | | 1,912,673 |
| Index: | | | | | | | | | |
| Equity | | 1,814,266 | (82,222) | | _ | 401,047 | 5,200 | | 2,138,291 |
| Fixed income | | 704,661 | 28,888 | | _ | 17,774 | 4,678 | | 756,001 |
| Multi-asset | | 6,392 | (1,896) | | _ | 559 | (110) | | 4,945 |
| Alternatives | | 3,296 | 105 | | _ | (138) | (11) | | 3,252 |
| Index subtotal | | 2,528,615 | (55,125) | | _ | 419,242 | 9,757 | | 2,902,489 |
| Total | \$ | 4,170,206 | \$ 31,981 | \$ | 2,177 | \$ 586,437 | \$ 24,361 | \$ | 4,815,162 |

⁽¹⁾ Amounts include AUM attributable to the Kreos Transaction.

<u>Institutional active</u> AUM ended 2023 at \$1.9 trillion, reflecting \$87 billion of net inflows, driven by the funding of several significant outsourcing mandates and continued growth in our *LifePath*® target-date and private markets platforms.

Multi-asset net inflows of \$86 billion reflected continued growth from significant pension outsourcing mandates and *LifePath* target-date offerings. Fixed income net inflows of \$5 billion similarly reflected the funding of insurance outsourcing mandates. Equity net outflows of \$13 billion were primarily from quantitative equity strategies.

Alternatives net inflows of \$10 billion were led by infrastructure, private credit and private equity. Excluding return of capital and investment of \$7 billion, alternatives net inflows were \$17 billion. At year-end, BlackRock had approximately \$32 billion of non-fee paying, unfunded, uninvested commitments to deploy for institutional clients, which is not included in AUM.

Institutional active represented 21% of long-term AUM and 19% of long-term base fees and securities lending revenue for 2023.

Institutional index AUM totaled \$2.9 trillion at December 31, 2023, reflecting \$55 billion of net outflows, driven by equities.

Institutional index represented 31% of long-term AUM and 7% of long-term base fees and securities lending revenue for 2023.

The Company's institutional clients consist of the following:

- <u>Pensions, Foundations and Endowments</u> BlackRock is among the world's largest managers of pension plan assets with \$3.0 trillion, or 63%, of long-term institutional AUM managed for defined benefit, defined contribution and other pension plans for corporations, governments and unions at December 31, 2023. The market landscape continues to shift from defined benefit to defined contribution, and our defined contribution channel represented \$1.5 trillion of total pension AUM. BlackRock remains well positioned for the on-going evolution of the defined contribution market and demand for outcome-oriented investments. An additional \$83 billion, or 2%, of long-term institutional AUM was managed for other tax-exempt investors, including charities, foundations and endowments.
- Official Institutions BlackRock managed \$272 billion, or 6%, of long-term institutional AUM for official institutions, including central banks, sovereign wealth funds, supranationals, multilateral entities and government ministries and agencies at year-end 2023. These clients often require specialized investment advice, the use of customized benchmarks and training support.
- <u>Financial and Other Institutions</u> BlackRock is a top independent manager of assets for insurance companies, which accounted for \$650 billion, or 13%, of long-term institutional AUM at year-end 2023. Assets managed for other taxable institutions, including corporations, banks and third-party fund sponsors for which the Company provides sub-advisory services, totaled \$773 billion, or 16%, of long-term institutional AUM at year-end.

CLIENT TYPE AND PRODUCT TYPE

Component changes in AUM by client type and product type for 2023 are presented below.

| (in millions) | De | cember 31, 2022 | et inflows outflows) | Acc | quisition ⁽¹⁾ | Market change | FX impact | De | ecember 31, 2023 |
|------------------------|----|--------------------|-------------------------|-----|--------------------------|------------------|--------------|----|---------------------|
| Retail: | | | | | | | | | |
| Equity | \$ | 370,612 | \$ 2,810 | \$ | _ | \$ 58,248 | \$ 4,064 | \$ | 435,734 |
| Fixed income | | 299,114 | (2,471) | | _ | 11,821 | 4,335 | | 312,799 |
| Multi-asset | | 125,168 | (236) | | _ | 14,022 | 583 | | 139,537 |
| Alternatives | | 48,581 | (8,576) | | _ | 1,286 | 336 | | 41,627 |
| Retail subtotal | | 843,475 | (8,473) | | _ | 85,377 | 9,318 | | 929,697 |
| ETFs: | | | | | | | | | |
| Equity | | 2,081,742 | 81,223 | | _ | 362,885 | 6,781 | | 2,532,631 |
| Fixed income | | 758,093 | 111,956 | | _ | 24,544 | 3,810 | | 898,403 |
| Multi-asset | | 8,875 | (746) | | _ | 949 | 62 | | 9,140 |
| Alternatives | | 60,900 | (6,491) | | _ | 4,626 | 90 | | 59,125 |
| ETFs subtotal | | 2,909,610 | 185,942 | | _ | 393,004 | 10,743 | | 3,499,299 |
| Institutional: | | | | | | | | | |
| Active: | | | | | | | | | |
| Equity | | 168,734 | (13,301) | | _ | 29,088 | 2,167 | | 186,688 |
| Fixed income | | 774,955 | 4,714 | | _ | 53,538 | 3,616 | | 836,823 |
| Multi-asset | | 544,469 | 85,665 | | _ | 79,644 | 7,404 | | 717,182 |
| Alternatives | | 153,433 | 10,028 | | 2,177 | 4,925 | 1,417 | | 171,980 |
| Active subtotal | | 1,641,591 | 87,106 | | 2,177 | 167,195 | 14,604 | | 1,912,673 |
| Index: | | | | | | | | | |
| Equity | | 1,814,266 | (82,222) | | _ | 401,047 | 5,200 | | 2,138,291 |
| Fixed income | | 704,661 | 28,888 | | _ | 17,774 | 4,678 | | 756,001 |
| Multi-asset | | 6,392 | (1,896) | | _ | 559 | (110) | | 4,945 |
| Alternatives | | 3,296 | 105 | | _ | (138) | (11) | | 3,252 |
| Index subtotal | | 2,528,615 | (55,125) | | _ | 419,242 | 9,757 | | 2,902,489 |
| Institutional subtotal | | 4,170,206 | 31,981 | | 2,177 | 586,437 | 24,361 | | 4,815,162 |
| Long-term | | 7,923,291 | 209,450 | | 2,177 | 1,064,818 | 44,422 | | 9,244,158 |
| Cash management | | 671,194 | 79,245 | | _ | 8,732 | 5,666 | | 764,837 |
| Total | \$ | 8,594,485 | \$ 288,695 | \$ | 2,177 | \$ 1,073,550 | \$ 50,088 | \$ | 10,008,995 |

⁽¹⁾ Amounts include AUM attributable to the Kreos Transaction.

Long-term product offerings include active and index strategies. Our active strategies seek to earn attractive returns in excess of a market benchmark or performance hurdle while maintaining an appropriate risk profile and leverage fundamental research and quantitative models to drive portfolio construction. In contrast, index strategies seek to closely track the returns of a corresponding index, generally by investing in substantially the same underlying securities within the index or in a subset of those securities selected to approximate a similar risk and return profile of the index. Index products include both our non-ETF index products and ETFs.

Although many clients use both active and index strategies, the application of these strategies may differ. For example, clients may use index products to gain exposure to a market or asset class or may use a combination of index strategies to target active returns. In addition, institutional non-ETF index assignments tend to be very large (multi-billion dollars) and typically reflect low fee rates. Net flows in institutional index products generally have a small impact on BlackRock's revenues and earnings.

Equity

Year-end 2023 equity AUM totaled \$5.3 trillion, reflecting net outflows of \$11 billion. Net outflows included \$27 billion and \$66 billion out of active and non-ETF index, respectively, partially offset by ETF net inflows of \$81 billion.

BlackRock's effective fee rates fluctuate due to changes in AUM mix. Approximately half of BlackRock's equity AUM is tied to international market strategies, including emerging markets, which tend to have higher fee rates than US equity strategies. Accordingly, fluctuations in international equity markets, which may not consistently move in tandem with US markets, have a greater impact on BlackRock's equity revenues and effective fee rate.

Equity represented 58% of long-term AUM and 53% of long-term base fees and securities lending revenue for 2023.

Fixed Income

Fixed income AUM ended 2023 at \$2.8 trillion, reflecting net inflows of \$143 billion. Net inflows included \$112 billion and \$32 billion into ETFs and non-ETF index, respectively, partially offset by \$1 billion of net outflows from active. Fixed income ETF net inflows of \$112 billion reflected the benefit of our diverse product offering and included strong flows into treasury, core and corporate credit ETFs.

Fixed income represented 30% of long-term AUM and 26% of long-term base fees and securities lending revenue for 2023.

Multi-Asset

BlackRock manages a variety of multi-asset funds and bespoke mandates for a diversified client base that leverages our broad investment expertise in global equities, bonds, and alternatives, and our extensive risk management capabilities. Investment solutions may include a combination of long-only portfolios and alternative investments as well as tactical asset allocation overlays.

Multi-asset represented 9% of long-term AUM and 9% of long-term base fees and securities lending revenue for 2023.

Component changes in multi-asset AUM for 2023 are presented below.

| (in millions) | De | ecember 31, 2022 | Net inflows (outflows) | Market change | FX impact | December 31, 2023 | | |
|-------------------------------|----|---------------------|---------------------------|------------------|--------------|----------------------|---------|--|
| Target date/risk | \$ | 370,840 | \$ 49,279 | \$ 67,091 | \$ 1,926 | \$ | 489,136 | |
| Asset allocation and balanced | | 201,172 | 23,059 | 20,300 | 1,596 | | 246,127 | |
| Fiduciary | | 112,892 | 10,449 | 7,783 | 4,417 | | 135,541 | |
| Total | \$ | 684,904 | \$ 82,787 | \$ 95,174 | \$ 7,939 | \$ | 870,804 | |

Multi-asset net inflows reflected ongoing institutional demand for our solutions-based advice with \$84 billion of net inflows coming from institutional clients, including the funding of several significant outsourcing mandates. Defined contribution plans remained a significant driver of flows and contributed \$30 billion to institutional multi-asset net inflows in 2023, primarily into target date and target risk product offerings.

The Company's multi-asset strategies include the following:

- <u>Target date and target risk strategies</u> generated net inflows of \$49 billion. Institutional investors represented 90% of target date and target risk AUM, with defined contribution plans representing 81% of AUM. Flows were driven by defined contribution investments in our *LifePath* offerings. *LifePath* products utilize a proprietary active asset allocation model that seeks to balance risk and return over an investment horizon based on the investor's expected retirement timing. Underlying investments are primarily index products.
- <u>Asset allocation and balanced strategies</u> generated \$23 billion of net inflows. These strategies combine equity, fixed income and alternative
 components for investors seeking a tailored solution relative to a specific benchmark and within a risk budget. In certain cases, these
 strategies seek to minimize downside risk through diversification, derivatives strategies and tactical asset allocation decisions. Flows in this
 category included pension outsourcing mandates that funded during the year. Flagship products also include our Global Allocation and
 Multi-Asset Income fund families.
- <u>Fiduciary management services</u> are complex mandates in which pension plan sponsors or endowments and foundations retain BlackRock to assume responsibility for some or all aspects of investment management, often with BlackRock acting as outsourced chief investment officer. These customized services require strong partnership with the clients' investment staff and trustees in order to tailor investment strategies to meet client-specific risk budgets and return objectives.

Alternatives

BlackRock alternatives focus on sourcing and managing high-alpha investments with lower correlation to public markets and developing a holistic approach to address client needs in alternatives investing. Our alternatives products fall into three main categories — (1) illiquid alternatives, (2) liquid alternatives, and (3) currency and commodities. Illiquid alternatives include offerings in infrastructure, opportunistic and credit, private equity, real estate and alternative solutions. Liquid alternatives include offerings in direct hedge funds and hedge fund solutions (funds of funds).

In 2023, liquid and illiquid alternatives generated a combined \$2 billion of net inflows, or \$10 billion excluding return of capital / return on investment of \$8 billion. The largest contributors to return of capital / return on investment were opportunistic and credit strategies, infrastructure and private equity solutions. Net inflows were driven by infrastructure, opportunistic and credit strategies and private equity. At year-end, BlackRock had approximately \$32 billion of non-fee paying, unfunded, uninvested commitments, which are expected to be deployed in future years; these commitments are not included in AUM or flows until they are fee-paying. Currency and commodities saw \$7 billion of net outflows, primarily from commodities ETFs.

BlackRock believes that as alternatives become more conventional and investors adapt their asset allocation strategies, investors will further increase their use of alternative investments to complement core holdings. BlackRock's highly diversified alternatives franchise is well positioned to continue to meet growing demand from both institutional and retail investors.

Alternatives represented 3% of long-term AUM and 12% of long-term base fees and securities lending revenue for 2023.

In the first quarter of 2024, BlackRock announced that it had entered into an agreement to acquire Global Infrastructure Management LLC (referred to herein as Global Infrastructure Partners ("GIP")), a leading independent infrastructure manager with over \$100 billion in client AUM as of September 30, 2023. GIP specializes in investing in, owning and operating assets across the energy, transport, digital infrastructure and water and waste management sectors. The transaction is expected to close in the third quarter of 2024, subject to customary regulatory approvals and other closing conditions.

Component changes in alternatives AUM for 2023 are presented in the table below.

| <i>(</i> | De | cember 31, 2022 | | Net nflows utflows) | ٨٠٠ | quisition ⁽¹⁾ | | Market | | FX | Dec | cember 31, 2023 | re | lemo: turn of apital/ stment ⁽²⁾ | Memo: committed capital ⁽³⁾ |
|---|----|--------------------|----|---------------------------|-----|--------------------------|----|---------|----|-------|-----|--------------------|-------|--|--|
| (in millions) Illiquid alternatives: | | 2022 | (0 | utilows) | ACC | quisition. | | change | | mpact | | 2023 | ilive | sunenc | сарнаг |
| Alternative solutions | \$ | 6,645 | \$ | 504 | \$ | _ | \$ | 63 | \$ | 102 | \$ | 7,314 | \$ | (565) | \$ 5,599 |
| Private equity and opportunistic: | Ψ | 0,010 | Ÿ | 001 | Ψ | | Ψ | 00 | Ÿ | 102 | • | 1,014 | Ψ | (000) | Ψ 0,000 |
| Private equity solutions | | 21,500 | | 3,443 | | _ | | (126) | | 65 | | 24,882 | | (1,829) | 6,913 |
| Opportunistic and credit strategies | | 24,842 | | 3,887 | | 2,177 | | (125) | | 347 | | 31,128 | | (2,826) | 3,075 |
| Long Term Private Capital | | 6,620 | | 4 | | _ | | 3,702 | | _ | | 10,326 | | _ | |
| Private equity and opportunistic subtotal | | 52,962 | | 7,334 | | 2,177 | | 3,451 | | 412 | | 66,336 | | (4,655) | 9,988 |
| Real assets: | | | | | | | | | | | | | | | |
| Real estate | | 28,596 | | 43 | | _ | | (1,523) | | 442 | | 27,558 | | (515) | 378 |
| Infrastructure | | 29,548 | | 5,784 | | _ | | (106) | | 475 | | 35,701 | | (1,961) | 14,983 |
| Real assets subtotal | | 58,144 | | 5,827 | | _ | | (1,629) | | 917 | | 63,259 | | (2,476) | 15,361 |
| Total illiquid alternatives | | 117,751 | | 13,665 | | 2,177 | | 1,885 | | 1,431 | | 136,909 | | (7,696) | 30,948 |
| Liquid alternatives: | | | | | | | | | | | | | | | |
| Direct hedge fund strategies | | 51,972 | | (9,224) | | _ | | 3,200 | | 370 | | 46,318 | | _ | _ |
| Hedge fund solutions | | 28,682 | | (2,146) | | _ | | 1,348 | | 31 | | 27,915 | | (324) | 765 |
| Total Liquid alternatives | | 80,654 | | (11,370) | | _ | | 4,548 | | 401 | | 74,233 | | (324) | 765 |
| Currency and commodities | | 67,805 | | (7,229) | | _ | | 4,266 | | _ | | 64,842 | | _ | |
| Total | \$ | 266,210 | \$ | (4,934) | \$ | 2,177 | \$ | 10,699 | \$ | 1,832 | \$ | 275,984 | \$ | (8,020) | \$ 31,713 |

⁽¹⁾ Amounts include AUM attributable to the Kreos Transaction.

Illiquid Alternatives

The Company's illiquid alternatives strategies include the following:

- Real Assets which includes infrastructure and real estate, totaled \$63 billion in AUM, reflecting net inflows of \$6 billion, led by infrastructure.
- Private Equity and Opportunistic included AUM of \$31 billion in opportunistic and credit offerings, \$25 billion in private equity solutions, and \$10 billion in Long Term Private Capital ("LTPC"). Net inflows of \$7 billion into private equity and opportunistic strategies included \$4 billion of net inflows into opportunistic and credit offerings and \$3 billion of net inflows into private equity solutions.
- <u>Alternative Solutions</u> represents highly customized portfolios of alternative investments. Alternative solutions portfolios had \$7 billion in AUM at December 31, 2023, reflecting \$0.5 billion of net inflows.

Liquid Alternatives

The Company's liquid alternatives products' net outflows of \$11 billion reflected redemptions from direct hedge funds, mainly from retail event driven and multi-strategy credit funds. Direct hedge fund strategies includes a variety of single- and multi-strategy offerings.

In addition, the Company manages \$84 billion in liquid credit strategies which is included in active fixed income.

Currency and Commodities

The Company's currency and commodities products include a range of active and index products.

Currency and commodities products had \$7 billion of net outflows, primarily from ETFs. Commodities ETFs represented \$59 billion of AUM and are not eligible for performance fees.

Cash Management

Cash management AUM totaled a record \$765 billion at December 31, 2023, reflecting \$79 billion of net inflows. Cash management products include taxable and tax-exempt money market funds, short-term investment funds and customized separate accounts. Portfolios are denominated in US dollars, Canadian dollars, Australian dollars, euros, Swiss francs, New Zealand dollars or British pounds.

⁽²⁾ Return of capital/investment is included in outflows.

⁽³⁾ Amount represents client assets that are uninvested commitments, which are currently non-fee paying and are not included in AUM. These commitments are expected to generate fees and will be counted in AUM and flows as the capital is deployed over time.

CLIENT REGION

Our footprints in the Americas, EMEA and Asia-Pacific regions reflect strong relationships with intermediaries and an established ability to deliver our global investment expertise in funds and other products tailored to local regulations and requirements.

AUM by product type and client region at December 31, 2023 is presented below.

| (in millions) | Americas | | | As | sia-Pacific | Total | | |
|-----------------|-----------------|----|-----------|----|-------------|-------|------------|--|
| Equity | \$ 3,660,686 | \$ | 1,227,394 | \$ | 405,264 | \$ | 5,293,344 | |
| Fixed income | 1,740,218 | | 755,240 | | 308,568 | | 2,804,026 | |
| Multi-asset | 627,582 | | 197,128 | | 46,094 | | 870,804 | |
| Alternatives | 148,944 | | 95,622 | | 31,418 | | 275,984 | |
| Long-term | 6,177,430 | | 2,275,384 | | 791,344 | | 9,244,158 | |
| Cash management | 550,880 | | 203,426 | | 10,531 | | 764,837 | |
| Total | \$ 6,728,310 | \$ | 2,478,810 | \$ | 801,875 | \$ | 10,008,995 | |

Component changes in AUM by client region for 2023 are presented below.

| (in millions) | December 31, millions) 2022 | | et inflows outflows) | Acquisition ⁽¹⁾ | | | Market change | | FX impact | | December 31, 2023 | | |
|---------------|-----------------------------|-----------|-------------------------|----------------------------|-------|----|------------------|----|--------------|----|----------------------|--|--|
| Americas | \$ | 5,782,223 | \$ 177,249 | \$ | _ | \$ | 757,788 | \$ | 11,050 | \$ | 6,728,310 | | |
| EMEA | | 2,137,442 | 65,171 | | 2,177 | | 210,475 | | 63,545 | | 2,478,810 | | |
| Asia-Pacific | | 674,820 | 46,275 | | _ | | 105,287 | | (24,507) | | 801,875 | | |
| Total | \$ | 8,594,485 | \$ 288,695 | \$ | 2,177 | \$ | 1,073,550 | \$ | 50,088 | \$ | 10,008,995 | | |

⁽¹⁾ Amounts include AUM attributable to the Kreos Transaction.

Americas

Americas net inflows of \$177 billion were driven by net inflows into fixed income, multi-asset, cash, and equity of \$83 billion, \$60 billion, \$39 billion, and \$4 billion, respectively. These were partially offset by alternative net outflows of \$9 billion, primarily from US mutual funds. During the year, BlackRock served clients through offices across the US as well as in Canada, Mexico, Brazil, Colombia, Chile and the Dominican Republic. The Americas represented 67% of total AUM and 65% of total base fees and securities lending revenue for 2023.

FMFΔ

EMEA net inflows of \$65 billion were driven by cash, fixed income, multi-asset, and alternatives net inflows of \$38 billion, \$27 billion, \$23 billion, and \$3 billion, respectively. These were partially offset by equity net outflows of \$26 billion, which included a \$19 billion single institutional client redemption from a low-fee index mandate in the third quarter. Offerings include fund families in the United Kingdom ("UK"), the Netherlands, Luxembourg and Dublin and ETFs listed on stock exchanges throughout Europe, as well as separate accounts and pooled investment products.

EMEA represented 25% of total AUM and 29% of total base fees and securities lending revenue for 2023.

Asia-Pacific

Asia-Pacific net inflows of \$46 billion were primarily due to fixed income and equity net inflows of \$34 billion and \$11 billion, respectively. Clients in the Asia-Pacific region are served through offices in Japan, Australia, Hong Kong, Singapore, Taiwan, Korea, China, and India.

Asia-Pacific represented 8% of total AUM and 6% of total base fees and securities lending revenue for 2023.

INVESTMENT PERFORMANCE

Investment performance across active and index products as of December 31, 2023 was as follows:

| | One-year period | Three-year period | Five-year period |
|---|--------------------|----------------------|---------------------|
| Fixed income: | | - | - |
| Actively managed AUM above benchmark or peer median | | | |
| Taxable | 84% | 78% | 92% |
| Tax-exempt | 75% | 61% | 45% |
| Index AUM within or above applicable tolerance | 98% | 97% | 97% |
| Equity: | | | |
| Actively managed AUM above benchmark or peer median | | | |
| Fundamental | 69% | 47% | 87% |
| Systematic | 87% | 83% | 89% |
| Index AUM within or above applicable tolerance | 96% | 99% | 100% |

Performance Notes

Past performance is not indicative of future results. Except as specified, the performance information shown is as of December 31, 2023 and is based on preliminary data available at that time. The performance data shown reflects information for all actively and passively managed equity and fixed income accounts, including US registered investment companies, European-domiciled retail funds and separate accounts for which performance data is available, including performance data for high net worth accounts available as of November 30, 2023. The performance data does not include accounts terminated prior to December 31, 2023 and accounts for which data has not yet been verified. If such accounts had been included, the performance data provided may have substantially differed from that shown.

Performance comparisons shown are gross-of-fees for institutional and high net worth separate accounts, and net-of-fees for retail funds. The performance tracking shown for index accounts is based on gross-of-fees performance and includes all institutional accounts and all iShares funds globally using an index strategy. AUM information is based on AUM available as of December 31, 2023 for each account or fund in the asset class shown without adjustment for overlapping management of the same account or fund. Fund performance reflects the reinvestment of dividends and distributions.

| Performance shown | is derived fron | n applicable | benchmarks of | r peer m | edian information, | as selected by | BlackRock. | Peer medians | are based ir |
|-------------------------|-----------------|--------------|------------------|-----------|--------------------|----------------|------------|--------------|--------------|
| part on data either fro | om Lipper, Inc. | or Mornings | tar, Inc. for ea | ch includ | ed product. | • | | | |

TECHNOLOGY SERVICES

BlackRock offers investment management technology systems, risk management services, and wealth management and digital distribution tools on a fee basis. Aladdin is our proprietary technology platform, providing an end-to-end, SaaS solution for investment and risk management for both BlackRock and a growing number of institutional and retail investors around the world. BlackRock offers risk reporting capabilities via Aladdin Risk, as well as investment accounting capabilities. Aladdin Provider is a tool used by asset servicers, connecting them to the platform used by asset managers and owners to add operational efficiency. In 2019, BlackRock acquired eFront, a leading end-to-end alternative investment management software and solutions provider to enable clients to manage portfolios and risk across public and private asset classes on a single platform. eFront is offered to clients both as a standalone offering and as part of an integrated "Whole Portfolio View" solution that provides transparency across clients' public and private assets. Through our Cachematrix platform, BlackRock is also a leading provider of financial technology which simplifies the cash management process for banks and their corporate clients in a streamlined, open-architecture platform.

BlackRock offers a number of wealth management technology tools offering personalized digital advice, portfolio construction capabilities and risk analytics for retail distributors. These tools include Aladdin Wealth, which provides wealth management firms and their financial professionals with institutional-quality business management, portfolio construction, modeling and risk analytics capabilities.

At year-end, BlackRock technology services clients included banks, insurance companies, official institutions, pension funds, asset managers, asset servicers, retail distributors and other investors across North America, South America, Europe, the Middle East, Asia, Africa and Australia.

Technology services revenue of \$1.5 billion was up 9% year-over-year, and annual contract value ("ACV") increased 10% year-over-year. ACV growth was driven by strong net sales of Aladdin in 2023, with over half of new client mandates spanning multiple Aladdin products. Aladdin assignments are typically long-term contracts that provide recurring revenue. At the end of any period, BlackRock generally has recurring revenue contracts in place for a large portion of total annual revenue. BlackRock measures the fees related to these agreements and refers to this as ACV. For further information on ACV, see Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations — Non-GAAP Financial Measures.

Aladdin, which represented the majority of technology services revenue for the year, continues to benefit from trends favoring global platform consolidation and multi-asset risk solutions across public and private markets. Approximately 25% of Aladdin's revenue was denominated in non-US currencies. In addition, while Aladdin is a multi-asset system, the majority of positions managed on the platform are fixed income. 2023 technology services revenue growth reflected headwinds associated with 2022 bond market declines on Aladdin's fixed income platform assets.

BlackRock is focused on enhancing Aladdin, with continued investment into areas such as whole portfolio, private markets, wealth and sustainable investing solutions. BlackRock continues to evolve and enable clients to further simplify their operating infrastructure with Aladdin. Clients increasingly want to tailor how they use Aladdin to meet their specific needs, and BlackRock is providing them with choice and flexibility. BlackRock is empowering clients with data and opening Aladdin by creating connectivity with ecosystem providers and third-party technology solutions, which include asset servicers, cloud providers, digital asset platforms, trading systems and others. This connectivity helps clients work in their Aladdin environments with a more customized and seamless end-to-end experience.

In addition, BlackRock has made minority investments in financial technology and digital distribution providers, data and whole portfolio capabilities including Upvest, Avaloq, Human Interest, Circle, SpiderRock Advisors, Clarity AI, Envestnet, Acorns, Scalable Capital and iCapital. BlackRock records its share of income related to minority investments accounted for under the equity method in other revenue and records gains and losses related to changes in value of other minority investments in nonoperating income (expense).

SECURITIES LENDING

Securities lending is managed by a dedicated team, supported by quantitative analysis, proprietary technology and disciplined risk management. BlackRock receives both cash (primarily for US domiciled portfolios) and noncash collateral under securities lending arrangements. The cash management team invests the cash received as collateral for securities on loan in other portfolios. Fees for securities lending for US domiciled portfolios can be structured as a share of earnings, or as a management fee based on a percentage of the value of the cash collateral or both. The value of the securities on loan and the revenue earned are captured in the corresponding asset class being managed. The value of the collateral is not included in AUM.

Outstanding loan balances ended the year at approximately \$359 billion, up from \$355 billion at year-end 2022. More demand for general collateral securities resulted in slightly higher balances year over year. Intrinsic lending spreads increased and cash reinvestment spreads remained flat as cash yields were stable year over year.

BlackRock employs a conservative investment style for cash and securities lending collateral that emphasizes quality, liquidity, and interest rate risk management. Disciplined risk management, including a rigorous credit surveillance process, is an integral part of the investment process. BlackRock's Cash Management Credit Committee has established risk limits, such as aggregate issuer exposure limits and maturity limits, across many of the products BlackRock manages, including over all of its cash management products. In the ordinary course of our business, there may be instances when a portfolio may exceed an internal risk limit or when an internal risk limit may be changed. No such instances, individually or in the aggregate, have been material to the Company. To the extent that daily evaluation and reporting of the portfolios identify that a limit has been exceeded, the relevant portfolio will be adjusted. To the extent a portfolio manager would like to obtain a temporary waiver of a risk limit, the portfolio manager must obtain approval from the credit research team, which is independent from the cash management portfolio managers. While a risk limit may be waived temporarily, such waivers are infrequent.

RISK AND QUANTITATIVE ANALYSIS

Across all asset classes, in addition to the efforts of the portfolio management teams, the Risk and Quantitative Analysis ("RQA") group at BlackRock draws on extensive analytical systems and proprietary and third-party data to identify, measure and manage a wide range of risks. RQA provides risk management advice and independent risk oversight of the investment management processes, identifies and helps manage counterparty and enterprise risks, coordinates standards for firm wide investment performance measurement and determines risk management-related analytical and information requirements. Where appropriate, RQA will work with portfolio managers and developers to facilitate the development or improvement of risk models and analytics.

COMPETITION

BlackRock competes with investment management firms, mutual fund complexes, insurance companies, banks, brokerage firms, financial technology providers and other financial institutions that offer products that are similar to, or alternatives to, those offered by BlackRock. In order to grow its business, BlackRock must be able to compete effectively for AUM. Key competitive factors include investment performance track records, the efficient delivery of beta for index products, investment style and discipline, price, client service and brand name recognition. Historically, the Company has competed principally on the basis of its long-term investment performance track record, its investment process, its risk management and analytic capabilities and the quality of its client service.

HUMAN CAPITAL

With approximately 19,800 employees in more than 30 countries, as of December 31, 2023, BlackRock provides a broad range of investment management and technology services to institutional and retail clients in more than 100 countries across the globe. As an asset manager, BlackRock's long-term success depends on its people and how it manages its workforce.

Culture and Principles

BlackRock believes that maintaining a strong corporate culture is an important component of its human capital management practices and critical to the firm's long-term success. BlackRock's culture is underpinned by five core principles that unify its workforce and guide how it interacts with its employees, its clients, the communities in which it operates and its other stakeholders: (1) We are a fiduciary to our clients; (2) We are One BlackRock; (3) We are passionate about performance; (4) We take emotional ownership; and (5) We are committed to a better future.

Diversity, Equity and Inclusion ("DEI")

BlackRock believes a diverse workforce with an inclusive and connected culture is a commercial imperative and indispensable to its success. Ultimately, a dynamic, inclusive organization allows BlackRock to attract and retain top talent around the world and to stay ahead of its clients' needs.

BlackRock's three pillar DEI strategy is aligned with the firm's business priorities and long-term objectives. The three pillars are (1) talent and culture across the globe, which focuses on attracting, developing and retaining top talent by cultivating an inclusive work environment where employees have fair access to opportunities and feel seen, heard, valued and respected, (2) activities to support interested clients, which focus on expanding investment choices and business partnership opportunities with brokers, managers, and suppliers, and (3) impact in underserved communities, which focuses on helping more and more people experience financial well-being through BlackRock philanthropy and employee-led volunteer efforts.

BlackRock views transparency and measurement as critical to its strategy. Since 2020, the firm has published annual SASB-aligned disclosure and EEO-1 reports, and since 2022, a Global DEI Annual Report. As of January 1, 2024, of the Company's employees who self-identified their gender status, approximately 44% of the Company's global workforce, 33% of global senior leaders (Directors or above) and 47% of global new hires, were women. Additionally, as of January 1, 2024, of the Company's US employees who self-identified their race/ethnicity status, approximately 8% of employees, 4% of senior leaders and 10% of new hires identified as Black or African American, 8% of employees, 5% of senior leaders and 16% of new hires identified as Latinx, and 28% of employees, 21% of senior leaders and 30% of new hires identified as Asian. Further, of the Company's approximately 19,800 employees as of December 31, 2023, 46% were based in the Americas, 31% were based in EMEA and 23% were based in Asia-Pacific regions.

Board Oversight of Human Capital Management

BlackRock's Board of Directors (the "Board") plays an important role in the oversight of human capital management and devotes one Board meeting annually to an in-depth review of BlackRock's culture, talent development, retention and recruiting initiatives, DEI strategy, leadership and succession planning and employee feedback. Moreover, the Board's Management Development and Compensation Committee periodically reviews efforts and developments related to the firm's human capital management strategy.

Succession planning for BlackRock's Chief Executive Officer and other senior executives is a key part of the Board's annual review of human capital management issues. As part of this review, the Board focuses on whether BlackRock has the right people in place to execute the Company's long-term strategic plans, and on BlackRock's ability to identify, attract, develop, promote and retain future senior executives. An important element of the succession planning across the organization is a commitment to building leadership from within.

Employee Engagement

BlackRock values continuous dialogue with its employees to better understand their experiences at the firm and assess the efficacy of its human capital management practices. The Company uses several employee engagement mechanisms, including: (1) employee opinion pulse surveys; (2) interactive events and communications; (3) the sponsorship of employee networks; and (4) local community involvement. The employee opinion pulse surveys, which BlackRock conducts throughout the year, provide the Company with actionable feedback for its teams and for the Company as a whole. Additionally, BlackRock uses ongoing lifecycle surveys to collect feedback at various points along the employee journey. BlackRock works to keep employees informed and engaged through a regular cadence of communications and events, including newsletters, global and local townhalls and messages from leaders with timely business and organizational updates and culture-building opportunities. BlackRock's employee networks also provide additional forums and opportunities for employees with a diverse range of backgrounds, experiences and perspectives to connect with one another and enhance the firm's culture. Open to all, the networks are designed by employees, for employees, are sponsored by senior leaders and strengthen the One BlackRock community.

BlackRock believes that employees value opportunities to give back to their communities. Through local, employee-led BlackRock Gives committees, the Company supports nonprofit organizations nominated by employees in the communities where it operates. In addition, the Company has a matching gifts program that provides full-time employees with up to \$10,000 per year in matched donations to any IRS qualified charitable organization, Full-time employees are also given two paid volunteer days per year and BlackRock matches volunteer time with eligible charities.

Compensation, Wellness and Benefits

BlackRock is committed to responsible business practices and believes that investing in the physical, emotional, mental and financial well-being of its employees is a critical component of the firm's human capital management strategy. To that end, the Company designs its compensation and benefits practices to: (1) attract, motivate, and retain talented employees; (2) align employee incentives and risk-taking with that of the firm and the interests of its clients; and (3) support employees and their families across many aspects of their lives. The Company has a strong payfor-performance culture and an annual compensation process that takes into consideration firmwide results, individual business results and employee performance, as well as market benchmarks. BlackRock also offers a wide range of benefits that it regularly reviews in accordance with market practices and the local requirements of its offices, including, where applicable, retirement savings plans, a Flexible Time Off ("FTO") policy and flexible working arrangements, parental leave and family forming benefits, such as fertility benefits, adoption and surrogacy assistance, and backup elder and childcare benefits. The Company provides comprehensive healthcare and mental-health benefits to eligible employees, including medical, dental and vision coverage, health savings and spending accounts, counseling services, an employee assistance program and access to telemedicine services, where available. The Company also offers a Mental Health Ambassador program that is comprised of global volunteers across office locations who are trained in empathetic listening skills and direct interested colleagues to benefits, tools and resources to support mental health.

BlackRock prioritizes protecting the rights of its workforce. The Company has implemented policies related to harassment prevention and compliance with equal employment opportunity and overtime regulations. BlackRock is also committed to providing a safe and healthy work environment for its workforce. To do this, it designs global programs, including environmental and occupational health and safety programs, to meet or exceed local requirements. Moreover, BlackRock encourages all of its employees to raise issues of concern and assures employees that they may do so without fear of retaliation.

Recruiting, Training and Development

BlackRock recognizes that, like all companies, it is operating in an increasingly competitive environment. As such, the Company engages in efforts to reach top talent, including continued partnerships with organizations that promote talent from many different backgrounds; regularly reviewing job postings for potentially biased language; and actively engaging in outreach and recruitment efforts for its open positions. In the spirit of attracting talent from broad backgrounds, BlackRock also provides formal recruiting programs for Veterans (former service members transitioning to civilian careers) and Returners (individuals who have taken a career break of 18 months or more).

BlackRock is also committed to innovation, learning and reinvention in all areas of its business and believes that developing the capabilities of its employees is integral to delivering long-term value. To that end, the Company's human capital management practices are designed to provide opportunities for employees to learn, innovate and enhance their skillsets at every stage of their career. One example is the BlackRock Academies, the firm's online suite of interactive resources and courses, which enable employees to build skills in specific facets of BlackRock's business and purpose. The Company believes these opportunities play an important role in engaging BlackRock's employees.

In addition, BlackRock believes that a critical driver of its future success is its ability to grow strong leaders and people managers. The Company invests in leadership development programs designed to foster career growth. For leadership development, BlackRock provides training and makes coaching available to people managers to assist in building foundational skills.

REGULATION

Virtually all aspects of BlackRock's business are subject to various laws and regulations around the world, some of which are summarized below. These laws and regulations are primarily intended to protect investment advisory clients, investors in registered and unregistered investment companies, and trust and other fiduciary clients of BlackRock Institutional Trust Company, N.A. ("BTC"). Under these laws and regulations, agencies that regulate investment advisers, investment funds and trust banks and other individuals and entities have broad administrative powers, including the power to limit, restrict or prohibit the regulated entity or person from carrying on business if it fails to comply with such laws and regulations. Possible sanctions for significant compliance failures include the suspension of individual employees, limitations on engaging in certain lines of business for specified periods of time, revocation of investment adviser and other registrations or bank charters, censures and fines both for individuals and BlackRock. The rules governing the regulation of financial institutions and their holding companies and subsidiaries are very detailed and technical. Accordingly, the discussion below is general in nature, does not purport to be complete and is current only as of the date of this report.

BlackRock's business may be impacted by numerous regulatory reform initiatives occurring around the world. Any such initiative, or any new laws or regulations or changes to, or in the enforcement of, existing laws or regulations, could materially and adversely impact the scope or profitability of BlackRock's business activities, lead to business disruptions, require BlackRock to alter its business or operating activities and expose BlackRock to additional costs (including compliance and legal costs) as well as reputational harm. BlackRock's profitability also could be materially and adversely affected by modification of the rules and regulations that impact the business and financial communities in general, including changes to the laws governing banking, securities, taxation, antitrust regulation and electronic commerce.

GLOBAL REGULATORY REFORM

Policymaking workstreams focused on the financial services sector led by global standard setters, such as the Financial Stability Board ("FSB") and International Organization of Securities Commissions ("IOSCO"), may lead to or inform new regulations in multiple jurisdictions in which BlackRock operates. Most recently, such workstreams have focused on areas such as products and activities of money market funds ("MMFs"), open-ended funds ("OEFs") and sustainability regulations.

Macroprudential Policies for Asset Managers

Concerns about liquidity and leverage risks in the asset management industry and wider market-based finance sector have been heightened since the COVID-19 pandemic and reinforced by the Liquidity Driven Investment events in the UK. This has prompted a broad review of existing regulations globally, including an assessment of the adequacy of certain structural market components in mitigating risks by the FSB, IOSCO, the US Securities and Exchange Commission (the "SEC") and the Financial Stability Oversight Council ("FSOC"). In November 2022, the SEC proposed amendments to rules governing OEF liquidity risk management and swing pricing. The European Union ("EU") also proposed reforms to increase the availability of liquidity management tools to OEFs (including MMFs), enhance reporting on the use of liquidity management tools by OEFs to national regulators and allow such regulators of CEF managers to activate liquidity management tools in extreme market conditions. Meanwhile, the UK proposed introducing liquidity facilities to certain asset owners, which could result in regulatory burdens on asset managers. If any of these regulatory or policy actions result in broad application of macroprudential tools to OEFs or require changes to structural features of certain OEFs, it could limit BlackRock's ability to offer products to certain clients and/or result in clients altering their investment strategies or allocations in a manner that is adverse to BlackRock.

Global MMF Reforms

Following the market events of March 2020, US, UK and EU authorities initiated a review of existing regulatory frameworks with the aim of improving the resilience of MMFs in market downturns. In the US, the SEC adopted changes to Rule 2a-7, the primary rule under the Investment Company Act of 1940 governing MMFs, including changes to required liquidity levels and certain operational aspects of such funds, and requiring mandatory liquidity fees under certain circumstances. The UK released a consultation in December 2023 indicating their intent to change regulatory requirements for MMFs domiciled or marketed in the UK, including material increases in required liquidity levels. Although EU authorities stated in July 2023 that they would not re-open the EU regulatory framework for MMFs in the near term, the UK's proposed changes may increase pressure to implement similar reforms as the vast majority of MMFs sold in the UK are EU-domiciled and regulated. Such regulatory reforms could significantly and adversely impact certain of BlackRock's MMF products.

Environmental, Social and Governance ("ESG") and Sustainability

ESG and sustainability have been the subject of increased regulatory focus across jurisdictions. The International Sustainability Standards Board ("ISSB") released its first two disclosure standards in 2023, which may inform national regulators' approaches. For example, the UK, Singapore, Hong Kong, Taiwan and Australia have already indicated their intention to endorse these standards. In the US, the SEC has proposed a series of rules that would require, among other things: (1) corporate issuers to make substantial climate-related disclosures in periodic reports, including with respect to governance, risk management, business strategy, financial statement metrics and greenhouse gas ("GHG") emissions and (2) enhanced ESG disclosures by investment companies and investment advisers in fund and adviser filings, including disclosures on ESG strategies and how ESG factors are considered, and GHG emissions disclosure by certain environmentally focused funds. Furthermore, the SEC has announced plans to propose rules to require enhanced disclosure regarding human capital management and board diversity for public issuers. It has also increased scrutiny of disclosure and compliance issues relating to investment advisers' and funds' ESG strategies, policies and procedures. In addition, the US Department of Labor ("DOL") issued final rules clarifying that Employee Retirement Income Security Act of 1974, as amended ("ERISA") plan fiduciaries can, but are not required to, consider the economic effects of ESG factors for purposes of investing ERISA plan assets and exercising voting rights with respect to plan investments. Moreover, California passed several laws in 2023 that will require companies doing business in California to make certain types of climate-related disclosures, and other states may adopt similar laws.

The EU has enacted numerous regulations on ESG and sustainability, including on sustainability-related disclosures by financial market participants; integration of sustainability considerations into investment and risk management processes of asset managers and other institutional investors; making the advice and financial product distribution process more receptive to end-investor sustainability preferences; and requiring asset managers to report against an EU-wide taxonomy of environmentally sustainable activities and make detailed disclosures relating to ESG characteristics of funds and portfolios. Further regulations include the Corporate Sustainability Reporting Directive, which will require enhanced sustainability reporting for EU-based corporate issuers, with phased implementation beginning in 2024 and for a wider group of global companies from 2028. In December 2023, the EU reached provisional agreement on a directive, which if adopted in its current form, would require a wide group of European and global companies to provide transition plans and conduct due diligence on the sustainability of their suppliers. The EU and the UK Financial Conduct Authority ("FCA") are also developing rules and guidelines for the use of ESG or sustainability related terms in fund names, focused on specifying a minimum threshold of assets meeting ESG or sustainable criteria for such funds.

Within the UK, the FCA has proposed UK-specific sustainability regulations, including a sustainable product classification system for funds and enhanced disclosure requirements, which are expected to apply on a staggered basis from July 2024. In addition, His Majesty's Treasury ("HMT") released a consultation to bring ESG rating providers under regulation by the FCA and will consult on a UK-specific taxonomy of environmentally sustainable activities.

A number of Asia-Pacific jurisdictions are consulting on sustainability reporting obligations aligned with the ISSB standards. Similarly, policymakers in Japan have announced that they are preparing a local version of the ISSB standards. Japan and Singapore have published codes of conduct for ESG data and ratings providers, with Hong Kong considering a similar approach, while India introduced a regulatory framework for ESG ratings providers in July 2023.

Taxation

BlackRock's businesses may be directly or indirectly affected by tax legislation and regulation, or the modification of existing tax laws, by US or non-US tax authorities. Legislation at both the US federal and state level has been previously proposed to enact a financial transaction tax ("FTT") on stocks, bonds and a broad range of financial instruments and derivative transactions. In the EU, certain Member States have also enacted similar FTTs and the European Commission ("EC") has proposed legislation to harmonize these taxes and provide for the adoption of EU-level legislation applicable to some (but not all) EU Member States. If enacted as proposed, FTTs could have an adverse effect on BlackRock's financial results and clients' performance results.

The Organisation for Economic Cooperation and Development ("OECD") has proposed certain international tax reforms, which, among other things, would (1) shift taxing rights to the jurisdiction of the consumer and (2) establish a global minimum tax for multinational companies of 15% (namely the "Pillar One" and "Pillar Two" Framework). EU member states adopted, or plan to adopt, laws implementing the OECD's minimum tax rules under the Pillar Two Framework, which are expected to go into effect in 2024. Several other countries, including the UK, have changed or are considering changes to their tax law to implement the OECD's minimum tax proposal. As a result of these developments, the tax laws of certain countries in which BlackRock does business have and may continue to change, and any such changes could increase its tax liabilities. The Company is continuing to monitor legislative developments and evaluate the potential impact of the Pillar Two Framework on future periods.

The application of tax regulations involves numerous uncertainties and, in the normal course of business, US and non-US tax authorities may review and challenge tax positions adopted by BlackRock. These challenges may result in adjustments to, or impact the timing or amount of, taxable income, deductions or other tax allocations, which may adversely affect BlackRock's effective tax rate and overall financial condition. Similarly, the Company manages assets in products and accounts that have investment objectives which may conform to tax positions adopted by BlackRock or to specific tax rules. To the extent there are changes in tax law or policy, or regulatory challenges to tax positions adopted by BlackRock, the value or attractiveness of such investments may be diminished and BlackRock may suffer financial or reputational harm.

Regulation of Swaps and Derivatives

Jurisdictions outside the US in which BlackRock operates have adopted and implemented, or are in the process of considering, adopting or implementing, more pervasive regulation of many elements of the financial services industry, which could further impact BlackRock and the broader markets. For example, various global rules and regulations applicable to the use of financial products by funds, accounts and counterparties that have been adopted or proposed have required or will require BlackRock to build and implement new compliance monitoring procedures to address the enhanced level of oversight to which it and its clients will be subject. These rules impose requirements such as mandatory central clearing of certain swaps transactions, requiring execution of certain swaps transactions on or through registered electronic trading venues (as opposed to over the phone or other execution methods), reporting transactions to central data repositories, mandating certain documentation standards, requiring the posting and collection of initial and/or variation margin for bilateral swap transactions and subjecting certain types of listed and/or over-the-counter transactions to position limit or position reporting requirements.

In the US, certain interest rate swaps and certain index credit default swaps are subject to central clearing and trading venue execution requirements under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act"), with additional products and asset classes potentially becoming subject to these requirements in the future. In the EU and UK, central clearing and trading venue requirements for certain swap transactions have become effective for certain types of BlackRock funds and accounts. Further, most derivatives transactions that are not centrally cleared, including non-deliverable foreign exchange forward transactions and currency option transactions, are subject to requirements in the US, EU, UK and numerous other jurisdictions to post or collect mark-to-market margin payments. For certain BlackRock funds and accounts, initial margin requirements also apply in addition to such mark-to-market margin payments. These rules and regulations increase the complexity and cost of trading non-cleared derivatives for BlackRock's clients, in certain cases produce regulatory inconsistencies in global derivatives trading rules, and increase BlackRock's operational and legal risks.

US REGULATORY REFORM

Antitrust Rules and Guidance

In 2023, the Federal Trade Commission ("FTC") and the Antitrust Division of the Department of Justice (the "DOJ") issued a notice of proposed rulemaking with amendments to rules enacted under the Hart-Scott-Rodino Antitrust Improvements Act of 1976 ("HSR") that require parties in certain transactions to provide the FTC and DOJ prior notice and observe a waiting period before consummation of such transactions. The proposals would significantly expand the information required to be reported and documentation to be submitted in connection with an HSR filling. If enacted as drafted, the proposed rules could substantially increase BlackRock's pre-merger notification expenses and delay transactions. In December 2023 the FTC and DOJ also jointly issued new merger guidelines, which could impact the ability of the Company to expand its services through strategic investments or acquisitions.

Designation as a Systemically Important Financial Institution ("SIFI")

The FSOC has the authority to designate nonbank financial institutions as SIFIs in the US under the Dodd-Frank Act. In November 2023, the FSOC finalized amendments to its existing interpretive guidance to remove the prioritization of an activities-based approach over an entity-specific approach to designation in connection with addressing potential risks to financial stability, although the amendment clarified that the FSOC retained the ability to use an activities-based approach when appropriate. If BlackRock is designated as a SIFI, it could become subject to enhanced regulatory and capital requirements and direct supervision by the Federal Reserve.

US DOL Fiduciary Rule

In October 2023, the US DOL proposed a new regulation redefining the meaning of "investment advice fiduciary" under ERISA as well as amendments to several prohibited transaction exemptions applicable to investment advice fiduciaries. If adopted as proposed, the rule would substantially expand when a person would be considered a fiduciary subject to ERISA and could require BlackRock to revise a number of its distribution relationships, create compliance and operational challenges for BlackRock and its distribution partners, and limit BlackRock's ability to provide certain services to applicable clients.

Regulation of Swaps and Derivatives

The SEC, Federal Reserve, the Internal Revenue Service and the Commodity Futures Trading Commission ("CFTC") each continue to review practices and regulations relating to the use of futures, swaps and other derivatives. Such reviews could result in regulations that restrict or limit the use of such products by funds or accounts. If adopted, any such limitations or restrictions could require BlackRock to change certain business practices or implement new compliance processes, which could result in additional costs and/or restrictions.

In October 2020, the SEC adopted regulations governing the use of derivatives by registered investment companies ("RICs"), including mutual funds (other than MMFs), ETFs and closed-end funds, as well as business development companies. RICs were required to implement and comply with this rule beginning in 2022. The rule, among other things, imposes limits on the amount of derivatives transactions a RIC can enter into, eliminates the asset segregation compliance framework and introduces new compliance requirements for funds, including the establishment of comprehensive risk management programs. The rule may impact certain RICs' usage of derivatives and investment strategy.

In 2021, the SEC proposed rules in connection with security-based swaps ("SBS") transactions to require public reporting of large SBS positions. These rules, if adopted as proposed, may affect the types of transactions BlackRock may choose to execute in SBS or other SBS-related assets, introduce or increase costs relating to such transactions, and impact the liquidity in the SBS markets in which BlackRock transacts.

SEC Proposed Rules on Private Fund Advisers

In 2023, the SEC adopted new rules and amendments to enhance regulation of private fund advisors. These included amendments to Form PF for registered investment advisers requiring new disclosures, filing obligations and enhanced reporting. The SEC adopted additional rules requiring registered private fund advisers to, among other things, provide quarterly reports to fund investors, obtain annual audits for funds, distribute fairness opinions in connection with certain transactions, prohibit certain types of preferential terms and treatment, and provide transparency to investors of all types of preferential treatment granted to other investors in the same fund. Implementing these rules and amendments may significantly increase BlackRock's reporting, disclosure and compliance obligations and create operational complexity for BlackRock's alternatives products.

Proposed Rules on Regulation ATS

In 2023, the SEC re-proposed amendments to Regulation ATS. The proposed rules would expand the types of systems that could fall within the definition of "exchange" and extend Regulation ATS and Regulation Systems Compliance and Integrity to systems involving US government securities trading. If enacted as proposed, these rules may increase compliance costs for BlackRock.

SEC US Treasury Clearing Mandate

In December 2023, the SEC adopted rules mandating central clearing of US Treasury repurchases and certain other Treasury transactions. The rules require many market participants, including a large number of BlackRock funds and accounts, to clear Treasury repurchase transactions and potentially certain cash Treasury securities transactions through a clearing agency registered with the SEC, which could increase transaction costs for BlackRock's clients.

Proposed Rules on Equity Market Structure

In 2023, the SEC proposed equity market structure reforms that would significantly change how national market system ("NMS") stock orders are priced, executed and reported. The reforms include: (1) a requirement for certain retail orders to be subject to order-by-order competition, (2) an SEC-level best execution rule and (3) an adjustment to the tick sizes at which NMS stocks can be quoted or traded. If enacted as proposed, the collective impact of the rules may adversely affect market efficiency and execution costs, which would result in negative effects for BlackRock's business and clients.

SEC Rules on Short Sales and Reporting of Securities Loans

In 2023, the SEC adopted a new rule requiring certain institutional managers to report short positions and activity to the SEC for publication on an aggregate basis, which could potentially impact investment strategies and result in greater operational burdens and cost for BlackRock. The SEC also adopted a new rule requiring certain persons to report information on securities loan transactions to a registered national securities association which will then publish certain information. The rule may increase BlackRock's operational burdens and costs.

SEC Standard Settlement Rules

In 2023, the SEC adopted amendments and new rules which, among other things, shortened the standard settlement for most securities transactions to one business day after the trade date (T+1), which will likely increase BlackRock's operational burdens and costs.

SEC Predictive Data Analytics Rules

The SEC proposed new rules in 2023 that would require broker-dealers and investment advisers, when engaging or communicating with investors using predictive data analytics ("PDA") and PDA-like technologies, to evaluate such technologies for conflicts of interest and, where identified, eliminate or neutralize the conflict of interest. If adopted as proposed, the rules could encompass a wide range of forward-looking uses of technology applications and impose significant operational burdens and costs.

SEC Rulemakings for US Registered Funds and Investment Advisers

The SEC has recently engaged in various initiatives and reviews impacting regulatory structure governing the asset management industry and registered investment companies. For example, the SEC adopted rules requiring certain funds to provide tailored fund shareholder reports, adopted final amendments to the rule governing fund names, expanding the scope of the rule to fund names including growth, value, ESG or similar terms, and proposed rules governing outsourcing of certain functions by investment advisers to service providers.

INTERNATIONAL REGULATORY REFORM

Enhanced Regulatory Scrutiny of Technology Service Providers to Financial Services Firms

The EU's Digital Operational Resilience Act ("DORA"), which focuses on direct regulation of providers and users of technology and data services, will become applicable beginning in January 2025. DORA will, among other things: (1) introduce additional governance, risk management, incident reporting, resilience testing and information sharing requirements to several of BlackRock's European entities and certain Aladdin clients; and (2) potentially subject Aladdin to additional oversight. In parallel with DORA, the UK proposed a new Critical Third Party regime to regulate certain third parties designated by HMT as "critical" to the financial sector, and UK regulators have issued a consultation on proposed requirements for "critical" third parties, with further consultations expected in 2024.

Retail Investment Strategy

In 2023, the European Commission ("EC") adopted a Retail Investment Strategy package with wide-reaching amendments intended to enhance protections for retail investors. If enacted as proposed, these changes may impact BlackRock's operations in European markets, including product development, client servicing and distribution models.

FSMA 2023

The Financial Services and Markets Act 2023 ("FSMA 2023") reflects significant changes to the UK framework for financial services regulation, including changes that: (1) revoke retained EU law related to financial services regulation, (2) amend the UK Markets in Financial Instruments Directive and Markets in Financial Instruments Regulation frameworks, (3) establish a new designated activities regime and (4) reform the financial promotion regime for unauthorized firms. The UK government and FCA are expected to publish further legislation setting out specific changes impacting the UK market in 2024.

Mansion House Reforms

The Mansion House reforms announced in July 2023 also build on the new UK regulatory framework enabled by the FSMA 2023. Potential impacts to the asset management sector include: (1) repeal and replacement of the packaged retail and insurance based investment products ("PRIIPs") Regulation; (2) review of the UK's green finance strategy, including potential regulation of ESG data providers; (3) review of governance through the Senior Managers and Certification Regime; (4) repeal of EU legislation on the European Long-Term Investment Fund; (5) market infrastructure reforms; (6) reassessment of the boundary between investment advice and financial guidance; and (7) independent review of the UK investment research landscape.

Overseas Fund Regime ("OFR")

OFR, the simplified regime through which non-UK funds can register with the FCA to be marketed to UK retail investors, was enacted in February 2022 and is expected to be implemented through 2024. OFR requires consumer protection regimes in EU countries where BlackRock funds are domiciled to be found equivalent to the UK's regime in order to market such funds in the UK.

Conduct Regulation

The FCA continues to focus on conduct regulation, including the implementation of the Consumer Duty by all asset management firms, including BlackRock's UK subsidiaries. The Consumer Duty rules require firms to act to deliver good outcomes for retail customers in their manufacture and distribution of products and services, in respect of price and value, consumer understanding and consumer support. Any failure to meet the FCA's regulatory expectations could expose BlackRock to regulatory sanctions and increased reputational risk.

UK Stewardship Code Review

The UK Financial Reporting Council has announced a planned review of the UK Stewardship Code in 2024 to consider potential revisions to address stakeholder concerns.

Reform of Investment Markets

BlackRock is subject to numerous regulatory reform initiatives that may affect the Company's provision of investment services globally. In Europe, the Markets in Financial Instruments Directive ("MiFID") governing the provision of investment services has been revised and is accompanied by an associated Regulation (together with certain secondary regulation, "MiFID II"). The Regulation's requirements generally apply consistently across the EU. The MiFID II reforms were substantive, materially changing market transparency requirements, enhancing protections afforded to investors, and increasing operational complexity for the Company. Forthcoming proposals to review the operation of MiFID II and to develop a new EU Retail Investment Strategy may affect the European market structure and impact BlackRock's ability to operate in European markets. The broad nature of MiFID II means future reforms could also affect product development, client servicing and distribution models. Similar reforms have been implemented in Switzerland and Australia.

Regulatory Environment in China

The Company's operations in China are subject to a number of regulatory risks, including an evolving regulatory environment and complex data security and data transfer regulations. These factors may increase compliance risk and costs, limit the Company's ability to source and execute new investment opportunities and lead to impairment losses on its investments. Restrictions on transfers of certain types of onshore data of the Company's Chinese entities to offshore entities also may limit BlackRock's ability to aggregate, report and monitor such data on its global platform. In addition, a number of regulators in China have jurisdiction over BlackRock's business operations, increasing operational and regulatory engagement complexity. These risks may be further heightened by additional scrutiny by Chinese regulators of certain sectors, such as technology and other industries that might be deemed to be of national importance.

EXISTING US REGULATION - OVERVIEW

BlackRock and certain of its US subsidiaries are currently subject to extensive regulation, primarily at the federal level, by the SEC, the DOL, the Federal Reserve, the Office of the Comptroller of the Currency ("OCC"), the Financial Industry Regulatory Authority ("FINRA"), the National Futures Association ("NFA"), the FTC, the Department of Justice, the CFTC and other federal government agencies and regulatory bodies.

Certain of BlackRock's US subsidiaries are also subject to various anti-terrorist financing, privacy, anti-money laundering and economic sanctions laws and regulations established by various agencies. In addition, the Investment Advisers Act of 1940 (the "Advisers Act") imposes numerous obligations on registered investment advisers such as certain BlackRock subsidiaries, including record-keeping, operational and marketing requirements, disclosure obligations and prohibitions on fraudulent activities. State level regulation through attorneys general, insurance commissioners and other state level agencies also applies to certain BlackRock activities.

The Investment Company Act of 1940 (the "Investment Company Act") imposes stringent governance, compliance, operational, disclosure and related obligations on registered investment companies and their investment advisers and distributors, such as certain BlackRock subsidiaries and affiliates. The SEC is authorized to institute proceedings and impose sanctions for violations of the Advisers Act and the Investment Company Act, ranging from fines and censure to termination of an investment adviser's registration. Investment advisers also are subject to certain state securities laws and regulations. Non-compliance with the Advisers Act, the Investment Company Act or other federal and state securities laws and regulations could result in investigations, sanctions, disgorgement, fines and reputational damage.

BlackRock's trading and investment activities for client accounts are regulated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as well as the rules of various securities exchanges and self-regulatory organizations, including laws governing trading on inside information, market manipulation and a broad number of technical requirements (e.g., short sale limits, volume limitations and reporting obligations) and market regulation policies. Violation of any of these laws and regulations could result in fines or sanctions, as well as restrictions on BlackRock's activities and damage to its reputation. Furthermore, the Dodd-Frank Act requires one of BlackRock's subsidiaries, BTC, to register as a municipal advisor (as that term is defined in the Exchange Act) with the SEC and Municipal Securities Rulemaking Board ("MSRB"). BTC's registration as a municipal advisor subjects BTC to additional regulation by the SEC and MSRB.

BlackRock manages a variety of private pools of capital, including hedge funds, funds of hedge funds, private equity funds, collateralized debt obligations, collateralized loan obligations, real estate funds, collective trust funds, managed futures funds and hybrid funds. Congress, regulators, tax authorities and others continue to explore, on their own and in response to demands from the investment community and the public, increased regulation related to private pools of capital, including changes with respect to investor eligibility, certain limitations on trading activities, record-keeping and reporting, the scope of anti-fraud protections, safekeeping of client assets and a variety of other matters. BlackRock may be materially and adversely affected by new legislation, rulemaking or changes in the interpretation or enforcement of existing rules and regulations imposed by various regulators in this area.

Certain BlackRock subsidiaries are subject to ERISA, and to regulations promulgated thereunder by the DOL, insofar as they act as a "fiduciary" under ERISA with respect to benefit plan clients that are subject to ERISA. ERISA and applicable provisions of the Internal Revenue Code impose certain duties on persons who are fiduciaries under ERISA, prohibit certain transactions involving ERISA plan clients and impose excise taxes for violations of these prohibitions, mandate certain required periodic reporting and disclosures and require certain BlackRock entities to carry bonds insuring against losses caused by fraud or dishonesty. ERISA also imposes additional compliance, reporting and operational requirements on BlackRock that otherwise are not applicable to clients that are not subject to ERISA.

BlackRock has seven subsidiaries that are registered as commodity pool operators and/or commodity trading advisors with the CFTC and are members of the NFA. The CFTC and NFA each administer a comparable regulatory system covering futures contracts and various other financial instruments, including swaps as a result of the Dodd-Frank Act, in which certain BlackRock clients may invest. In addition, two of BlackRock's subsidiaries are registered with the SEC as broker-dealers and are member-firms of FINRA. Each broker-dealer has a membership agreement with FINRA that limits the scope of such broker-dealer's permitted activities. One of the broker-dealers is also a member of the MSRB and is subject to MSRB rules.

BlackRock's business activity in California that involves the processing of personal information is subject to the California Consumer Privacy Act ("CCPA") and the California Privacy Rights Act ("CPRA"), which provide for enhanced consumer protections for California residents. The CCPA and CPRA impose obligations on BlackRock for the handling, disclosure and deletion of personal information for California residents. In addition, several other US states have proposed or adopted similar privacy laws. Any failure by BlackRock to comply with the CCPA, CPRA or similar state privacy laws may result in fines, heightened regulatory scrutiny, litigation and/or reputational harm.

US Banking Regulation

One of BlackRock's subsidiaries, BTC, is organized as a nationally-chartered limited purpose trust company that does not accept deposits or make commercial loans. Accordingly, BTC is examined and supervised by the OCC and is subject to various banking laws and regulations enforced by the OCC, such as laws and regulations governing capital adequacy, fiduciary activities, conflicts of interest, self-dealing, and the prevention of financial crime, including money laundering. BTC is also a member of the Federal Reserve System and is subject to various Federal Reserve regulations applicable to member institutions, such as regulations restricting transactions with affiliates. Many of these laws and regulations are meant for the protection of BTC and/or BTC's customers rather than BlackRock, its affiliates or stockholders.

EXISTING INTERNATIONAL REGULATION — OVERVIEW

BlackRock's international operations are subject to the laws and regulations of a number of international jurisdictions, as well as oversight by numerous regulatory agencies and bodies in those jurisdictions. In some instances, these operations are also affected by US laws and regulations that have extra-territorial application.

Below is a summary of certain international regulatory standards to which BlackRock is subject. It is not meant to be comprehensive as there are parallel legal and regulatory arrangements in force in many jurisdictions where BlackRock's subsidiaries conduct business.

Of note among the various other international regulations to which BlackRock is subject, are the extensive and complex regulatory reporting requirements that necessitate the monitoring and reporting of issuer exposure levels (thresholds) across the holdings of managed funds and accounts and those of the Company.

European Regulation

The FCA currently regulates certain BlackRock subsidiaries in the UK. It is also responsible for the conduct of business regulation of the UK branch of one of BlackRock's US subsidiaries. In addition, the Prudential Regulation Authority ("PRA") regulates one BlackRock UK insurance subsidiary. Authorization by the FCA and (where relevant) the PRA is required to conduct certain financial services-related business in the UK under the Financial Services and Markets Act 2000 (the "FSMA"). The FCA's rules adopted under the FSMA govern the majority of a firm's capital and liquidity resources requirements, senior management arrangements, conduct of business requirements, interaction with clients, and systems and controls, whereas the rules of the PRA focus solely on the prudential requirements that apply to BlackRock's UK-based insurance subsidiary. The FCA supervises BlackRock's UK-regulated subsidiaries through a combination of proactive engagement, event-driven and reactive supervision and thematic reviews in order to monitor BlackRock's compliance with regulatory requirements. Breaches of the FCA's rules may result in a wide range of disciplinary actions against BlackRock's UK-regulated subsidiaries and/or its employees.

In addition, BlackRock has regulated entities in France, Germany, Ireland, Jersey, Luxembourg, the Netherlands and Switzerland. Each of these entities is required to comply with regulatory rules in the country in which it has been established, including the branches of the Netherlands entity which operate across the EU.

BlackRock's EU subsidiaries and branches must comply with the EU regulatory regime set out in MiFID II. BlackRock's UK-regulated subsidiaries must comply with the UK version of MiFID II, which regulates the provision of investment services and activities in the UK. MiFID II, and the UK equivalent of MiFID II, set out detailed requirements governing the organization and conduct of business of investment firms and regulated markets. The legislation also includes pre- and post-trade transparency requirements for equity and non-equity markets and extensive transaction reporting requirements. Certain BlackRock UK subsidiaries must also comply with the UK regulation which implements the Consolidated Life Directive and Insurance Distribution Directive. In addition, relevant entities must comply with revised obligations on capital resources for certain investment firms arising out of the IFPR. These include requirements to ensure capital adequacy, as well as matters of governance and remuneration. Relevant BlackRock entities must also comply with the requirements of the UCITS Directive and the AIFMD, as implemented in the relevant EU Member States and in the UK, which impose obligations on the authorization and capital, conduct of business, organization, transparency and marketing of retail and alternative investment funds respectively that are sold in, or marketed to, the EU. The obligations introduced through these regulations and directives will affect certain of BlackRock's European operations. Compliance with the UCITS Directives and the AIFMD may subject BlackRock to additional expenses associated with depositary oversight and other organizational requirements. BlackRock's EU-regulated subsidiaries are also subject to the European Market Infrastructure Regulation ("EMIR") (or the UK version of EMIR transposed into UK law in accordance with The European Union (Withdrawal) Act 2018 in the case of BlackRock's UK-regulated subsidiaries), an EU regulation governing derivatives, central counterparties and trade reposit

The EU has seen an increase in Common Supervisory Actions by ESMA to coordinate supervisory action by national EU regulators, most notably in areas such as product governance, liquidity management and fund costs and charges. BlackRock's EU operations may be affected to the extent this initiative results in formal legislation or action.

EU Member States, the UK and many other non-US jurisdictions have adopted statutes and/or regulations concerning privacy and data protection and requiring notification of personal data security breaches if certain thresholds are met. For example, the EU adopted the General Data Protection Regulation ("GDPR"), which became effective in 2018, and the UK transposed the GDPR into national law ("UK GDPR"), which became effective in 2021. In June 2021, the EC published a new set of standard contractual clauses, which only apply to the transfer of personal data outside of the EU to a country not approved by the EU as providing an adequate level of protection for the processing of personal data. The EU's adequacy decision with respect to the UK, which allows the continued flow of personal data from the EU to the UK, will be regularly reviewed and may be revoked if the UK diverges from its current adequate data protection laws. The UK has developed its own international data transfer agreement, which was implemented in March 2022. In June 2023, the EU-US Data Protection Framework came into force, which allows organizations to self-certify their compliance under the framework for data transfers from the EU, UK and Switzerland to the US. GDPR and UK GDPR, as well as other statutes and/or regulations concerning privacy and data protection, increase compliance obligations, affect BlackRock's collection, processing, retention and transfer of personal data and reporting of personal data security breaches, and provide for increased penalties for non-compliance.

BlackRock also maintains two offices in the Middle East, one in Dubai, which is regulated by the Dubai Financial Services Authority, and one in Riyadh, Saudi Arabia, which is regulated by the Saudi Capital Markets Authority. Both offices are authorized to provide certain investment services and support BlackRock's provision of investment products and services in their countries of domicile. Other countries across the Middle Eastern region are serviced on a cross-border basis.

Regulation in the Asia-Pacific Region

In Japan, a BlackRock subsidiary is subject to the Financial Instruments and Exchange Act ("FIEA") and the Act on Investment Trusts and Investment Corporations. These laws are administered and enforced by the Japanese Financial Services Agency ("JFSA"), which establishes standards for compliance, including capital adequacy and financial soundness requirements, customer protection requirements and conduct of business rules. The JFSA is empowered to conduct administrative proceedings that can result in censure, fines, cease and desist orders or the suspension or revocation of registrations and licenses granted under the FIEA. This Japanese subsidiary also holds a license for real estate brokerage activities which subjects it to the regulations set forth in the Real Estate Brokerage Act.

In Australia, BlackRock's operating entity is principally regulated under the Corporations Act 2001 (Cth) by the Australian Securities and Investments Commission ("ASIC"), which includes holding an Australian financial services license and operating registered managed investment schemes. ASIC is Australia's integrated corporate, markets, financial services and consumer credit regulator.

In New Zealand, certain BlackRock subsidiaries are primarily regulated by the Financial Markets Authority ("FMA"). The FMA is responsible for overseeing and enforcing financial markets legislation including the licensing of firms to provide certain financial products and services in New Zealand and administering anti-money laundering and terrorism financing legislation, amongst other functions.

The activities of certain BlackRock subsidiaries in Hong Kong are subject to the Securities and Futures Ordinance ("SFO"), which governs the securities and futures markets and regulates, among others, offers of investments to the public and provides for the licensing of intermediaries. The SFO is administered by the Securities and Futures Commission ("SFC"). The SFC is also empowered to establish standards for compliance as well as codes and guidelines. The relevant BlackRock subsidiaries and the employees conducting any of the regulated activities specified in the SFO are required to be licensed with the SFC, and are subject to the rules, codes and guidelines issued by the SFC.

BlackRock's operations in Taiwan are regulated by the Taiwan Financial Supervisory Commission, which is responsible for regulating securities markets (including the Taiwan Stock Exchange and the Taiwan Futures Exchange), the banking industry and the insurance sector.

BlackRock's Fund Management Company in China ("BlackRock FMC") is regulated by the China Securities Regulatory Commission and is subject to the Securities Investment Fund Law and Measures for the Supervision and Administration of Mutual Fund Managers for the overall oversight from incorporation to the corporate governance and operations of fund managers and funds. BlackRock FMC is also subject to the China Securities Law and various other financial laws and regulations. BlackRock CCB Wealth Management Limited, which is BlackRock's wealth management joint venture company with CCB Wealth Management Co., Ltd. and Fullerton Management Pte Ltd. in China, is regulated by the National Financial Regulatory Administration ("NFRA", formerly known as the China Banking and Insurance Regulatory Commission). They have enacted Bank Wealth Management Supervision and Management Measures and Management Measures of Bank Wealth Management Subsidiaries and other relevant rules to regulate the setup, conduct of business and risk management of bank wealth management companies.

In Singapore, a BlackRock subsidiary is regulated by the Monetary Authority of Singapore ("MAS") and its business activities are subject to the Securities and Futures Act 2001 ("SFA"). The SFA governs the regulation of activities and institutions in the securities and derivatives industry, including fund management, dealing in capital markets products and leveraged foreign exchange trading. The MAS is Singapore's central bank and integrated financial regulator, which regulates the financial services sector in Singapore and conducts integrated supervision of financial services and financial stability surveillance. This BlackRock subsidiary and the employees conducting any of the regulated activities specified in the SFA are required to be licensed with the MAS, and are subject to the SFA and the regulations, rules, codes, notices and guidelines issued by the MAS.

Other financial regulators oversee BlackRock subsidiaries, branches and representative offices across the Asia-Pacific region, including in South Korea. Regulators in all of these jurisdictions have authority with respect to financial services including, among other things, the authority to grant, suspend or cancel required licenses or registrations. In addition, these regulators may subject certain BlackRock subsidiaries to net capital requirements.

AVAILABLE INFORMATION

BlackRock files annual, quarterly and current reports, proxy statements and all amendments to these reports and other information with the SEC. BlackRock makes available free-of-charge, on or through its website at https://www.blackrock.com, the Company's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, proxy statements and all amendments to those filings, as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. The Company also makes available on its website the charters for the Audit Committee, Management Development and Compensation Committee, Nominating, Governance and Sustainability Committee and Risk Committee of the Board of Directors, its Code of Business Conduct and Ethics, its Code of Ethics for Chief Executive and Senior Financial Officers and its Corporate Governance Guidelines. Further, BlackRock will provide, without charge, upon written request, a copy of the Company's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, proxy statements and all amendments to those filings as well as the committee charters, its Code of Business Conduct and Ethics, its Code of Ethics for Chief Executive and Senior Financial Officers and its Corporate Governance Guidelines. Requests for copies should be addressed to Investor Relations, BlackRock, Inc., 50 Hudson Yards, New York, New York 10001. Reports, proxy statements and other information regarding issuers that file electronically with the SEC, including BlackRock's filings, are also available to the public from the SEC's website at https://www.sec.gov.

Item 1A. Risk Factors

As a global investment management firm, risk is an inherent part of BlackRock's business. Global markets, by their nature, are prone to uncertainty and subject participants to a variety of risks. While BlackRock devotes significant resources across all of its operations to identify, measure, monitor, manage and analyze market, operating, legal, compliance, reputational, fiduciary and investment risks, BlackRock's business, financial condition, operating results and nonoperating results could be materially adversely affected and the Company's stock price could decline as a result of any of these risks and uncertainties, including the ones discussed below.

MARKET AND COMPETITION RISKS

Changes in the value levels of equity, debt, real assets, commodities, foreign exchange or other asset markets, as well as the impact of global trade policies and tariffs, may cause assets under management ("AUM"), revenue and earnings to decline.

BlackRock's investment management revenue is primarily comprised of fees based on a percentage of the value of AUM and, in some cases, performance fees which are normally expressed as a percentage of returns to the client. Numerous factors, including price movements in the equity, debt or currency markets, or movements in the price of real assets, commodities or other alternative investments in which BlackRock invests on behalf of its clients, as well as the impact of global fiscal, monetary and trade policies, could cause:

- the value of AUM, or BlackRock's returns on AUM, to decrease;
- · client redemptions from BlackRock's products;
- client rebalancing or reallocating of assets into BlackRock products that yield lower fees;
- an impairment to the value of intangible assets and goodwill; or
- a decrease in the value of seed or co-investment capital.

These risks may also be heightened by market volatility, illiquid market conditions or other market disruptions. The occurrence of any of the above events may cause the Company's AUM, revenue and earnings to decline.

Changes in interest or foreign exchange rates and/or divergent beta may cause BlackRock's AUM and base fees to fluctuate and introduce volatility to the Company's net income and operating cash flows.

In recent years, global markets have experienced substantial volatility, with significant downturns in both bond and equity markets. In addition, central banks worldwide have raised interest rates in an effort to moderate rising inflation. BlackRock's business is directly and indirectly affected by changes in global interest rates. Similarly, due to the global nature of BlackRock's operations, a portion of its business is conducted in currencies other than the United States ("US") dollar. BlackRock's exposure to foreign exchange rates relative to the US dollar and interest rates may cause BlackRock's AUM to fluctuate and introduce volatility to the Company's base fees, net income and operating cash flows.

In addition, beta divergence between equity markets, where certain markets perform differently than others, may lead to an increase in the proportion of BlackRock AUM weighted toward lower fee equity products, resulting in a decline in BlackRock's effective fee rate. Divergent market factors may also erode the correlation between the growth rates of AUM and base fees.

BlackRock's investment advisory contracts may be terminated or may not be renewed by clients and fund boards on favorable terms and the liquidation of certain funds may be accelerated at the option of investors.

BlackRock derives a substantial portion of its revenue from providing investment advisory services. The advisory or management contracts BlackRock has entered into with its clients, including the agreements that govern many of BlackRock's investment funds, provide investors or, in some cases, the independent directors of applicable investment funds, with significant latitude to terminate such contracts, withdraw funds or liquidate funds, or to remove BlackRock as a fund's investment advisor (or equivalent). BlackRock also manages its US mutual funds, closedend and exchange-traded funds under management contracts that must be renewed and approved annually by the funds' respective boards of directors, a majority of whom are independent from the Company. BlackRock's fee arrangements under any of its advisory or management contracts may be reduced (including at the behest of a fund's board of directors). In addition, shareholder activism involving closed-end funds has increased, including public campaigns to demand that a fund consider significant transactions such as a tender offer, merger or liquidation or seek other actions such as the termination of the fund's management contract. If a number of BlackRock's clients terminate their contracts, or otherwise remove BlackRock from its advisory roles, liquidate funds or fail to renew management contracts on similar terms, the fees or carried interest BlackRock earns could be reduced, which may cause BlackRock's AUM, revenue and earnings to decline.

The failure or negative performance of products offered by competitors may cause AUM in similar BlackRock products to decline irrespective of BlackRock's performance.

Many competitors offer similar products to those offered by BlackRock and the failure or negative performance of competitors' products could lead to a loss of confidence in similar BlackRock products, irrespective of the performance of such BlackRock products. Any loss of confidence in a product type could lead to withdrawals, redemptions and liquidity issues in such products, which may cause the Company's AUM, revenue and earnings to decline.

Increased competition may cause BlackRock's AUM, revenue and earnings to decline.

The investment management industry is highly competitive, and BlackRock competes based on a number of factors including: investment performance, liquidity, its technology and portfolio construction offerings, the level of fees charged, the quality and breadth of services and products provided, name recognition and reputation, and its ability to develop new investment strategies and products to meet the changing needs of investors. In addition, over the past several years, there has been continued consolidation in the asset management industry as investors increasingly seek out firms that have the capacity to deliver broad multi-asset investment capabilities and technological expertise, including in a manner that is responsive to ever more localized needs. This consolidation, together with the introduction of new technologies, as well as regulatory changes, continues to alter the competitive landscape for investment managers, which may lead to additional fee compression or require BlackRock to invest more to modify or adapt its product offerings to attract and retain customers and remain competitive with the products, services and geographic diversity offered by other financial institutions, technology companies, trading, advisory or asset management firms. Increased competition on the basis of any of these factors, including competition leading to fee reductions on existing or new business, may cause the Company's AUM, revenue and earnings to decline.

Failure to maintain Aladdin's competitive position in a dynamic market could lead to a loss of clients and could impede BlackRock's productivity and growth.

The sophisticated risk analytics, portfolio management, trade execution and investment operations that BlackRock provides via its technology platform to support investment advisory and Aladdin clients are important elements of BlackRock's competitive success. Aladdin's competitive position is based in part on its ability to combine risk analytics with portfolio management, trading and operations tools on a single platform. Increased competition from risk analytics and investment management technology providers, including as a result of growing industry consolidation giving rise to competitors with increasingly sophisticated and comprehensive product offerings, or a shift in client demand toward standalone or internally developed solutions, whether due to price competition, perceived client market share, platform offerings or flexibility, or market-based or regulatory factors, may weaken Aladdin's competitive position and may cause the Company's revenue and earnings to decline. In addition, to the extent that Aladdin competitors are able to innovate more effectively than BlackRock or leverage delivery models that provide clients faster time to market, lower costs or the ability to more seamlessly combine or bundle with other service offerings, BlackRock may lose existing clients or fail to capture future market share, which may impede its productivity and growth. Moreover, although BlackRock takes steps to safeguard against infringements of its intellectual property ("IP"), there can be no assurance that the Company will be able to effectively protect and enforce its IP rights in Aladdin.

BlackRock may be unable to develop new products and services and the development of new products and services may expose BlackRock to reputational harm, additional costs or operational risk.

BlackRock's financial performance depends, in part, on its ability to react to changes in the asset management industry, respond to evolving client demands and develop, market and manage new investment products and services. The development and introduction of new products and services, including the creation of increasingly customizable products, requires continued innovative effort on the part of BlackRock and may require significant time and resources as well as ongoing support and investment. Substantial risk and uncertainties are associated with the introduction of new products and services, including the implementation of new and appropriate operational controls and procedures, shifting client and market preferences, the introduction of competing products or services, constraints on BlackRock's ability to manage growth within client mandates, compliance with regulatory and disclosure requirements and IP-related lawsuits or claims, which may not be fully evident or identified at such time. A growing number of BlackRock's products and services also depend on data provided by third parties as analytical inputs and are subject to additional risks, including with respect to data quality, cost, availability and provider relationships. Data sets for certain developing analytics, such as those in the sustainability space, continue to evolve and difficulties approximating gaps in the data, sourcing data from reliable sources, or validating the data could adversely impact the accuracy and effectiveness of such analytics. There can be no assurance that BlackRock will be able to innovate effectively in order to develop new products or services that address the needs of its clients on the timeline they require. Any failure to successfully develop new products and services, or effectively manage associated operational risks, could harm BlackRock's reputation and expose the Company to additional costs, which may cause its AUM, revenue and earnings to decline.

Changes in the value of seed and co-investments that BlackRock owns as well as BlackRock's minority investments could affect its income and could increase the volatility of its earnings.

At December 31, 2023, BlackRock's net economic investment exposure of approximately \$3.8 billion in its investments (see Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations-Investments*) primarily resulted from co-investments and seed investments in its sponsored investment funds. Movements in the equity, debt or currency markets, or in the price of real assets, commodities or other alternative investments, could lower the value of these investments as well as certain minority investments, increase the volatility of BlackRock's earnings and cause earnings to decline.

BlackRock indemnifies certain securities lending clients for specified losses as a result of a borrower default.

BlackRock provides borrower default indemnification to certain of its securities lending clients. In the event of a borrower default, BlackRock would use the collateral pledged by the borrower to repurchase securities out on loan in order to replace them in a client's account. Borrower default indemnification is limited to the shortfall that occurs in the event the collateral available at the time of the borrower's default is insufficient to repurchase those securities out on loan. BlackRock requires all borrowers to mark to market their pledged collateral daily to levels in excess of the value of the securities out on loan which mitigates the likelihood of the indemnity being triggered. Where the collateral is in the form of cash, the indemnities BlackRock provides do not guarantee, assume or otherwise insure the investment performance or return of any cash collateral vehicle into which that cash collateral is invested. The amount of securities on loan as of December 31, 2023 and subject to this type of indemnification was approximately \$259 billion. In the Company's capacity as lending agent, cash and securities totaling approximately \$276 billion was held as collateral for indemnified securities on loan at December 31, 2023. Significant borrower defaults occurring simultaneously with rapid declines in the value of collateral pledged and/or increases in the value of the securities loaned may create collateral shortfalls, which could result in material liabilities under these indemnities and may cause the Company's revenue and earnings to decline.

BlackRock's decision on whether to provide support to particular products from time to time, or the inability to provide support, may cause AUM, revenue and earnings to decline.

While not legally mandated, BlackRock may, at its option, from time to time choose to seed, warehouse or otherwise support investment products through capital or credit support for commercial or other reasons. Any decision by BlackRock on whether to support products may utilize capital and liquidity that would otherwise be available for other corporate purposes. BlackRock's ability to seed, warehouse or otherwise support certain products may be restricted by regulation or by the Company's failure to have or make available sufficient capital or liquidity. Moreover, inherent constraints arising from the business models of certain asset managers, including BlackRock, may during periods of market volatility result in BlackRock having fewer options for accessing liquidity than asset managers with alternate business models, which may adversely impact its ability to support certain products. Any decision by BlackRock to support particular products, or its inability or unwillingness to provide such support, may result in losses or affect BlackRock's capital or liquidity, which may cause AUM, revenue and earnings to decline.

Geopolitical unrest and other events outside of BlackRock's control could adversely affect the global economy or specific international, regional and domestic markets, which may cause BlackRock's AUM, revenue and earnings to decline.

Geopolitical risks, including those arising from trade tension and/or the imposition of trade tariffs, terrorist activity or acts of civil or international hostility, could have an adverse impact on BlackRock. For instance, the Ukraine-Russia and Israel-Hamas wars and potential escalation have and may continue to result in geopolitical instability and adversely affect the global economy, supply chains, specific markets and operations. Strategic competition between the US and China and resulting tensions and heightened levels of political polarization have also contributed to uncertainty in the geopolitical and regulatory landscapes. Similarly, other events outside of BlackRock's control, including natural disasters, climate-related events, pandemics or health crises may arise from time to time and be accompanied by governmental actions that may increase international tension or impact the US or global economy in ways that are uncertain. Any such events and responses, including regulatory developments, may cause significant volatility and declines in the global markets, disproportionate impacts to certain industries or sectors, disruptions to commerce (including to economic activity, travel and supply chains), loss of life and property damage, and may adversely affect the global economy or capital markets, as well as the Company's products, operations, clients, vendors and employees, which may cause BlackRock's AUM, revenue and earnings to decline. BlackRock's exposure to geopolitical risks may be heightened to the extent such risks arise in countries in which BlackRock currently operates or seeks to expand its presence.

Climate-related risks could adversely affect BlackRock's business, products, operations and clients, which may cause BlackRock's AUM, revenue and earnings to decline.

BlackRock's business and those of its clients could be impacted by climate-related risks. Climate-related risks may impact BlackRock through changes in the physical climate or from the process of transitioning to a low-carbon economy. Climate-related physical risks arise from the direct impacts of a changing climate in the short- and long-term. Such risks may include the risks of extreme weather events and changes in temperature, which may damage infrastructure and facilities, including BlackRock's physical assets, as well as disrupt connectivity or supply chains. Climate-related transition risks arise from exposure to the transition to a low-carbon economy through policy, regulatory, technology and market changes. For instance, new or divergent climate regulations or guidance, as well as differing perspectives of stakeholders regarding climate impacts, have affected and may continue to affect BlackRock's business activities and reputation, increase scrutiny and complicate compliance requirements, which could increase the Company's costs.

Climate-related physical and transition risks could also impact BlackRock's business both directly and indirectly through adverse impacts to its clients' investments, including as a result of declines in asset values, changes in client preferences, increased regulatory and compliance costs and significant business disruptions. Any of these risks may cause the Company's AUM, revenue and earnings to decline.

RISKS RELATED TO INVESTMENT PERFORMANCE

Poor investment performance could lead to the loss of clients and may cause AUM, revenue and earnings to decline.

The Company's management believes that investment performance, including the efficient delivery of beta, is one of the most important factors for the growth and retention of AUM. Poor investment performance relative to applicable portfolio benchmarks, aggregate fee levels or competitors may cause AUM, revenue and earnings to decline as a result of:

- client withdrawals in favor of better performing products offered by competitors;
- · client shifts to products that charge lower fees;
- the diminishing ability to attract additional funds from existing and new clients;
- reduced, minimal or no performance fees;
- · an impairment to the value of intangible assets and goodwill; or
- a decrease in the valuations of seed and co-investment capital.

Performance fees may increase volatility of both revenue and earnings.

A portion of BlackRock's revenue is derived from performance fees on investment advisory assignments. Performance fees represented \$554 million, or 3%, of total revenue for the year ended December 31, 2023. Generally, the Company is entitled to a performance fee only if the agreement under which it is managing the assets provides for one and if returns on the related portfolio exceed agreed-upon periodic or cumulative return targets. If these targets are not exceeded, a performance fee for that period will not be earned and, if targets are based on cumulative returns, the Company may not earn performance fees in future periods. The volatility of the Company's future revenue and earnings may also be affected due to illiquid alternatives becoming an increasing component of the overall composition of the Company's performance fee generating assets. In particular, the Company expects that as it manages more illiquid products, its performance fees will generally be recognized over substantially longer multi-year periods than those associated with more liquid products.

Failure to identify errors in the quantitative models BlackRock utilizes to manage its business could adversely affect product performance and client relationships.

BlackRock employs various quantitative models to support its investment processes, including those related to risk assessment, portfolio management, trading and hedging activities and product valuations. Any errors or limitations in the underlying models, model inputs or assumptions, including those from third-party sources, as well as any failure of BlackRock's governance, approval, testing and validation standards in respect of such models, model inputs or assumptions, the failure to timely update such models, model inputs or assumptions or errors in how such models are used, could have adverse effects on BlackRock's business and reputation. These risks may be heightened by the rapid growth and complexity of new models, evolving data sets and standards and market volatility.

TECHNOLOGY AND OPERATIONAL RISKS

A failure in, or disruption to, BlackRock's operations, systems or infrastructure, including business continuity plans, could adversely affect operations, damage the Company's reputation and cause BlackRock's AUM, revenue and earnings to decline.

BlackRock's infrastructure, including its technological capacity, data centers and office space, is vital to the competitiveness of its business. Moreover, a significant portion of BlackRock's critical business operations is concentrated in a limited number of geographic areas, including San Francisco, New York, London, Edinburgh, Budapest, Atlanta, Gurgaon and Belgrade. The failure to maintain an infrastructure commensurate with the size and scope of BlackRock's business, or the occurrence of a business outage or event outside BlackRock's control, including a major earthquake, hurricane, fire, terrorist act, pandemic, health crisis or other catastrophic event, or the actions of individuals or groups seeking to disrupt BlackRock's operations in any location at which BlackRock maintains a major presence, could materially impact operations, result in business disruption or impede the Company's growth.

Despite BlackRock's efforts to ensure business continuity, if it fails to keep business continuity plans up-to-date or if such plans, including secure back-up facilities and systems and the availability of back-up employees, are improperly implemented or deployed during a disruption, the Company's ability to operate could be adversely impacted which may cause AUM, revenue and earnings to decline or impact the Company's ability to comply with regulatory obligations or contractual obligations leading to reputational harm, legal liability, regulatory fines and/or sanctions.

A cyber-attack or a failure to implement effective information and cybersecurity policies, procedures and capabilities could disrupt operations and lead to financial losses and reputational harm, which may cause BlackRock's AUM, revenue and earnings to decline.

BlackRock is dependent on the effectiveness of the information and cybersecurity policies, procedures and capabilities it maintains to protect its computer and telecommunications systems and the data that resides on or is transmitted through them, including data provided by third parties that is significant to portions of BlackRock's business and products. An information security incident or disruption, such as a cyber-attack including social engineering, a phishing scam, business email compromise, malware, denial-of-service or ransomware attack, or a failure to control access to sensitive systems, could materially interrupt business operations or cause disclosure or modification of sensitive or confidential client or competitive information. Moreover, developments in BlackRock's use of process automation and artificial intelligence ("AI"), as well as the use of remote access by employees and mobile and cloud technologies, could heighten these and other operational risks, as certain aspects of the security of such technologies may be complex, unpredictable or beyond BlackRock's control. BlackRock's growing exposure to the public Internet, as well as reliance on mobile or cloud technology or any failure by mobile technology and cloud service providers to adequately safeguard their systems and prevent cyber-attacks, could disrupt BlackRock's operations and result in misappropriation, corruption or loss of personal, confidential or proprietary information or third-party data. In addition, there is a risk that encryption and other protective measures may be circumvented, particularly to the extent that new computing technologies including quantum computing increase the speed and computing power available.

The financial services industry has been the subject of cyber-attacks involving the dissemination, theft and destruction of corporate information or other assets, as a result of failure to follow procedures by employees or contractors or as a result of actions by third parties, including nation state actors, terrorist organizations, cyber criminals and hacktivists. BlackRock has been and continues to be the target of cyber-attacks, as well as the co-opting of its brand, and continues to monitor and develop its systems to protect its technology infrastructure and data from misappropriation or corruption, as the failure to do so could disrupt BlackRock's operations and cause financial losses. Advances in technology, including generative AI, and use of such technology by malicious actors could heighten these risks. Although BlackRock has implemented policies and controls, and takes protective measures involving significant expense, to prevent and address potential data breaches, inadvertent disclosures, increasingly sophisticated cyber-attacks and cyber-related fraud, there can be no assurance that any of these measures proves fully effective. In addition, given the evolving nature of cyber threat actors and the increasing sophistication of cyber-attack methodology, a successful cyber-attack may persist for an extended period of time before being detected, and it may take a considerable amount of time for an investigation to be completed and the severity and potential impact to be known. Moreover, due to the complexity and interconnectedness of BlackRock's systems, the process of upgrading or patching the Company's protective measures could itself create a risk of security issues or system disruptions for the Company, as well as for clients who rely upon, or have exposure to, BlackRock's systems.

In addition, due to BlackRock's interconnectivity with third-party vendors, advisors, central agents, exchanges, clearing houses and other financial institutions, BlackRock or any such third party may be adversely affected if any of them is subject to a successful cyber-attack or other information security event, including those arising due to the use of mobile technology or a third-party cloud environment. BlackRock also routinely transmits and receives personal, confidential or proprietary information by email and other electronic means. The Company collaborates with clients, vendors and other third parties to develop secure transmission capabilities and protect against cyber-attacks. However, BlackRock or such third parties may not have all appropriate controls in place to protect the confidentiality of such information.

Any information security incident or cyber-attack against BlackRock or third parties with whom it is connected, including any interception, mishandling or misuse of personal, confidential or proprietary information or failure to disclose or communicate a cybersecurity incident appropriately, could result in material financial loss, loss of competitive position, regulatory fines and/or sanctions, breach of client contracts, reputational harm or legal liability, which, in turn, may cause BlackRock's AUM, revenue and earnings to decline. In addition, BlackRock's cybersecurity insurance may not cover all losses and damages from such events and BlackRock's ability to maintain or obtain sufficient insurance coverage in the future may be limited.

Failure or unavailability of third-party dependencies may adversely affect Aladdin operations, which could cause reputational harm, lead to a loss of clients and impede BlackRock's productivity and growth.

BlackRock must maintain effective infrastructure, including a robust and secure technological framework, in order to maximize the benefit of the Aladdin platform. In so doing, it relies in part on certain third-party service providers, including for cloud hosting and technologies supporting cloud-based operations. For example, Aladdin's data architecture depends on third-party providers of technology solutions, including the ability of such parties to scale and perform in response to Aladdin's growth. In addition, the analytical capabilities of Aladdin depend on the ability of a number of third parties to provide data and other information as inputs into Aladdin's analytical calculations. Although BlackRock has implemented internal controls and procedures and maintains a robust vendor management program designed to perform diligence and monitor third parties that support the Aladdin platform, there can be no assurance that these measures will prove effective. Any failure by third parties to maintain infrastructure that is commensurate with Aladdin's size and growth, or provide the data or information required to support its varying capabilities, could compromise Aladdin's resilience, result in operational difficulties, cause reputational harm and adversely impact BlackRock's ability to provide services to its investment advisory and Aladdin clients.

Continuing enhancements to Aladdin's capabilities, as well as the expansion of the Aladdin platform into new markets and geographies, have led to significant growth in Aladdin's processing scale, which may expose BlackRock to reputational harm, increased regulatory scrutiny and heightened operational, data management, cyber- and information-security risks.

The operation of BlackRock's Aladdin platform routinely involves updating existing capabilities, configuration change management, developing, testing and rolling out new functionalities and expanding coverage into new markets and geographies, including in connection with inorganic transactions or to address client or regulatory requirements. These updates and expansion initiatives, which have led to significant growth in Aladdin's processing scale, frequently occur on accelerated time frames and may expose BlackRock to additional cyber- and information-security risks, as well as increased execution, operational and data management risks. If BlackRock is unable to manage the pace of, or provide the operational resiliency and stability for, the expansion of Aladdin and associated growth of its processing scale, BlackRock may experience client attrition, reduced business, increased costs, reputational harm or regulatory fines and/or sanctions, which may cause BlackRock's AUM, revenue and earnings to decline.

In addition, the highly regulated business activities of many Aladdin clients may expose BlackRock to heightened regulatory scrutiny. For example, the changing political and regulatory environment in certain jurisdictions in which Aladdin clients are based has required BlackRock to open new data centers in those jurisdictions in order to host client data in the client's home location. Operating new data centers in foreign jurisdictions may expose BlackRock to increased operational complexity, as well as additional regulatory risks associated with the compliance requirements of such jurisdictions. In addition, there has been increased regulatory scrutiny globally on technology and information providers, which may impact Aladdin and certain functionalities and tools.

A failure to effectively manage the development and use of AI, combined with an evolving regulatory environment, could have an adverse effect on BlackRock's growth, reputation or business.

BlackRock uses machine learning and AI in its business and expects to continue to expand its AI capabilities, including through generative AI. AI methods are complex and rapidly evolving, and the introduction of AI into new or existing processes may result in new or enhanced governmental or regulatory scrutiny, IP or other litigation, data protection, confidentiality or information security risks, social or ethical concerns, competitive harm or other complications. For example, the use of datasets to develop and test AI models, the content generated by AI systems, or the application of AI systems may be found to be insufficient, biased or harmful, or lead to adverse business decisions or operating errors. AI technologies, including generative AI, may create content that appears correct but is factually inaccurate or flawed. In addition, IP ownership and license rights, including copyright, surrounding AI technologies have not been fully addressed by US courts or federal, state or non-US laws or regulation. Furthermore, regulation of AI technologies is evolving globally. Efforts around use of these technologies require additional investment in operational controls and procedures, development and implementation of appropriate protections and safeguards for handling the use of data with AI, including with respect to data leakage, and regulatory compliance costs. Any failure to successfully integrate AI technologies, respond to client or market demands or effectively manage the related risks could harm BlackRock's growth and reputation, adversely impact product offerings, client interactions or business initiatives, and expose the Company to legal and regulatory liabilities and additional costs, including regulatory fines or sanctions, which may cause its AUM, revenue and earnings to decline.

Failure to maintain adequate corporate and contingent liquidity may cause BlackRock's AUM, liquidity and earnings to decline, as well as harm its prospects for growth.

BlackRock's ability to meet anticipated cash needs depends upon a number of factors, including its creditworthiness and ability to generate operating cash flows. In addition, while BlackRock, Inc. is not subject to regulatory capital or liquidity requirements, certain of its subsidiaries are subject to regulatory capital and liquidity frameworks as well as certain other prudential requirements and standards, which require them to maintain levels of capital and liquidity. Failure to maintain adequate liquidity could lead to unanticipated costs and force BlackRock to revise existing strategic and business initiatives. BlackRock's access to equity and debt markets and its ability to issue public or private debt, or secure lines of credit or commercial paper back-up lines, on reasonable terms may be limited by adverse market conditions, a reduction in its long- or short-term credit ratings, or changes in government regulations, including tax and interest rates. Failure to obtain funds and/or financing, or any adverse change to the cost of obtaining such funds and/or financing, may cause BlackRock's AUM, liquidity and earnings to decline, curtail its operations and limit or impede its prospects for growth.

Operating risks associated with BlackRock's securities lending program may result in client losses.

BlackRock lends securities to banks and broker-dealers on behalf of certain of its clients. In these securities lending transactions, the borrower is required to provide and maintain collateral at or above regulatory minimums. Securities on loan are marked to market daily to determine if the borrower is required to pledge additional collateral. BlackRock must manage this process and is charged with mitigating the associated operational risks. The failure of BlackRock's controls to mitigate such operational risks could result in financial losses for the Company's clients that participate in its securities lending programs (separate from any losses related to the risks of collateral investments), and BlackRock may be held liable for any failure to manage such risks.

Inorganic transactions may harm the Company's competitive or financial position if they are not successful.

BlackRock employs a variety of organic and inorganic strategies intended to enhance earnings, increase product offerings, deliver wholeportfolio solutions, access new clients, leverage advances in technology and expand into new geographies. Inorganic strategies have included hiring smaller-sized investment teams, making minority investments in early- to mid-stage technological and other ventures, entering into strategic joint ventures and acquiring investment management and technology businesses, analytics, models and other IP. Inorganic transactions involve a number of financial, accounting, tax, regulatory, geographical and operational challenges and uncertainties, including in some cases, the assumption of pre-existing liabilities, which must be managed in order for BlackRock to realize the benefit of such transactions, and such transactions may be the subject of unanticipated liabilities arising from commercial disputes, information security vulnerabilities or breaches and IP or other legal claims. The success of BlackRock's inorganic strategy also depends in large part on its ability to integrate the workforce, operations, strategies, technologies and other components of a target business following the completion of an acquisition. BlackRock may be required to commit significant management time, as well as create new, or grow existing, operational and support functions, to facilitate the integration of acquired businesses, manage combined future growth and maintain a cohesive corporate culture. There can be no assurance that BlackRock will be able to successfully integrate acquired businesses, retain associated talent, scale support functions or realize other intended benefits of its inorganic strategy in the timeframe BlackRock expects, or at all. Moreover, the challenges associated with BlackRock's inorganic strategy may be heightened when inorganic transactions are in new geographic locations, involve new markets, products, business lines or early stage investments or are delivered via technology and systems that differ from those employed by BlackRock or that overlap with existing BlackRock businesses. In addition, in the case of minority investments and joint ventures, BlackRock may be subject to risks due to reputational harm, liability or loss resulting from, or relating to operating systems, risk management controls, and employees that are outside of BlackRock's control, as well as risks related to the jurisdictions or markets in which such investees or joint ventures operate. For example, BlackRock has a minority investment in Circle Internet Financial ("Circle"), which is associated with crypto asset markets which experienced substantial volatility and high-profile enterprise failures and bankruptcies. The crypto asset markets are subject to significant regulatory uncertainty, which could also negatively impact BlackRock's investment in Circle. Any failure to identify and mitigate the risks associated with acquisitions, joint ventures or minority investments through due diligence, governance or oversight rights, indemnification provisions and/or operational expertise, or to manage the integration of acquisitions effectively, could result in losses or impairments related to such transactions and have an adverse effect on BlackRock's reputation or cause its AUM, revenue and earnings to decline, which may harm the Company's competitive position in the investment management industry.

BlackRock is subject to risks associated with its proposed acquisition of GIP, including completion of the acquisition in the anticipated timeframe and failure to realize anticipated benefits of the acquisition.

BlackRock is subject to risks and uncertainties associated with its proposed acquisition of Global Infrastructure Partners ("GIP"), including the risk that a condition to closing may not be satisfied or waived, the possibility of failure to obtain necessary regulatory approvals, which may be outside of BlackRock's or GIP's control, or the possibility that the acquisition does not close in the anticipated timeframe or at all. BlackRock may not be able to realize the anticipated benefits of the acquisition, including synergies, value creation or other benefits of the proposed acquisition fully or at all, or on the timeline BlackRock expects. At times, the resources of either or both companies or the attention of certain members of their management may be focused on completion of the acquisition and diverted from day-to-day business operations, which may disrupt each company's ongoing business. In addition, consummation of the acquisition may have an adverse impact on the Company, including from risks related to significant transaction costs, unknown liabilities, litigation and/or regulatory actions related to the acquisition or if the acquired business does not perform as expected, which may cause BlackRock's AUM, revenue and earnings to decline.

BlackRock's alternatives products include investments in early-stage companies, private equity portfolio companies and real assets, such as real estate, infrastructure and energy assets, which may expose BlackRock and its funds and accounts to new or increased risks and liabilities, as well as reputational harm.

BlackRock's alternatives products include investments in early-stage companies, private equity portfolio companies and real assets, including real estate, infrastructure and energy assets, which may expose BlackRock and its funds and accounts to increased risks and liabilities that are inherent in the ownership and management of such investments and portfolio companies. These may include:

- risks related to the potential illiquidity, valuation and disposition of such investments;
- risks related to emerging and less established companies that have, among other things, short operating histories, new technologies and products, nascent control functions, quickly evolving markets and limited financial resources;
- construction risks, including as a result of force majeure, labor disputes or work stoppages, shortages of material or interruptions to the availability of necessary equipment;
- accidents, pandemics, health crises or catastrophic events, such as explosions, fires or terrorist activity beyond BlackRock's control;
- climate-related risks, including greater frequency or intensity of adverse weather and natural disasters;
- personal injury or property damage;
- failures on the part of third-party servicers and operators, including managers and contractors, appointed in connection with investments or projects to adequately perform their contractual duties or operate in accordance with applicable laws;
- risks related to investments in emerging markets, including economic and political risks and differences in legal or regulatory environments, which may make enforcement of legal obligations more difficult;
- exposure to stringent and complex non-US, federal, state and local laws, ordinances and regulations, including those related to financial crime, permits, government contracting, conservation, exploration and production, tenancy, occupational health and safety, foreign investment and environmental protection;
- environmental hazards, such as natural gas leaks, product and waste spills, pipeline and tank ruptures, and unauthorized discharges of products, wastes and other pollutants;
- changes to the supply and demand for properties and/or tenancies or fluctuations in the price of commodities;
- risks related to the availability, cost, coverage and other limitations on insurance;
- risks related to governance and oversight, including board oversight, of portfolio companies;

- · the financial resources of tenants: and
- contingent liabilities on disposition of investments.

The above risks may expose BlackRock's funds and accounts to additional expenses and liabilities, including costs associated with delays or remediation, and increased legal or regulatory costs, all of which could impact the returns earned by BlackRock's clients. These risks could also result in direct liability for BlackRock by exposing BlackRock to losses, regulatory sanctions or litigation, including claims for compensatory or punitive damages. Similarly, market conditions may change during the course of developments or projects in which BlackRock invests and those changes may make such developments or projects less attractive than at the time they were commenced and potentially harm the investment returns of BlackRock's clients. The occurrence of any such events may expose BlackRock to reputational harm, divert management's attention away from BlackRock's other business activities or cause its AUM, revenue and earnings to decline.

Operating in international markets increases BlackRock's operational, political, regulatory and other risks.

As a result of BlackRock's extensive international operations, the Company faces associated operational, regulatory, reputational, political and foreign exchange rate risks, many of which are outside of the Company's control. Operating outside the US may also expose BlackRock to increased compliance risks, as well as higher costs to comply with US and non-US anti-corruption, anti-money laundering and sanctions laws and regulations. Similarly, certain jurisdictions in which BlackRock operates may not have comparable levels of protection for corporate assets, such as IP, and client information and records, to the US. As a result, there may also be heightened information security or privacy risks in those jurisdictions. Any theft or unauthorized use of data, technology or IP may negatively impact BlackRock's business operations and reputation. In addition, changes to the political or regulatory environment in a jurisdiction in which BlackRock operates, including increased restrictions or scrutiny, may adversely impact BlackRock's business or operating activities. The failure of the Company's systems of internal control to mitigate such risks, or of its operating infrastructure to support its global activities, could result in operational failures and regulatory fines and/or sanctions and impede the Company's growth, which may cause the Company's AUM, revenue and earnings to decline.

RISKS RELATED TO HUMAN CAPITAL

The potential for human error in connection with BlackRock's operational systems could disrupt operations, cause losses, lead to regulatory fines or damage the Company's reputation and may cause BlackRock's AUM, revenue and earnings to decline.

Many of BlackRock's operations are highly complex and are dependent on the Company's ability to process and monitor a large number of transactions, many of which occur across numerous markets and currencies at high volumes and frequencies. Although BlackRock expends considerable resources on systemic controls, supervision, technology and training in an effort to ensure that such transactions do not violate client guidelines and applicable rules and regulations or adversely affect clients, counterparties or the Company, BlackRock's operations are dependent on its employees. From time-to-time, employees make mistakes that are not always immediately detected by systems, controls, policies and procedures intended to prevent and detect such errors. These can include calculation errors, errors in software implementation or development, failure to ensure data security, follow processes, patch systems or timely report issues, or errors in judgment. Such risks may be exacerbated in times of increased market volatility, high trading volumes or workforce turnover. Human errors, even if promptly discovered and remediated, may disrupt operations or result in regulatory fines and/or sanctions, breach of client contracts, reputational harm or legal liability, which, in turn, may cause BlackRock's AUM, revenue and earnings to decline.

Fraud, the circumvention of controls or the violation of risk management and workplace policies could have an adverse effect on BlackRock's reputation, which may cause the Company's AUM, revenue and earnings to decline.

BlackRock seeks to foster a positive workplace culture, has adopted a comprehensive risk management framework and continues to enhance various controls, procedures, policies and systems to monitor and manage risks. Notwithstanding these measures, BlackRock cannot ensure that its workplace culture or such controls, procedures, policies and systems will successfully identify and manage internal and external risks and BlackRock employees have in the past engaged in improper conduct. In addition, BlackRock is subject to the risk that its employees, contractors or other third parties may in the future deliberately or recklessly seek to circumvent established controls to commit fraud, pay or solicit bribes or otherwise act in ways that are inconsistent with the Company's controls, policies, procedures, workplace culture or principles. This risk may be heightened as BlackRock expands into new markets and increases the breadth of its business offerings, all of which introduce additional complexity to its risk management program. The changing nature of the office environment, such as return to office arrangements and remote and alternative work models, could cause employees to become disconnected with corporate culture and policies, which may increase operational issues. Persistent attempts to circumvent policies and controls or repeated incidents involving fraud, conflicts of interests or transgressions of policies and controls could have an adverse effect on BlackRock's reputation, cause adverse publicity, and result in litigation, regulatory inquiries, fines and/or sanctions, which may cause the Company's AUM, revenue and earnings to decline.

The failure to recruit, train and retain employees and develop and implement effective executive succession could lead to the loss of clients and may cause AUM, revenue and earnings to decline.

BlackRock's success is largely dependent on the talents and efforts of its highly skilled workforce and the Company's ability to plan for the future long-term growth of the business by identifying and developing those employees who can ultimately transition into key roles within BlackRock. The global market for qualified fund managers, investment analysts, technology and risk specialists and other professionals is highly competitive, and factors that affect BlackRock's ability to attract, train and retain highly qualified and diverse employees include the Company's reputation and workplace culture, the immigration and public health policies in the jurisdictions in which BlackRock has offices, its approach to remote and alternative work models, the compensation and benefits it provides, and its commitment to effectively managing executive succession, including the development and training of qualified individuals.

In addition, a percentage of the deferred compensation that BlackRock pays to certain of its employees is tied to the Company's share price. As such, decreases in BlackRock's share price could impair the retention value of such deferred compensation. There can be no assurance that the Company will continue to be successful in its efforts to recruit and retain employees and effectively manage executive succession. If BlackRock is unable to offer competitive compensation or otherwise attract, develop and retain talented individuals, or if it fails to effectively manage executive succession, the Company's ability to compete effectively and retain its existing clients may be materially impacted.

RISKS RELATED TO KEY THIRD-PARTY RELATIONSHIPS

The impairment or failure of third parties may negatively impact the performance of products and accounts that BlackRock manages, which may cause BlackRock's AUM, revenue and earnings to decline.

BlackRock's investment management activities expose the products and accounts it manages for its clients to many different industries and counterparties, including distributors, brokers and dealers, commercial and investment banks, clearing organizations, mutual and hedge funds, and other institutional clients. Transactions with counterparties expose BlackRock's clients to credit risk in the event the applicable counterparty defaults. Although BlackRock regularly assesses risks posed by its counterparties, such counterparties may be subject to sudden swings in the financial and credit markets that may impair their ability to perform or they may fail to meet their obligations. Counterparties may also experience lapses in their internal controls or risk management systems or expose BlackRock and/or its clients to losses resulting from employee malfeasance, negligence or human error. In addition, the concentration of certain financial institutions that BlackRock uses to facilitate securities and derivatives transactions for its clients, including clearing organizations, exchanges and central agents, increases the risk that a technical or operational issue at, or default by, one such institution could introduce operational issues or delays impacting multiple BlackRock clients. Any such operational issue, impairment or failure could negatively impact the performance of products that BlackRock manages for its clients, which may lead to client attrition and, in turn, cause BlackRock's AUM, revenue and earnings to decline.

The failure of key third-party providers to BlackRock to fulfill their obligations or a failure by BlackRock to maintain its relationships with key third-party providers could have a material adverse effect on BlackRock's growth, reputation or business, which may cause the Company's AUM, revenue and earnings to decline.

BlackRock depends on a number of key third-party providers for various fund administration, accounting, custody, market and environmental, social and governance ("ESG") data, market indices, insurance, technology and AI, cloud hosting and transfer agent roles and other distribution and operational needs. Further, BlackRock relies upon a relatively concentrated group of third-party index providers to deliver services that are integral to its clients' investment decisions. The index provider industry is characterized by large vendors and the use of long-term contracts remains the market standard. This industry structure may limit BlackRock's ability to renegotiate its index provider contracts on favorable terms or at all. While BlackRock performs focused diligence on its vendors in an effort to ensure they operate in accordance with expectations, to the extent any significant deficiencies are uncovered, there may be few, or no, alternative vendors available. In addition, BlackRock's operations and processes rely on commercially available data provided by third parties as well as providers of services, including technology services, and operating errors, process delays and failures or failures to comply with data usage requirements with respect to these service providers may adversely impact BlackRock. Data providers commonly disclaim the accuracy and completeness of data and BlackRock does not have the ability to validate or verify the accuracy and completeness of commercially sourced datasets. Moreover, in situations where BlackRock has limited access to alternative vendors, or where the nature of BlackRock's arrangement with a vendor requires a long term-commitment, BlackRock may be dependent on such vendor for continuous operational reliability and may be unable to avoid incurring costs if such vendor introduces required upgrades to its services.

BlackRock may from time to time transfer key contracts from one third-party provider to another. Key contract transfers may be costly and complex and expose BlackRock to heightened operational risks. Any failure to mitigate such risks could result in reputational harm, as well as financial losses to BlackRock and its clients. The failure or inability of BlackRock to diversify its sources for key services or the failure of any key third-party provider to fulfill its obligations could result in activities inconsistent with clients' investment management or other agreements, have an adverse financial impact on BlackRock products or lead to operational, legal and regulatory issues for the Company, which could result in reputational harm or legal liability, fines and/or sanctions and may cause BlackRock's AUM, revenue and earnings to decline.

Any disruption to the Company's distribution channels may cause BlackRock's AUM, revenue and earnings to decline.

BlackRock relies on a number of third parties to provide distribution, portfolio administration and servicing for certain BlackRock investment management products and services through their various distribution channels. BlackRock's ability to maintain strong relationships with its distributors may impact the Company's future performance, and its relationships with distributors are subject to periodic renegotiation that may result in increased distribution costs and/or reductions in the amount of BlackRock products and services being marketed or distributed. Moreover, new fiduciary regulations could lead to significant shifts in distributors' business models and more limited product offerings, potentially resulting in reduced distribution and/or marketing of certain of the Company's products and services and fee compression. If BlackRock is unable to distribute its products and services successfully or if it is unable to replace or renew existing distribution arrangements, BlackRock's AUM, revenue and earnings may decline. In addition, improper activities, as well as inadequate anti-money laundering diligence conducted by third-party distributors, could create reputational and regulatory harm to BlackRock.

Key technology partnerships may expose BlackRock to increased regulatory oversight, as well as migration, execution, technology and operational risks.

In April 2020, BlackRock announced a strategic partnership to host Aladdin infrastructure on the Microsoft Azure cloud and commenced a multiyear plan to migrate the Aladdin environments for BlackRock and its external Aladdin clients to the cloud. In addition, BlackRock has also migrated certain systems that support its corporate functions to cloud-based platforms. The benefits of cloud-based platforms are significant and BlackRock has adopted a robust risk-based approach to its migration strategies; however these partnerships also introduce new risks, including: (1) risks associated with relying on third-parties for aspects of infrastructure reliability and stability; (2) software and information security risks arising from the use of cloud technology; (3) operational and execution risks, including those related to migration; and (4) risks related to increased regulatory oversight and new compliance obligations, which risks may be further exacerbated as BlackRock and the Aladdin platform continue to grow. Failures by BlackRock to manage these risks, and/or risks associated with future potential technology partnerships, may result in escalating costs, financial loss, client dissatisfaction or attrition, regulatory fines and/or sanctions, reputational harm or legal liability, which, in turn, may cause BlackRock's AUM, revenue and earnings to decline. Disruption to the operations of third parties whose functions are integral to BlackRock's exchange-traded fund ("ETF") platform may adversely affect the prices at which ETFs trade, particularly during periods of market volatility.

BlackRock is the largest provider of ETFs globally. Shares of ETFs trade on stock exchanges at prices at, above or below the ETF's most recent net asset value ("NAV"). The NAV of an ETF is calculated at least once daily, generally at the end of each business day, and fluctuates with changes in the market value of the ETF's holdings. The trading price of the ETF's shares fluctuates continuously throughout trading hours. The creation/redemption feature and arbitrage mechanism of an ETF are designed to make it more likely that the ETF's shares normally will trade at prices close to the NAV. Notwithstanding these features, exchange prices have in the past deviated measurably from the NAV of certain ETFs and may under certain circumstances do so in the future. ETF market prices are subject to numerous potential risks, including trading halts invoked by a stock exchange, and the inability or unwillingness of market makers, authorized participants, settlement systems or other market participants to perform functions necessary for an ETF's arbitrage mechanism to function effectively. These risks may be heightened as a result of significant market volatility, the growth of the ETF industry combined with increased market activity, as well as the complexity associated with certain products or asset classes. Moreover, if market events lead to incidences where ETFs trade at prices that deviate meaningfully from an ETF's NAV, or trading halts are invoked by the relevant stock exchange or market, investors may lose confidence in ETF products and redeem their holdings, which may cause BlackRock's AUM, revenue and earnings to decline.

LEGAL, REGULATORY AND REPUTATIONAL RISKS

BlackRock is subject to extensive regulation around the world, which increases its cost of doing business.

BlackRock's business is subject to extensive regulation around the world. These regulations subject BlackRock's business activities to an array of increasingly detailed operational requirements, compliance with which is costly and complex.

In addition, many of BlackRock's legal entities are subject to laws and regulations aimed at preventing corruption, money laundering, inappropriate employment practices, illegal payments and engaging in business activities with certain individuals, countries or groups, including but not limited to the US Foreign Corrupt Practices Act, the USA PATRIOT Act, the Bank Secrecy Act, the EU Anti-Money Laundering Directives, the Money Laundering, Terrorist Financing and Transfer of Funds Regulations 2017, the UK Bribery Act, sanctions imposed by the US Treasury's Office of Foreign Assets Control, the United Nations and the EU and its member states, as well as those imposed by other countries in which BlackRock operates, such as His Majesty's Treasury's ("HMT") Office of Financial Sanctions Implementation.

BlackRock is also subject to certain risk retention rules and regulation, as well as regulatory capital requirements, which require the Company to maintain capital to support certain of its businesses. Furthermore, many jurisdictions in which BlackRock operates have laws and regulations relating to data privacy, cybersecurity and protection of personal information, including the GDPR and UK GDPR, which impose stringent data protection rules for individuals within the European Economic Area ("EEA") and UK, respectively, and for personal data exported outside the EEA and UK.

BlackRock is additionally subject to scrutiny from various government agencies that focus on antitrust and competition laws and regulations within the US and internationally, including in connection with merger control proceedings and proposed investments. Any determination of a failure to comply with any such laws or regulations could result in fines and/or sanctions against the Company, as well as reputational harm. Moreover, to the extent that these laws and regulations become more stringent, or if BlackRock is required to hold increased levels of capital to support its businesses, the Company's financial performance or plans for growth may be adversely impacted.

BlackRock may also be adversely affected by a failure to comply with existing laws and regulations or by changes in the interpretation or enforcement of such laws and regulations, including those discussed above. Challenges associated with interpreting regulations issued in numerous countries in a globally consistent manner may add to such risks if regulators in different jurisdictions have inconsistent views or provide only limited regulatory guidance. In particular, violation of applicable laws or regulations could result in fines and/or sanctions, temporary or permanent prohibition of certain activities, reputational harm and related client terminations, suspensions of employees or revocation of their licenses, suspension or termination of investment adviser, broker-dealer or other registrations, or suspension or termination of BTC's bank charter or other sanctions, which could have a material adverse effect on BlackRock's reputation or business and may cause the Company's AUM, revenue and earnings to decline. For a more extensive discussion of the laws, regulations and regulators to which BlackRock is subject and regulated by, see Item 1, Business – Regulation.

New regulations informed by global standard setters and/or developed by various national authorities may expose BlackRock to increasing regulatory scrutiny and compliance costs in the jurisdictions in which it operates.

Policymaking workstreams focused on the financial services sector led by global standard setters, such as the Financial Stability Board ("FSB") and International Organization of Securities Commissions ("IOSCO"), may lead to or inform new regulations in multiple jurisdictions in which BlackRock operates. Such workstreams have focused on areas such as money market funds ("MMFs"), open-ended funds ("OEFs") and sustainability regulations. BlackRock is, and may become, subject to increasing regulation in these areas, see Item 1, *Business – Regulation*, including:

• Macroprudential Policies for Asset Managers: Concerns about liquidity and leverage risks in the asset management industry and wider market-based finance sector have been heightened since the COVID-19 pandemic and reinforced by the Liquidity Driven Investment events in the UK. This has prompted a broad review of existing regulations globally, including an assessment of the adequacy of certain structural market components in mitigating risks by the FSB, IOSCO, the US Securities and Exchange Commission (the "SEC") and the Financial Stability Oversight Council ("FSOC"). In November 2022, the SEC proposed amendments to rules governing OEF liquidity risk management and swing pricing. The EU also proposed reforms to increase the availability of liquidity management tools to OEFs (including MMFs), enhance reporting on the use of liquidity management tools by OEFs to national regulators and allow such regulators to require OEF managers to activate liquidity management tools in extreme market conditions. Meanwhile, the UK proposed introducing liquidity facilities to certain asset owners, which could result in regulatory burden on asset managers. If any of these regulatory or policy actions result in broad application of macroprudential tools to OEFs or require changes to structural features of certain OEFs, it could limit BlackRock's ability to offer products to certain clients and/or result in clients altering their investment strategies or allocations in a manner that is adverse to BlackRock.

- Global MMF Reforms: Following the market events of March 2020, US, UK and EU authorities initiated a review of existing regulatory frameworks with the aim of improving the resilience of MMFs in market downturns. In the US, the SEC adopted changes to Rule 2a-7, the primary rule under the Investment Company Act of 1940 governing MMFs, including changes to required liquidity levels and certain operational aspects of such funds, and requiring mandatory liquidity fees under certain circumstances. The UK released a consultation in December 2023 indicating their intent to change regulatory requirements for MMFs domiciled or marketed in the UK, including material increases in required liquidity levels. Although EU authorities stated in July 2023 that they would not re-open the EU regulatory framework for MMFs in the near term, the UK's proposed changes may increase pressure to implement similar reforms as the vast majority of MMFs sold in the UK are EU-domiciled and regulated. Such regulatory reforms could significantly and adversely impact certain of BlackRock's MMF products.
- ESG and Sustainability: ESG and sustainability have been the subject of increased regulatory focus across jurisdictions. The International Sustainability Standards Board ("ISSB") released its first two disclosure standards in 2023, which may inform national regulators' approaches. For example, the UK, Singapore, Hong Kong, Taiwan and Australia have already indicated their intention to endorse these standards. In the US, the SEC has proposed a series of rules that would require, among other things: (1) corporate issuers to make substantial climate-related disclosures in periodic reports, including with respect to governance, risk management, business strategy, financial statement metrics and greenhouse gas ("GHG") emissions and (2) enhanced ESG disclosures by investment companies and investment advisers in fund and adviser filings, including disclosures on ESG strategies and how ESG factors are considered, and GHG emissions disclosure by certain environmentally focused funds. Furthermore, the SEC has announced plans to propose rules to require enhanced disclosure regarding human capital management and board diversity for public issuers. It has also increased scrutiny of disclosure and compliance issues relating to investment advisers' and funds' ESG strategies, policies and procedures. In addition, the US Department of Labor ("DOL") issued final rules clarifying that Employee Retirement Income Security Act of 1974, as amended ("ERISA") plan fiduciaries can, but are not required to, consider the economic effects of ESG factors for purposes of investing ERISA plan assets and exercising voting rights with respect to plan investments. Moreover, California passed several laws in 2023 that will require companies doing business in California to make certain types of climate-related disclosures, and other states may adopt similar laws.

The EU has enacted numerous regulations on ESG and sustainability, including on sustainability-related disclosures by financial market participants; integration of sustainability considerations into investment and risk management processes of asset managers and other institutional investors; making the advice and financial product distribution process more receptive to end-investor sustainability preferences; and requiring asset managers to report against an EU-wide taxonomy of environmentally sustainable activities and make detailed disclosures relating to ESG characteristics of funds and portfolios. Further regulations include the Corporate Sustainability Reporting Directive, which will require enhanced sustainability reporting for EU-based corporate issuers, with phased implementation beginning in 2024 and for a wider group of global companies from 2028. In December 2023, the EU reached provisional agreement on a directive, which if adopted in its current form, would require a wide group of European and global companies to provide transition plans and conduct due diligence on the sustainability of their suppliers. The EU and the UK Financial Conduct Authority ("FCA") are also developing rules and guidelines for the use of ESG or sustainability related terms in fund names, focused on specifying a minimum threshold of assets meeting ESG or sustainable criteria for such funds. Within the UK, the FCA has proposed UK-specific sustainability regulations, including a sustainable product classification system for funds and enhanced disclosure requirements, which are expected to apply on a staggered basis from July 2024. In addition, HMT released a consultation to bring ESG rating providers under regulation by the FCA and will consult on a UK-specific taxonomy of environmentally sustainable activities.

A number of Asia-Pacific jurisdictions are consulting on sustainability reporting obligations aligned with the ISSB standards. Similarly, policymakers in Japan have announced that they are preparing a local version of the ISSB standards. Japan and Singapore have published codes of conduct for ESG data and ratings providers, with Hong Kong considering a similar approach, while India introduced a regulatory framework for ESG ratings providers in July 2023.

As jurisdictions continue to develop legal frameworks on ESG and sustainability regulations, BlackRock faces increased fragmentation risk related to local implementation, resulting in complex and potentially conflicting compliance obligations and legal and regulatory uncertainty.

Global regulatory reforms could require BlackRock to alter its future business or operating activities, which could be time-consuming and increase costs, including costs related to regulatory compliance, result in litigation, impede the Company's growth and cause its AUM, revenue and earnings to decline. Regulatory reform may also impact BlackRock's clients, which could cause them to change their investment strategies or allocations in manners that may be adverse to BlackRock.

Regulatory reforms in the US expose BlackRock to increasing regulatory scrutiny, as well as regulatory uncertainty.

In recent years, a number of regulatory reforms have been proposed or fully or partially implemented in the US, and the level of regulatory scrutiny to which BlackRock is subject has increased. These risks have been heightened as the pace of regulatory rulemaking has intensified. BlackRock, as well as its clients, vendors and distributors, have expended resources and altered certain of their business or operating activities to prepare for, address and meet the requirements that such regulatory reforms impose. While BlackRock is, and may become, subject to numerous reform initiatives in the US, see Item 1, *Business – Regulation*, key regulatory reforms that may impact the Company include:

- Antitrust Rules and Guidance: In 2023, the Federal Trade Commission ("FTC") and the Antitrust Division of the Department of Justice (the "DOJ") issued a notice of proposed rulemaking with amendments to rules enacted under the Hart-Scott-Rodino Antitrust Improvements Act of 1976 ("HSR") that require parties in certain transactions to provide the FTC and DOJ prior notice and observe a waiting period before consummation of such transactions. The proposals would significantly expand the information required to be reported and documentation to be submitted in connection with an HSR filing. If enacted as drafted, the proposed rules could substantially increase BlackRock's premerger notification expenses and delay transactions. In December 2023, the FTC and DOJ also jointly issued new merger guidelines, which could impact the ability of the Company to expand its services through strategic investments or acquisitions.
- Designation as a Systemically Important Financial Institution ("SIFI"): The FSOC has the authority to designate nonbank financial institutions as SIFIs in the US under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. In November 2023, the FSOC finalized amendments to its existing interpretive guidance to remove the prioritization of an activities-based approach over an entity-specific approach to designation in connection with addressing potential risks to financial stability, although the amendment clarified that the FSOC retained the ability to use an activities-based approach when appropriate. If BlackRock is designated as a SIFI, it could become subject to enhanced regulatory and capital requirements and direct supervision by the Federal Reserve.

- US DOL Fiduciary Rule: In October 2023, the US DOL proposed a new regulation redefining the meaning of "investment advice fiduciary" under ERISA as well as amendments to several prohibited transaction exemptions applicable to investment advice fiduciaries. If adopted as proposed, the rule would substantially expand when a person would be considered a fiduciary subject to ERISA and could require BlackRock to revise a number of its distribution relationships, create compliance and operational challenges for BlackRock and its distribution partners, and limit BlackRock's ability to provide certain services to applicable clients.
- SEC Rules Governing Security-Based Swaps: In 2021, the SEC proposed rules in connection with security-based swaps ("SBS") transactions to require public reporting of large SBS positions. These rules, if adopted as proposed, may affect the types of transactions BlackRock may choose to execute in SBS or other SBS-related assets, introduce or increase costs relating to such transactions, and impact the liquidity in the SBS markets in which BlackRock transacts.
- SEC Rules on Private Fund Advisers: In 2023, the SEC adopted new rules and amendments to enhance regulation of private fund advisors. These included amendments to Form PF for registered investment advisers requiring new disclosures, filing obligations and enhanced reporting. The SEC adopted additional rules requiring registered private fund advisers to, among other things, provide quarterly reports to fund investors, obtain annual audits for funds, distribute fairness opinions in connection with certain transactions, prohibit certain types of preferential terms and treatment, and provide transparency to investors of all types of preferential treatment granted to other investors in the same fund. Implementing these rules and amendments may significantly increase BlackRock's reporting, disclosure and compliance obligations and create operational complexity for BlackRock's alternatives products.
- Proposed Rules on Regulation ATS: In 2023, the SEC re-proposed amendments to Regulation ATS. The proposed rules would expand the
 types of systems that could fall within the definition of "exchange" and extend Regulation ATS and Regulation Systems Compliance and
 Integrity to systems involving US government securities trading. If enacted as proposed, these rules may increase compliance costs for
 BlackRock.
- SEC US Treasury Clearing Mandate: In December 2023, the SEC adopted rules mandating central clearing of US Treasury repurchases and certain other Treasury transactions. The rules require many market participants, including a large number of BlackRock funds and accounts, to clear Treasury repurchase transactions and potentially certain cash Treasury securities transactions through a clearing agency registered with the SEC, which could increase transaction costs for BlackRock's clients.
- Proposed Rules on Equity Market Structure: In 2023, the SEC proposed equity market structure reforms that would significantly change how national market system ("NMS") stock orders are priced, executed and reported. The reforms include: (1) a requirement for certain retail orders to be subject to order-by-order competition, (2) an SEC-level best execution rule and (3) an adjustment to the tick sizes at which NMS stocks can be quoted or traded. If enacted as proposed, the collective impact of the rules may adversely affect market efficiency and execution costs, which would result in negative effects for BlackRock's business and clients.
- SEC Rules on Short Sales and Reporting of Securities Loans: In 2023, the SEC adopted a new rule requiring certain institutional managers to report short positions and activity to the SEC for publication on an aggregate basis, which could potentially impact investment strategies and result in greater operational burdens and cost for BlackRock. The SEC also adopted a new rule requiring certain persons to report information on securities loan transactions to a registered national securities association which will then publish certain information. The rule may increase BlackRock's operational burdens and costs.
- SEC Standard Settlement Rules: In 2023, the SEC adopted amendments and new rules which, among other things, shortened the standard settlement for most securities transactions to one business day after the trade date (T+1), which will likely increase BlackRock's operational burdens and costs.
- SEC Predictive Data Analytics Rules: The SEC proposed new rules in 2023 that would require broker-dealers and investment advisers, when engaging or communicating with investors using predictive data analytics ("PDA") and PDA-like technologies, to evaluate such technologies for conflicts of interest and, where identified, eliminate or neutralize the conflict of interest. If adopted as proposed, the rules could encompass a wide range of forward-looking uses of technology applications and impose significant operational burdens and costs.
- SEC Rulemakings for US Registered Funds and Investment Advisers: The SEC has recently engaged in various initiatives and reviews impacting regulatory structure governing the asset management industry and registered investment companies. For example, the SEC adopted rules requiring certain funds to provide tailored fund shareholder reports, adopted final amendments to the rule governing fund names, expanding the scope of the rule to fund names including growth, value, ESG or similar terms, and proposed rules governing outsourcing of certain functions by investment advisers to service providers.

Regulatory reforms in the US could require BlackRock to alter its future business or operating activities, which could be time-consuming and costly, increase regulatory compliance costs, result in litigation, impede the Company's growth and cause its AUM, revenue and earnings to decline. Regulatory reform may also impact BlackRock's clients, which could cause them to change their investment strategies or allocations in manners that may be adverse to BlackRock.

International regulatory reforms expose BlackRock and its clients to increasing regulatory scrutiny, as well as regulatory uncertainty.

BlackRock's business and operating activities are subject to increasing regulatory oversight outside of the US and the Company may be affected by several proposed or implemented reform initiatives in the EMEA and the Asia-Pacific regions, as well as volatility associated with international regulatory uncertainty. While BlackRock is, and may become, subject to numerous reform initiatives internationally, see Item 1, *Business – Regulation*, key reforms in these regions include:

European Union

• Enhanced Regulatory Scrutiny of Technology Service Providers to Financial Services Firms: The EU's Digital Operational Resilience Act ("DORA"), which focuses on direct regulation of providers and users of technology and data services, will become applicable beginning in January 2025. DORA will, among other things: (1) introduce additional governance, risk management, incident reporting, resilience testing and information sharing requirements to several of BlackRock's European entities and certain Aladdin clients; and (2) potentially subject Aladdin to additional oversight. In parallel with DORA, the UK proposed a new Critical Third Party regime to regulate certain third parties designated by HMT as "critical" to the financial sector, and UK regulators have issued a consultation on proposed requirements for "critical" third parties, with further consultations expected in 2024.

• Retail Investment Strategy: In 2023, the European Commission ("EC") adopted a Retail Investment Strategy package with wide-reaching amendments intended to enhance protections for retail investors. If enacted as proposed, these changes may impact BlackRock's operations in European markets, including product development, client servicing and distribution models.

United Kingdom

- FSMA 2023: The Financial Services and Markets Act 2023 ("FSMA") reflects significant changes to the UK framework for financial services regulation, including changes that: (1) revoke retained EU law related to financial services regulation, (2) amend the UK Markets in Financial Instruments Directive and Markets in Financial Instruments Regulation frameworks, (3) establish a new designated activities regime and (4) reform the financial promotion regime for unauthorized firms. The UK government and FCA are expected to publish further legislation setting out specific changes impacting the UK market in 2024.
- Mansion House Reforms: The Mansion House reforms announced in July 2023 also build on the new UK regulatory framework enabled by the FSMA. Potential impacts to the asset management sector include: (1) repeal and replacement of the packaged retail and insurance based investment products ("PRIIPs") Regulation; (2) review of the UK's green finance strategy, including potential regulation of ESG data providers; (3) review of governance through the Senior Managers and Certification Regime; (4) repeal of EU legislation on the European Long-Term Investment Fund; (5) market infrastructure reforms; (6) reassessment of the boundary between investment advice and financial guidance; and (7) independent review of the UK investment research landscape.
- Overseas Fund Regime ("OFR"): OFR, the simplified regime through which non-UK funds can register with the FCA to be marketed to UK
 retail investors, was enacted in February 2022 and is expected to be implemented through 2024. OFR requires consumer protection
 regimes in EU countries where BlackRock funds are domiciled to be found equivalent to the UK's regime in order to market such funds in
 the UK.
- Conduct Regulation: The FCA continues to focus on conduct regulation, including the implementation of the Consumer Duty by all asset management firms, including BlackRock's UK subsidiaries. The Consumer Duty rules require firms to act to deliver good outcomes for retail customers in their manufacture and distribution of products and services, in respect of price and value, consumer understanding and consumer support. Any failure to meet the FCA's regulatory expectations could expose BlackRock to regulatory sanctions and increased reputational risk.
- UK Stewardship Code Review: The UK Financial Reporting Council has announced a planned review of the UK Stewardship Code in 2024 to consider potential revisions to address stakeholder concerns.

Asia-Pacific

Regulatory Environment in China: The Company's operations in China are subject to a number of regulatory risks, including an evolving
regulatory environment and complex data security and data transfer regulations. These factors may increase compliance risk and costs,
limit the Company's ability to source and execute new investment opportunities and lead to impairment losses on its investments.
Restrictions on transfers of certain types of onshore data of the Company's Chinese entities to offshore entities also may limit BlackRock's
ability to aggregate, report and monitor such data on its global platform. In addition, a number of regulators in China have jurisdiction over
BlackRock's business operations, increasing operational and regulatory engagement complexity. These risks may be further heightened by
additional scrutiny by Chinese regulators of certain sectors, such as technology and other industries that might be deemed to be of national
importance.

International regulatory reforms could require BlackRock to alter its future business or operating activities, which could be time-consuming and costly, increase regulatory compliance costs, result in litigation, impede the Company's growth and cause its AUM, revenue and earnings to decline. Regulatory reform may also impact BlackRock's clients, which could cause them to change their investment strategies or allocations in manners that may be adverse to BlackRock.

Legal proceedings may cause the Company's AUM, revenue and earnings to decline.

BlackRock is subject to a number of sources of potential legal liability and the Company, certain of the investment funds it manages and certain of its subsidiaries and employees have been named as defendants in various legal actions, including arbitrations, class actions and other litigation arising in connection with BlackRock's activities. Certain of BlackRock's subsidiaries and employees are also subject to periodic examination, special inquiries and potential proceedings by regulatory authorities, including the Securities and Exchange Commission, Office of the Comptroller of the Currency ("OCC"), Department of Labor, Commodity Futures Trading Commission, Financial Conduct Authority, Commission de Surveillance du Secteur Financial and Federal Reserve. Similarly, from time to time, BlackRock receives subpoenas or other requests for information from various US state and federal as well as non-US governmental and regulatory authorities in connection with certain industry-wide, company-specific or other investigations, proceedings or litigations. These examinations, inquiries and proceedings have in the past and could in the future, if compliance failures or other violations are found, cause the relevant governmental or regulatory authority to institute proceedings and/or impose sanctions for violations. Any such action may also result in litigation by investors in BlackRock's funds, other BlackRock clients or BlackRock's shareholders. Such legal proceedings could harm the Company's reputation and may cause its AUM, revenue and earnings to decline, potentially harm the investment returns of the applicable fund, or result in the Company being liable for damages.

In addition, when clients retain BlackRock to manage their assets or provide them with products or services, they typically specify contractual requirements or guidelines that BlackRock must observe in the provision of its services. A failure to comply with these guidelines or requirements could expose BlackRock to lawsuits, harm its reputation or cause clients to withdraw assets or terminate contracts.

BlackRock faces increasing focus from regulators, officials, clients and other stakeholders regarding ESG matters, which may adversely impact its reputation and business.

BlackRock faces increasing focus from regulators, officials, clients and other stakeholders regarding ESG matters. BlackRock offers choice to its clients who have a variety of goals and preferences, including those who want to increase their exposure to the low-carbon transition and those who choose not to invest in products or strategies with sustainable investment objectives. BlackRock is subject to competing demands from different stakeholder groups with divergent views on ESG-related matters, including in countries in which BlackRock operates and invests, as well as in states and localities where BlackRock serves public sector clients. This divergence has and continues to increase the risk that any perceived or actual action or lack thereof by BlackRock on such matters on behalf of its clients will be viewed differently by various stakeholders and adversely impact BlackRock's reputation and business, including through withdrawals, redemptions, terminations or decisions not to commit or invest new capital by clients, as well as legal and governmental action and scrutiny. Some US states and state officials have adopted or proposed legislation or otherwise have taken official positions restricting or prohibiting state government entities from doing certain business with entities identified by the state as "boycotting" or "discriminating" against particular industries or considering ESG factors in their investment processes and proxy voting. Other states and localities may adopt similar legislation or other ESG-related laws and positions that adversely impact BlackRock's business. BlackRock may also communicate certain initiatives and goals for its corporate activities related to environmental, diversity, and other ESG-related matters. BlackRock could be criticized for the scope or nature of any initiatives or goals, or for revisions thereto. Such initiatives or goals may be difficult or costly to implement, may not advance at the anticipated pace, or be accomplished within the announced timeframe or at all. If BlackRock is not able to successfully manage ESG-related expectations across varied stakeholder interests, it may adversely affect BlackRock's reputation, ability to attract and retain clients, employees, shareholders and business partners or result in litigation, legal or governmental action, which may cause its AUM, revenue and earnings to decline,

Damage to BlackRock's reputation may harm its business.

BlackRock's reputation is critical to its relationships with its clients, employees, shareholders and business partners. BlackRock's reputation may be harmed by, among other factors, regulatory, enforcement or other governmental actions, technology or operational failures, poor investment performance, ineffective management or monitoring of key third-party relationships, ransomware or other cybersecurity incidents, privacy incidents, employee errors or misconduct, failures to manage risks or conflicts of interest, or legal actions related to BlackRock or its products and services. In addition, BlackRock's business, scale and investments subject it to significant media coverage and increasing attention from a broad range of stakeholders. This heightened scrutiny has resulted in negative publicity and adverse actions for BlackRock and may continue to do so in the future. Any perceived or actual action or lack thereof, or perceived lack of transparency, by BlackRock on matters subject to scrutiny, such as ESG, may be viewed differently by various stakeholders and adversely impact BlackRock's reputation and business, including through redemptions or terminations by clients, and legal and governmental action and scrutiny. BlackRock's global presence and investments on behalf of its clients around the world could also lead to heightened scrutiny and criticism in an increasingly fragmented geopolitical landscape. For example, BlackRock has received criticism from some stakeholders because of its operations and investments in certain countries on behalf of clients, including China. These criticisms could adversely impact BlackRock's reputation and business. In addition, the increasing popularity of social media and non-mainstream Internet news sources may lead to faster and wider dissemination of adverse publicity or inaccurate information about BlackRock, making effective remediation more difficult. Damage to BlackRock's reputation may impact BlackRock's ability to attract and retain clients, employees, shareholders a

A failure to effectively manage potential conflicts of interest could result in litigation or enforcement actions and/or adversely affect BlackRock's business and reputation, which may cause BlackRock's AUM, revenue and earnings to decline.

As a global investment management firm that provides investment and technology services to a diverse range of clients, the Company must routinely address and manage conflicts of interest, as well as the perception of conflicts of interest, between itself and its clients, employees or vendors. While BlackRock has policies, controls and disclosure protocols in place to manage and address potential conflicts of interest, identifying and mitigating conflicts of interest can be complex and is the subject of increasing regulatory and media scrutiny. It is possible that actual, potential or perceived conflicts could give rise to investor or client dissatisfaction, adverse publicity, litigation or enforcement actions. In particular, BlackRock's broad range of investment, advisory and technology offerings, and its focus on providing clients with whole portfolio solutions, may result in clients working with multiple BlackRock businesses and/or BlackRock being engaged by institutions that have a nexus to industries or jurisdictions in which BlackRock operates, which may increase the potential for actual or perceived conflicts of interest and improper information sharing. To the extent that BlackRock fails, or appears to fail, to deal appropriately with any conflict of interest, it may face adverse publicity, reputational damage, litigation, regulatory proceedings, client attrition, penalties, fines and/or sanctions, any of which may cause BlackRock's AUM, revenue and earnings to decline.

A subsidiary of BlackRock is subject to US banking regulations that may limit its business activities.

BlackRock's trust bank subsidiary, which is a national banking association chartered by the OCC, is subject to OCC regulation and capital requirements that may limit its business activities. The OCC has broad supervisory and enforcement authority over BlackRock's trust bank. Having a subsidiary subject to banking regulation may put BlackRock at a competitive disadvantage because certain of its competitors are not subject to the limitations imposed by such regulation.

The implications of complying with threshold limits and/or any failure to comply with ownership reporting requirements could result in harm to BlackRock's reputation, impact the performance of certain BlackRock funds and may cause its AUM, revenue and earnings to decline.

Of note among the various regulations to which BlackRock is subject are the extensive and increasingly stringent regulatory reporting requirements that necessitate the monitoring and reporting of issuer exposure levels (thresholds) across the holdings of managed funds and accounts and those of the Company. The specific triggers and the reporting methods that these threshold filings entail vary significantly by regulator and across jurisdictions. BlackRock continues to invest in technology, training and its employees to further enhance its monitoring and reporting functions. Despite these investments, the complexity of the various threshold reporting requirements combined with the breadth of the assets managed by the Company and high volume of securities trading have caused errors and omissions to occur in the past and pose a risk that errors or omissions may occur in the future. Any such errors may expose BlackRock to monetary penalties or other sanctions, which could have an adverse effect on BlackRock's reputation and may cause its AUM, revenue and earnings to decline.

Moreover, as BlackRock's business grows it is becoming subject to a greater number of regulatory, industry-level or issuer-specific threshold limits and scrutiny that may prevent BlackRock from holding positions in certain equity securities, securities convertible into equity securities or futures contracts in excess of certain thresholds. Although BlackRock is actively engaged in regulatory, issuer-specific and structural initiatives to create additional investment capacity, threshold limits may nonetheless prevent the purchase of certain securities which may, in turn, impact the performance of certain BlackRock index funds by increasing tracking error relative to the funds' benchmarks, impact the performance of certain BlackRock actively managed funds by preventing them from taking advantage of alpha generating opportunities, and impede the Company's growth.

BlackRock has been the subject of commentary citing concerns about the scale of its index investing business, as well as purported competition issues relating to the common ownership theory.

As a leader in the index investing and asset management industry, BlackRock has been the subject of commentary citing concerns about the growth of index investing and concentrated proxy voting power. Some commentators have argued that continued growth of index funds has the potential to impact stock market competitiveness by exacerbating stock price moves and market volatility. Some commentators, regulators and lawmakers have also argued that index managers have accumulated outsized influence through the proxy voting power their clients have assigned them. Some have proposed limitations on the ability of index fund managers to vote on behalf of their clients, or that voting and engagement on certain topics should trigger changes in regulatory status. Additional commentary focuses on the common ownership theory, an academic theory stating that minority ownership of multiple companies within a single industry by the same investor leads to anticompetitive effects. This theory purports to link aggregated equity positions in certain industries with higher consumer prices and executive compensation and lower wages and employment rates, among other things. In the US, the FTC cited common ownership as a disqualifying factor in a proposed exemption from pre-merger notification rules and as a consideration underlying its consultation on rules applying to acquisitions of voting securities by investment entities. In 2021, the FTC identified common ownership as a key enforcement area and passed a resolution empowering individual commissioners to investigate shareholder conduct in connection with common ownership. In 2023, the FTC and DOJ released new merger guidelines recognizing that common ownership may reduce competitive incentives. Common ownership may be given greater consideration in regulatory investigations, studies, rule proposals, policy decisions and/or the scrutiny of mergers and acquisitions. The debate on common ownership is still on the agenda of competition regulators globally, and common ownership may continue to be a consideration for the EC, among others, including in the assessment of mergers and investigations. For example, EC and European Parliament reports in 2020 suggested that more evidence was required on the impact of common ownership on competition, and a committee of the Australian House of Representatives held an inquiry in 2021 on the implications of common ownership and capital concentration on Australian companies and markets. In 2023, the UK Competition & Markets Authority ("CMA") established a new economic research unit which identified common ownership as a potential research topic. There is substantial literature casting doubt on the assumptions, data, methodology and conclusions associated with the common ownership theory and competition regulators, including at the FTC and CMA, have acknowledged that the debate around the theory remains unsettled. Nevertheless, some commentators have proposed remedies, including limits on the ownership stakes of common owners that, if enacted into policy, could have a negative impact on the capital markets, as well as increase costs and limit the availability of products for investors. Such policy solutions could, in turn, adversely affect BlackRock.

New tax legislation or changes to existing US and non-US tax laws, treaties and regulations or challenges to BlackRock's historical taxation practices may adversely affect BlackRock's effective tax rate, business and overall financial condition.

BlackRock's businesses may be directly or indirectly affected by tax legislation and regulation, or the modification of existing tax laws, by US or non-US tax authorities. Legislation at both the US federal and state level has been previously proposed to enact a financial transaction tax ("FTT") on stocks, bonds and a broad range of financial instruments and derivative transactions. In the EU, certain Member States have also enacted similar FTTs and the EC has proposed legislation to harmonize these taxes and provide for the adoption of EU-level legislation applicable to some (but not all) EU Member States. If enacted as proposed, FTTs could have an adverse effect on BlackRock's financial results and clients' performance results.

The Organisation for Economic Cooperation and Development ("OECD") has proposed certain international tax reforms, which, among other things, would (1) shift taxing rights to the jurisdiction of the consumer and (2) establish a global minimum tax for multinational companies of 15% (namely the "Pillar One" and "Pillar Two" Framework). EU member states adopted, or plan to adopt, laws implementing the OECD's minimum tax rules under the Pillar Two Framework, which are expected to go into effect in 2024. Several other countries, including the UK, have changed or are considering changes to their tax law to implement the OECD's minimum tax proposal. As a result of these developments, the tax laws of certain countries in which BlackRock does business have and may continue to change, and any such changes could increase its tax liabilities. The Company is continuing to monitor legislative developments and evaluate the potential impact of the Pillar Two Framework on future periods.

The application of tax regulations involves numerous uncertainties, and in the normal course of business US and non-US tax authorities may review and challenge tax positions adopted by BlackRock. These challenges may result in adjustments to, or impact the timing or amount of, taxable income, deductions or other tax allocations, which may adversely affect BlackRock's effective tax rate and overall financial condition. Similarly, the Company manages assets in products and accounts that have investment objectives which may conform to tax positions adopted by BlackRock or to specific tax rules. To the extent there are changes in tax law or policy, or regulatory challenges to tax positions adopted by BlackRock, the value or attractiveness of such investments may be diminished and BlackRock may suffer financial or reputational harm.

Item 1B. Unresolved Staff Comments

The Company has no unresolved comments from the Securities and Exchange Commission ("SEC") staff relating to BlackRock's periodic or current reports filed with the SEC pursuant to the Exchange Act.

Item 1C. Cybersecurity

CYBERSECURITY RISK MANAGEMENT AND STRATEGY

BlackRock recognizes the importance of identifying, assessing, and managing material risks associated with cybersecurity threats. Cybersecurity represents an important component of the Company's approach to enterprise risk management ("ERM"). The Company leverages a multi-lines-of-defense model with cybersecurity operational processes executed by global information security and other teams across the firm and dedicated internal audit technology and technology risk management ("TRM") teams that independently review technology risks. The Company's cybersecurity program is fully integrated into its ERM framework and is aligned with recognized frameworks, including NIST CSF, FFIEC CAT, FedRAMP, SOC 1/2, ISO 27001/2 and others. BlackRock aims to inform and continuously improve its cybersecurity program through engagement with regulatory, client, insurer, vendor, partner, peer, government and industry organizations and associations, as well as external audit, technology risk, information security and other assessments.

BlackRock seeks to address cybersecurity risks through a global, multilayered strategy of control programs that is designed to preserve the confidentiality, integrity and availability of the information that BlackRock collects and stores by identifying, preventing and mitigating cybersecurity threats and incidents. As one of the critical elements of the Company's overall ERM framework, BlackRock's cybersecurity program is focused on the following key areas:

- Governance: As discussed in more detail under the heading "Cybersecurity Governance" below, the Board's oversight of cybersecurity risk management is supported by the Risk Committee, which regularly interacts with the Company's risk management function, the Company's Chief Risk Officer ("CRO") and Chief Information Security Officer ("CISO"), along with other members of management. In addition, technology and cybersecurity risks are formally overseen by a dedicated management risk governance committee, the Technology Risk and Cybersecurity Committee ("TRCC"), which is a sub-committee of the firmwide Enterprise Risk Committee ("ERC").
- Cross-Functional Approach: The Company has implemented a global, cross-functional approach to identifying, preventing, and mitigating
 cybersecurity threats and incidents, while also implementing layered preventative, detective, reactive and recovery controls to identify and
 manage cybersecurity risks.
- Safeguards: The Company deploys a range of people, process and technical controls that are designed to protect the Company's information systems from cybersecurity threats, which may include, among others: physical security controls; perimeter controls, including technical assessments, firewalls, network segregation, intrusion detection and prevention; tabletop exercises; ongoing vulnerability and patch management; vendor due diligence; multi-factor authentication; device encryption; application security, code testing and penetration testing; endpoint security, including anti-malware protection, threat intel and response, managed detection and response, security configuration management, portable storage device lockdown, and restricted administrative privileges; employee awareness, training, and phishing testing; data loss prevention program and monitoring; information security incident reporting and monitoring; and layered and comprehensive access controls.
- Incident Response and Recovery Planning: The Company has established and maintains incident response and recovery plans that address the Company's response to a cybersecurity incident, including processes designed to assess, escalate, contain, investigate and remediate the incident, as well as to comply with applicable legal obligations and mitigate potential reputational damage. Such plans are evaluated on a periodic basis.
- Third-Party Risk Management: The Company maintains a risk-based approach to identifying and overseeing cybersecurity risks presented by third parties, including vendors, service providers, counterparties and clients, as well as the systems of third parties that could significantly and adversely impact the Company's business in the event of a cybersecurity incident affecting those third-party systems. Operational incidents can arise as a result of failures by third parties with which the Company does business, such as failures by internet, communication technology and cloud service providers or other vendors to adequately follow processes and procedures, safeguard their systems or prevent system disruptions or cyber-attacks. Third-party risks are included within BlackRock's ERM framework, and risk identification and mitigation are supported by the Company's cybersecurity program. BlackRock also performs diligence on certain third parties and monitors cybersecurity threats and risks identified through such diligence.
- Education and Awareness: The Company's employees and contractors are required to complete an annual information security training to equip them with effective tools to address cybersecurity threats, and receive communications on the Company's evolving information security policies and procedures.

The Company's global information security team, in collaboration with the technology risk and internal audit teams, engages in the periodic assessment and testing of the Company's cyber risks and cybersecurity program. These efforts may include a wide range of activities, including audits, assessments, wargames and "tabletop" exercises, threat modeling, vulnerability testing and other exercises focused on evaluating the effectiveness of the Company's cybersecurity measures and planning. BlackRock also participates in financial services industry and government forums in an effort to improve both internal and sector cybersecurity defense. The Company regularly engages third parties and advisors to assess its cybersecurity control environment. The results of certain program and control assessments are reported to the Risk Committee, and BlackRock adjusts its cybersecurity program as appropriate based on the information provided by these assessments.

As of December 31, 2023, BlackRock is not aware of any cybersecurity risks that have materially affected or are reasonably likely to materially affect BlackRock's business strategy, results of operations, or financial condition. For additional information on whether and how risks from cybersecurity threats are reasonably likely to materially affect BlackRock, see "A cyber-attack or a failure to implement effective information and cybersecurity policies, procedures and capabilities could disrupt operations and lead to financial losses and reputational harm, which may cause BlackRock's AUM, revenue and earnings to decline." under Part I, Item 1A, *Risk Factors* herein.

CYBERSECURITY GOVERNANCE

BlackRock's Board of Directors is actively engaged in the oversight of BlackRock's risk management program. The Risk Committee assists the Board with its oversight of the Company's levels of risk, risk assessment, risk management and related policies and processes, including risks arising from cybersecurity threats. The Risk Committee receives regular reports on the Company's cybersecurity program, technology resilience risk management and related developments from members of the Company's information security team, including the CISO. The Board and the Risk Committee also receive information regarding cybersecurity incidents that meet certain reporting thresholds. On an annual basis, senior members of BlackRock's technology, risk and information security teams provide a comprehensive overview of BlackRock's cyber risk and related programs to a joint session of the Board's Risk and Audit Committees.

Technology and cybersecurity risks at BlackRock are also overseen by the TRCC, a dedicated management risk governance committee and sub-committee of the firmwide ERC. The chair of the TRCC is appointed by the head of Enterprise Risk Management at the Company and its members include the CISO as well as a broad range of senior business stakeholders across BlackRock. The TRCC is responsible for oversight of BlackRock's technology and cybersecurity risk management practices and helps ensure that technology and cybersecurity risks remain within firmwide risk tolerances and technology and cybersecurity risk issues are escalated as appropriate to the ERC and other committees. The TRCC also reviews any relevant technology and cybersecurity risk related issues and helps ensure that they are appropriately escalated, reported, and remediated.

BlackRock's cybersecurity risk management and strategy processes, which are discussed in greater detail above, are led by the Company's CISO. As of December 31, 2023, the CISO had over 30 years of experience in information technology with a 25-year concentration in information security, including previously serving as the CISO at several global financial institutions. He also holds the Certified Information Systems Security Professional certification. The CISO works closely with the leadership team and other subject matter experts in the global cybersecurity group, who collectively have extensive prior work experience in various roles involving managing information security, developing cybersecurity strategy, implementing effective information and cybersecurity programs and overseeing cybersecurity controls in technology risk and audit functions, as well as having relevant degrees and industry-leading certifications.

The CISO and members of the TRCC monitor the prevention, detection, mitigation and remediation of cybersecurity incidents through their management of, and participation in, the cybersecurity risk management processes described above, including the operation of BlackRock's incident response plan.

Item 2. Properties

BlackRock's principal office, which is leased, is located at 50 Hudson Yards, New York, New York. BlackRock leases additional office space throughout the world, including Atlanta, Belgrade (Serbia), Budapest, Edinburgh, Gurgaon (India), Hong Kong, London, Mumbai (India), Princeton (New Jersey), San Francisco and Singapore. The Company also owns an 84,500 square foot office building in Wilmington, Delaware and a 43,000 square foot data center in Amherst, New York.

Item 3. Legal Proceedings

For a discussion of the Company's legal proceedings, see Note 15, Commitments and Contingencies, in the notes to the consolidated financial statements contained in Part II, Item 8.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

BlackRock's common stock is listed on the NYSE and is traded under the symbol "BLK". At the close of business on January 31, 2024, there were 197 common stockholders of record. Common stockholders include institutional or omnibus accounts that hold common stock for many underlying investors.

The following table sets forth for the periods indicated the dividends declared per share for the common stock as reported on the NYSE:

| | Cas Divid Decla | end |
|----------------|-----------------------|------|
| <u>2023</u> | | |
| First Quarter | \$ | 5.00 |
| Second Quarter | \$ | 5.00 |
| Third Quarter | \$ | 5.00 |
| Fourth Quarter | \$ | 5.00 |
| <u>2022</u> | | |
| First Quarter | \$ | 4.88 |
| Second Quarter | \$ | 4.88 |
| Third Quarter | \$ | 4.88 |
| Fourth Quarter | \$ | 4.88 |

The closing price of BlackRock's common stock as of February 22, 2024 was \$813.44.

DIVIDENDS

On January 12, 2024, the Board of Directors approved BlackRock's quarterly dividend of \$5.10 per share to be paid on March 22, 2024 to stockholders of record at the close of business on March 7, 2024.

ISSUER PURCHASES OF EQUITY SECURITIES

During the three months ended December 31, 2023, the Company made the following purchases of its common stock, which is registered pursuant to Section 12(b) of the Exchange Act.

| | Total Number of Shares Purchased ⁽¹⁾ | F | Average Price Paid per Share | Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs | Maximum Number of Shares That May Yet Be Purchased Under the Plans or Programs ⁽¹⁾ |
|--|--|----|------------------------------------|--|---|
| October 1, 2023 through October 31, 2023 | 211,477 | \$ | 616.97 | 208,564 | 6,087,167 |
| November 1, 2023 through November 30, 2023 | 328,204 | \$ | 689.24 | 326,240 | 5,760,927 |
| December 1, 2023 through December 31, 2023 | 31,900 | \$ | 759.41 | 28,312 | 5,732,615 |
| Total | 571,581 | \$ | 666.42 | 563,116 | |

⁽¹⁾ Consists of purchases made by the Company primarily to satisfy income tax withholding obligations of employees and members of the Company's Board of Directors related to the vesting of certain restricted stock or restricted stock unit awards and purchases made by the Company as part of the share repurchase program that the Company announced in July 2010, which initially authorized the repurchase of 5.1 million shares with no stated expiration. In January 2023, the Company announced that the Board of Directors authorized the repurchase of an additional seven million shares under the Company's existing share repurchase program, for a total of up to approximately 7.9 million shares of BlackRock common stock.

Item 6. [Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

FORWARD-LOOKING STATEMENTS

This report, and other statements that BlackRock may make, may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act, with respect to BlackRock's future financial or business performance, strategies or expectations. Forward-looking statements are typically identified by words or phrases such as "trend," "potential," "opportunity," "pipeline," "believe," "comfortable," "expect," "anticipate," "current," "intention," "estimate," "position," "assume," "outlook," "continue," "remain," "maintain," "sustain," "seek," "achieve," and similar expressions, or future or conditional verbs such as "will," "would," "should," "could," "may" and similar expressions.

BlackRock cautions that forward-looking statements are subject to numerous assumptions, risks and uncertainties, which change over time. Forward-looking statements speak only as of the date they are made, and BlackRock assumes no duty to and does not undertake to update forward-looking statements. Actual results could differ materially from those anticipated in forward-looking statements and future results could differ materially from historical performance.

BlackRock has previously disclosed risk factors in its Securities and Exchange Commission ("SEC") reports. These risk factors and those identified elsewhere in this report, among others, could cause actual results to differ materially from forward-looking statements or historical performance and include: (1) the introduction, withdrawal, success and timing of business initiatives and strategies; (2) changes and volatility in political, economic or industry conditions, the interest rate environment, foreign exchange rates or financial and capital markets, which could result in changes in demand for products or services or in the value of AUM; (3) the relative and absolute investment performance of BlackRock's investment products; (4) BlackRock's ability to develop new products and services that address client preferences; (5) the impact of increased competition; (6) the impact of future acquisitions or divestitures, including the acquisition of Global Infrastructure Management, LLC (referred to herein as Global Infrastructure Partners ("GIP") or the "GIP Transaction"); (7) BlackRock's ability to integrate acquired businesses successfully, including GIP; (8) risks related to the GIP Transaction, including the possibility that the GIP Transaction does not close, the failure to satisfy the closing conditions, the possibility that expected synergies and value creation from the GIP Transaction will not be realized, or will not be realized within the expected time period, and impacts to business and operational relationships related to disruptions from the GIP Transaction; (9) the unfavorable resolution of legal proceedings; (10) the extent and timing of any share repurchases; (11) the impact, extent and timing of technological changes and the adequacy of intellectual property, data, information and cybersecurity protection; (12) the failure to effectively manage the development and use of AI; (13) attempts to circumvent BlackRock's operational control environment or the potential for human error in connection with BlackRock's operational systems; (14) the impact of legislative and regulatory actions and reforms, regulatory, supervisory or enforcement actions of government agencies and governmental scrutiny relating to BlackRock; (15) changes in law and policy and uncertainty pending any such changes; (16) any failure to effectively manage conflicts of interest; (17) damage to BlackRock's reputation; (18) increasing focus from stakeholders regarding ESG matters; (19) geopolitical unrest, terrorist activities, civil or international hostilities, and other events outside BlackRock's control, including wars, natural disasters and health crises, which may adversely affect the general economy, domestic and local financial and capital markets, specific industries or BlackRock; (20) climate-related risks to BlackRock's business, products, operations and clients; (21) the ability to attract, train and retain highly qualified and diverse professionals; (22) fluctuations in the carrying value of BlackRock's economic investments; (23) the impact of changes to tax legislation, including income, payroll and transaction taxes, and taxation on products, which could affect the value proposition to clients and, generally, the tax position of the Company; (24) BlackRock's success in negotiating distribution arrangements and maintaining distribution channels for its products; (25) the failure by key third-party providers of BlackRock to fulfill their obligations to the Company; (26) operational, technological and regulatory risks associated with BlackRock's major technology partnerships; (27) any disruption to the operations of third parties whose functions are integral to BlackRock's ETF platform; (28) the impact of BlackRock electing to provide support to its products from time to time and any potential liabilities related to securities lending or other indemnification obligations; and (29) the impact of problems, instability or failure of other financial institutions or the failure or negative performance of products offered by other financial institutions.

OVERVIEW

BlackRock, Inc. (together, with its subsidiaries, unless the context otherwise indicates, "BlackRock" or the "Company") is a leading publicly traded investment management firm with \$10.0 trillion of AUM at December 31, 2023. With approximately 19,800 employees in more than 30 countries, BlackRock provides a broad range of investment management and technology services to institutional and retail clients in more than 100 countries across the globe. For further information see Note 1, *Business Overview*, and Note 26, *Segment Information*, in the notes to the consolidated financial statements contained in Part II, Item 8.

The following discussion includes a comparison of BlackRock's results for 2023 and 2022. For a discussion of BlackRock's results for 2021 and a comparison of results for 2022 and 2021, see Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations*, of the Company's Annual Report on Form 10-K for the year ended December 31, 2022, which was filed with the SEC on February 24, 2023.

Acquisitions

In August 2023, BlackRock completed the acquisition of Kreos Capital, a provider of growth and venture debt financing to companies in the technology and healthcare industries (the "Kreos Transaction"). The acquisition adds to BlackRock's position as a leading global credit asset manager and advances its ambitions to provide clients with a diverse range of private market investment products and solutions. Total consideration for the transaction was approximately \$250 million, which included contingent consideration.

In January 2024, BlackRock announced that it had entered into a definitive agreement to acquire 100% of the business and assets of GIP, a leading independent infrastructure fund manager, for \$3 billion in cash and approximately 12 million shares of BlackRock common stock. Approximately 30% of the total consideration, all in stock, will be deferred and will be issued subject to the satisfaction of certain post-closing events. The Company intends to fund the cash consideration through \$3 billion of additional debt. The Company believes the combination of GIP with BlackRock's complementary infrastructure offerings will create a broad global infrastructure franchise with differentiated origination and asset management capabilities. The GIP Transaction is expected to close in the third quarter of 2024 subject to customary regulatory approvals and other closing conditions.

Business Outlook

BlackRock's strategy continues to be guided by the Company's clients' needs and focus on the long-term, which the Company believes better enables it to deliver durable returns for shareholders and create value for all of its stakeholders.

BlackRock's framework for long-term shareholder value creation is predicated on generating differentiated organic growth, leveraging scale to increase operating margins over time, and returning capital to shareholders on a consistent basis. BlackRock's diversified platform, in terms of style, product, client and geography, enables it to generate more stable cash flows through market cycles, positioning BlackRock to invest for the long-term by striking an appropriate balance between investing for future growth and prudent discretionary expense management.

In January 2024, BlackRock announced two changes in anticipation of the evolution the Company sees ahead for asset management and the capital markets. First, BlackRock believes that the strategic re-architecture of the organization to embed its ETF and Index expertise across the entire firm will simplify and improve how the Company works and delivers for clients. Second, the Company also believes that the acquisition of GIP will propel its leadership in the fast-growing market for hard-asset infrastructure.

A number of long-term structural trends support an acceleration in infrastructure investment. These include increasing global demand for upgraded digital infrastructure like fiber broadband, cell towers and data centers; renewed investment in logistical hubs such as airports, railways and shipping ports as supply chains are rewired; and a movement toward increased energy independence in many parts of the world supported by decarbonization infrastructure.

The need for new infrastructure coupled with record high government deficits indicates that the mobilization of capital through public-private partnerships will be critical, and will create compelling investment opportunities for clients. The Company believes these dynamics offer clients – current cashflow, inflation-protected, long-duration investments.

The planned combination of GIP with BlackRock's complementary infrastructure offerings will create a broad global infrastructure franchise with differentiated origination and asset management capabilities. Marrying the proprietary origination and business improvement capabilities of GIP and BlackRock's global corporate and sovereign relationships is expected to provide a platform for diversified, large-scale sourcing to support deal flow and co-investment opportunities for clients. The Company believes that bringing GIP and BlackRock together will deliver to clients the benefits of broader origination and business improvement capabilities.

BlackRock's investment management revenue is primarily comprised of fees earned as a percentage of AUM and, in some cases, performance fees, which are normally expressed as a percentage of fund returns to the client. Numerous factors, including price movements in the equity, debt or currency markets, or in the price of real assets, commodities or alternative investments in which BlackRock invests on behalf of clients, and BlackRock's ability to maintain strong investment performance, could impact BlackRock's AUM, revenue and earnings.

Recently, central banks globally have paused raising interest rates, after a rapid rate hiking regime in 2022 and much of 2023 in an effort to moderate inflation. BlackRock's business is directly and indirectly affected by changes in global interest rates. Changes in global interest rates may cause BlackRock's AUM to fluctuate and introduce volatility to the Company's base fees, net income and operating cash flows. BlackRock's business may also be impacted by governmental changes, as well as potential regulations, foreign and trade policies and fiscal spending that may arise as a result of such changes. See Part I, Item 1A, *Risk Factors* herein for information on the possible future effects of changes in global interest rates and governmental changes on the Company's results.

BlackRock manages \$2.8 trillion in fixed income assets, nearly two-thirds of which are owned by institutions for strategic or liability-matching purposes. BlackRock believes it is well positioned for a stabilizing rate environment due to the breadth, diversification and investment performance of its fixed income platform which encompasses active, exchange-traded funds ("ETFs") and non-ETF index fixed income products, and a range of strategies, including unconstrained, high yield, total return and short-duration.

BlackRock manages \$5.3 trillion of equity assets across markets globally. Beta divergence between equity markets, where certain markets perform differently than others, may lead to an increase in the proportion of BlackRock AUM weighted toward lower fee equity products, resulting in a decline in BlackRock's effective fee rate. Divergent market factors may also erode the correlation between the growth rates of AUM and investment advisory and administration fees (collectively "base fees") and securities lending revenue.

BlackRock's highly diversified multi-product platform was created to meet client needs in all market environments and provide clients with choice in how they seek to achieve their unique financial goals. BlackRock is positioned to provide alpha-seeking active, index and cash management investment strategies across asset classes and geographies. In addition, BlackRock leverages its world-class risk management, analytics and technology capabilities, including the Aladdin platform, on behalf of clients. BlackRock serves a diverse mix of institutional and retail clients across the globe, as well as investors in ETFs, maintaining differentiated client relationships and a fiduciary focus. The diversity of BlackRock's platform facilitates the generation of organic growth in various market environments, and as client preferences evolve. BlackRock's long-term strategy remains to keep alpha at the heart of BlackRock; drive growth in ETFs, private markets, and technology; be the global leader in sustainable investing; and lead as a whole portfolio advisor.

BlackRock is a \$2.6 trillion active manager, with the active platform reflecting global reach, interconnectivity across teams and regions, growing data and insights, integrated technology and risk management and scalable processes – all of which the Company believes enables it to deliver more consistent outcomes for clients over the long-term.

The ETF industry has been growing rapidly, driven by structural tailwinds including the use of ETFs as active tools, the migration from commission-based to fee-based wealth management, growth in model portfolios, expansion of digital wealth platforms, and the modernization of the bond market. BlackRock's ETF growth strategy is centered on increasing scale and pursuing global growth themes in client and product segments, including Core, Strategic, which includes Fixed Income, Factors, Sustainable and Thematic ETFs, and Precision Exposures. BlackRock views ETFs as a technology that facilitates investing, and ETFs have become core to asset management. The Company believes that the organizational architecture changes that include embedding the ETF and Index business across the entire firm will accelerate the growth of ETFs and other investment strategies at BlackRock. The Company also believes that ETFs will continue to be a structural growth area as clients turn to ETFs as the preferred vehicle for investing strategies of all types.

Clients are also increasing their allocations to private markets as they search for diversification and higher returns. BlackRock has built a broad illiquid alternatives platform with \$137 billion of AUM across infrastructure, private credit, real estate and private equity to meet this demand. As of December 31, 2023, BlackRock has approximately \$32 billion of committed capital to deploy for institutional clients in a variety of alternatives strategies, and remains confident in its ability to accelerate growth as a leader in private markets. BlackRock also manages \$74 billion in liquid alternatives, as well as \$84 billion in liquid credit strategies, included within fixed income AUM. The planned acquisition of GIP is expected to add meaningful scale and complementary capabilities to our infrastructure private markets platform.

BlackRock continues to invest in technology services offerings, which enhance the ability to manage portfolios and risk, effectively serve clients and operate efficiently. Market volatility, growing cost pressures, and complexity in optimizing whole portfolios underscore the need for enterprise operating and risk management technology, and should continue to drive demand for holistic and flexible technology solutions. BlackRock continues to evolve and enable clients to further simplify their operating infrastructure with Aladdin. Clients increasingly want to tailor how they use Aladdin to meet their specific needs, and BlackRock is providing them with choice and flexibility. Through the integration of Aladdin and eFront, clients are able to better manage and analyze risk across their whole portfolio spanning public and private markets. BlackRock is empowering clients with data and opening Aladdin by creating connectivity with ecosystem providers and third-party technology solutions, which include asset servicers, cloud providers, digital asset platforms, trading systems and others. This connectivity helps clients work in their Aladdin environments with a more customized and seamless end-to-end experience. Investments in Aladdin Al copilots, enhancements in openness supporting ecosystem partnerships, and advancing whole portfolio solutions including private markets and digital assets are expected to further augment the value of using Aladdin.

As the asset management landscape shifts globally from individual product selection to a whole-portfolio approach, BlackRock's strategy is focused on creating outcome-oriented client solutions for both retail investors and institutions. This includes having a diverse platform of alphaseeking active, index and alternative products, as well as enhanced distribution and portfolio construction technology offerings. Digital wealth tools are an important component of BlackRock's retail strategy, as BlackRock scales and customizes model portfolios, extends Aladdin Wealth and digital wealth partnerships globally, and helps advisors build better portfolios through portfolio construction and risk management, powered by Aladdin. BlackRock has seen strong momentum in outsourcing solutions among institutional clients, including the funding of several significant mandates in 2023, and anticipates continued outsourcing opportunities in the future.

Across BlackRock, many clients are focusing on the impact of sustainability factors on their portfolios. This shift has been driven by an increased understanding of how sustainability-related factors can affect economic growth, asset values, and financial markets as a whole. As a fiduciary, BlackRock is committed to providing clients with choice and then executing in accordance with their chosen objectives – for some clients, this includes investing in sustainable strategies. The Company aims to deliver the best risk-adjusted returns within the mandates clients choose, underpinned by research, data, and analytics.

BlackRock believes its strategy aligns with expected future client demand and structural growth opportunities in areas including private markets, such as infrastructure and private credit; integrated whole portfolio and outsourced solutions; ETFs; Aladdin technology; and fixed income, as allocations to the asset class have become more attractive in a higher rate environment.

EXECUTIVE SUMMARY

| (in millions, except per share data) | 2023 | 2022 |
|--|------------------|-----------------|
| GAAP basis ⁽¹⁾ : | | |
| Total revenue | \$ 17,859 | \$ 17,873 |
| Total expense | 11,584 | 11,488 |
| Operating income | \$ 6,275 | \$ 6,385 |
| Operating margin | 35.1 % | 35.7 % |
| Nonoperating income (expense), less net income (loss) attributable to noncontrolling interests | 706 | 89 |
| Income tax expense | 1,479 | 1,296 |
| Net income attributable to BlackRock | \$ 5,502 | \$ 5,178 |
| Diluted earnings per common share | \$ 36.51 | \$ 33.97 |
| Effective tax rate | 21.2 % | 20.0 % |
| As adjusted ⁽²⁾ : | | |
| Operating income | \$ 6,593 | \$ 6,711 |
| Operating margin | 41.7 % | 42.8 % |
| Nonoperating income (expense), less net income (loss) attributable to noncontrolling interests | \$ 648 | \$ 89 |
| Net income attributable to BlackRock | \$ 5,692 | \$ 5,391 |
| Diluted earnings per common share | \$ 37.77 | \$ 35.36 |
| Effective tax rate | 21.4 % | 20.7 % |
| Other: | | |
| Assets under management (end of period) | \$ 10,008,995 | \$ 8,594,485 |
| Diluted weighted-average common shares outstanding | 150.7 | 152.4 |
| Shares outstanding (end of period) | 148.5 | 149.8 |
| Book value per share ⁽³⁾ | \$ 264.96 | \$ 252.04 |
| Cash dividends declared and paid per share | \$ 20.00 | \$ 19.52 |

(3) Total BlackRock stockholders' equity, divided by total shares outstanding at December 31 of the respective year-end.

2023 Compared With 2022

GAAP. Operating income of \$6.3 billion decreased \$110 million and operating margin of 35.1% decreased 60 bps from 2022. Decreases in operating income and operating margin were primarily driven by the negative impact of markets on average AUM, and higher expense including direct fund expense, compensation and benefits expense and general and administrative expense, partially offset by higher technology services revenue. Operating income for 2023 also included a restructuring charge of \$61 million in connection with initiatives to reorganize specific platforms, primarily Aladdin and illiquid alternative investments, to stay ahead of client needs. Operating income for 2022 included a restructuring charge of \$91 million from an initiative to modify the size and shape of the global workforce to align more closely with strategic priorities.

Nonoperating income (expense) less net income (loss) attributable to noncontrolling interests ("NCI") increased \$617 million from 2022, driven primarily by higher interest and dividend income, higher mark-to-market revaluation of the Company's seed capital portfolio, net of impact of certain hedges, and higher gains on private equity co-investment portfolios, partially offset by the impact of \$267 million of noncash gains related to BlackRock's strategic minority investment in iCapital Network, Inc. ("iCapital") in 2022.

Income tax expense for 2023 included \$242 million discrete tax net benefits related to the resolution of certain outstanding tax matters and stock-based compensation awards that vested in 2023. Income tax expense for 2022 reflected \$235 million of net discrete tax benefits primarily related to stock-based compensation awards that vested in 2022 and the resolution of certain outstanding tax matters, and \$35 million of net noncash tax benefits related to the revaluation of certain deferred income tax liabilities.

Earnings per diluted common share increased \$2.54, or 7%, from 2022, primarily reflecting significantly higher nonoperating income, partially offset by lower operating income and a higher effective tax rate in the current year.

As Adjusted. Operating income of \$6.6 billion decreased \$118 million and operating margin of 41.7% decreased 110 bps from 2022. The pre-tax restructuring charge of \$61 million and \$91 million described above has been excluded from as adjusted results for 2023 and 2022, respectively.

Earnings per diluted common share increased \$2.41, or 7%, from 2022, reflecting significantly higher nonoperating income, partially offset by lower operating income and a higher effective tax rate. Income tax expense for 2022 excluded \$35 million net noncash net benefit described above

Beginning in the first quarter of 2023, BlackRock updated its definitions of operating income, as adjusted, operating margin, as adjusted, nonoperating income (expense), as adjusted, and net income attributable to BlackRock, Inc., as adjusted, to exclude the compensation expense related to the market valuation changes on certain deferred cash compensation plans, and the related nonoperating gain (loss) impact of an economic hedge of these deferred cash compensation plans. See Non-GAAP Financial Measures for further information on as adjusted items and the reconciliation to GAAP.

For further discussion of BlackRock's revenue, expense, nonoperating results and income tax expense, see Discussion of Financial Results herein.

⁽¹⁾ Accounting principles generally accepted in the United States ("GAAP").
(2) As adjusted items are described in more detail in Non-GAAP Financial Measures. Beginning in the first quarter of 2023, BlackRock updated the definitions of its non-GAAP financial measures to exclude the impact of market valuation changes on certain deferred cash compensation plans which the Company began economically hedging in

NON-GAAP FINANCIAL MEASURES

BlackRock reports its financial results in accordance with GAAP; however, management believes evaluating the Company's ongoing operating results may be enhanced if investors have additional non-GAAP financial measures. Adjustments to GAAP financial measures ("non-GAAP adjustments") include certain items management deems nonrecurring or that occur infrequently, transactions that ultimately will not impact BlackRock's book value or certain tax items that do not impact cash flow. Management reviews non-GAAP financial measures, in addition to GAAP financial measures, to assess ongoing operations and considers them to be helpful, for both management and investors, in evaluating BlackRock's financial performance over time. Management also uses non-GAAP financial measures as a benchmark to compare its performance with other companies and to enhance comparability for the reporting periods presented. Non-GAAP financial measures may pose limitations because they do not include all of BlackRock's revenue and expense. BlackRock's management does not advocate that investors consider such non-GAAP financial measures in isolation from, or as a substitute for, financial information prepared in accordance with GAAP. Non-GAAP financial measures may not be comparable to other similarly titled measures of other companies.

Computations and reconciliations for all periods are derived from the consolidated statements of income as follows:

(1) Operating income, as adjusted, and operating margin, as adjusted:

| (in millions) | 2023 | 2022 |
|---|--------------|--------------|
| Operating income, GAAP basis | \$ 6,275 | \$ 6,385 |
| Non-GAAP expense adjustments: | | |
| Compensation expense related to appreciation (depreciation) on deferred cash compensation plans (a) | 57 | _ |
| Amortization of intangible assets (b) | 151 | 151 |
| Acquisition-related compensation costs (b) | 17 | 24 |
| Acquisition-related transaction costs (b) ⁽¹⁾ | 7 | _ |
| Contingent consideration fair value adjustments (b) | 3 | 3 |
| Lease costs - New York (c) | 14 | 57 |
| Restructuring charge (d) | 61 | 91 |
| Reduction of indemnification asset (e) ⁽¹⁾ | 8 | _ |
| Operating income, as adjusted | 6,593 | 6,711 |
| Product launch costs and commissions | _ | 6 |
| Operating income used for operating margin measurement | \$ 6,593 | \$ 6,717 |
| Revenue, GAAP basis | \$ 17,859 | \$ 17,873 |
| Non-GAAP adjustments: | | |
| Distribution fees | (1,262) | (1,381) |
| Investment advisory fees | (789) | (798) |
| Revenue used for operating margin measurement | \$ 15,808 | \$ 15,694 |
| Operating margin, GAAP basis | 35.1 % | 35.7 % |
| Operating margin, as adjusted | 41.7 % | 42.8 % |
| (1) Amount included within general and administration expense. | | |

(2) Nonoperating income (expense), less net income (loss) attributable to NCI, as adjusted:

| (in millions) | 20 | 23 | 2022 |
|--|----|-----|------------|
| Nonoperating income (expense), GAAP basis | \$ | 880 | \$ (95) |
| Less: Net income (loss) attributable to NCI | | 174 | (184) |
| Nonoperating income (expense), net of NCI | | 706 | 89 |
| Less: Hedge gain (loss) on deferred cash compensation plans (a) | | 58 | _ |
| Nonoperating income (expense), less net income (loss) attributable to NCI, as adjusted | \$ | 648 | \$ 89 |

(3) Net income attributable to BlackRock, Inc., as adjusted:

| (in millions, except per share data) | 2023 | 2022 | | | |
|---|----------------|-------|--|--|--|
| Net income attributable to BlackRock, Inc., GAAP basis | \$ 5,502 \$ | 5,178 | | | |
| Non-GAAP adjustments ⁽¹⁾ : | | | | | |
| Net impact of hedged deferred cash compensation plans (a) | (1) | _ | | | |
| Amortization of intangible assets (b) | 114 | 114 | | | |
| Acquisition-related compensation costs (b) | 12 | 19 | | | |
| Acquisition-related transaction costs (b) | 5 | _ | | | |
| Contingent consideration fair value adjustments (b) | 3 | 3 | | | |
| Lease costs - New York (c) | 11 | | | | |
| Restructuring charge (d) | 46 | | | | |
| Income tax matters | _ | (35) | | | |
| Net income attributable to BlackRock, Inc., as adjusted | \$ 5,692 \$ | 5,391 | | | |
| Diluted weighted-average common shares outstanding | 150.7 | 152.4 | | | |
| Diluted earnings per common share, GAAP basis | \$ 36.51 \$ | 33.97 | | | |
| Diluted earnings per common share, as adjusted | \$ 37.77 \$ | 35.36 | | | |

⁽¹⁾ Non-GAAP adjustments, excluding income tax matters, are net of tax.

- (1) Operating income, as adjusted, and operating margin, as adjusted: Management believes operating income, as adjusted, and operating margin, as adjusted, are effective indicators of BlackRock's financial performance over time, and, therefore, provide useful disclosure to investors. Management believes that operating margin, as adjusted, reflects the Company's long-term ability to manage ongoing costs in relation to its revenues. The Company uses operating margin, as adjusted, to assess the Company's financial performance, to determine the long-term and annual compensation of the Company's senior-level employees and to evaluate the Company's relative performance against industry peers. Furthermore, this metric eliminates margin variability arising from the accounting of revenues and expenses related to distributing different product structures in multiple distribution channels utilized by asset managers.
 - Operating income, as adjusted, includes the following non-GAAP expense adjustments:
 - (a) Compensation expense related to appreciation (depreciation) on deferred cash compensation plans. Beginning in the first quarter of 2023, the Company updated its definition of operating income, as adjusted, to exclude compensation expense related to the market valuation changes on certain deferred cash compensation plans, which the Company began hedging economically in 2023. For these deferred cash compensation plans, the final value of the deferred amount to be distributed to employees in cash upon vesting is determined based on the returns on specified investment funds. The Company recognizes compensation expense for the appreciation (depreciation) of the deferred cash compensation liability in proportion to the vested amount of the award during a respective period, while the gain (loss) to economically hedge these plans is immediately recognized in nonoperating income (expense), which creates a timing difference impacting net income. This timing difference will reverse and offset to zero over the life of the award at the end of the multi-year vesting period. Management believes excluding market valuation changes related to the deferred cash compensation plans in the calculation of operating income, as adjusted, provides useful disclosure to both management and investors of the Company's financial performance over time as these amounts are economically hedged, while also increasing comparability with other companies.
 - (b) Acquisition related costs. Acquisition related costs include adjustments related to amortization of intangible assets, other acquisition-related costs, including compensation costs for nonrecurring retention-related deferred compensation, and contingent consideration fair value adjustments incurred in connection with certain acquisitions. Management believes excluding the impact of these expenses when calculating operating income, as adjusted, provides a helpful indication of the Company's financial performance over time, thereby providing helpful information for both management and investors while also increasing comparability with other companies.
 - (c) Lease costs New York. In 2022 and 2023, the Company continued to recognize lease expense within general and administration expense for both its current headquarters located at 50 Hudson Yards in New York and prior headquarters until the Company's lease on its prior headquarters expired in April 2023. The Company began lease payments related to its current headquarters in May 2023, but began recording lease expense in August 2021 when it obtained access to the building to begin its tenant improvements. Prior to the Company's move to its current headquarters in February 2023, the impact of lease costs related to 50 Hudson Yards was excluded from operating income, as adjusted. In February 2023, the Company completed the majority of its move to 50 Hudson Yards and no longer excluded the impact of these lease costs. Subsequently, from February 2023 through April 2023, the Company excluded the impact of lease costs related to the Company's prior headquarters. Management believes excluding the impact of these respective New York lease costs ("Lease costs New York") when calculating operating income, as adjusted, is useful to assess the Company's financial performance and ongoing operations, and enhances comparability among periods presented.
 - (d) Restructuring charge. In 2023, the Company recorded a restructuring charge, comprised of severance and compensation expense for accelerated vesting of previously granted deferred compensation awards, in connection with initiatives to reorganize specific platforms, primarily Aladdin and alternative investments. In 2022, the Company recorded a restructuring charge primarily comprised of severance and accelerated amortization expense of previously granted deferred compensation awards in connection with an initiative to modify the size and shape of the global workforce to align more closely with strategic priorities. Management believes excluding the impact of these restructuring charges when calculating operating income, as adjusted, is useful to assess the Company's financial performance and ongoing operations, and enhances comparability among periods presented.
 - (e) Reduction of indemnification asset. In 2023, BlackRock recorded \$8 million of general and administration expense to reflect the reduction of the indemnification asset and an offsetting \$8 million tax benefit due to the resolution of certain tax matters. The \$8 million general and administrative expense and \$8 million tax benefit have been excluded from as adjusted results as there is no impact on BlackRock's book value.
 - Operating income used for measuring operating margin, as adjusted, is equal to operating income, as adjusted, excluding the impact of product launch costs (e.g. closed-end fund launch costs) and related commissions. Management believes the exclusion of such costs and related commissions is useful because these costs can fluctuate considerably, and revenue associated with the expenditure of these costs will not fully impact BlackRock's results until future periods.
 - Revenue used for calculating operating margin, as adjusted, is reduced to exclude all of the Company's distribution fees, which are recorded as a separate line item on the consolidated statements of income, as well as a portion of investment advisory fees received that is used to pay distribution and servicing costs. For certain products, based on distinct arrangements, distribution fees are collected by the Company and then passed-through to third-party client intermediaries. For other products, investment advisory fees are collected by the Company and a portion is passed-through to third-party client intermediaries. However, in both structures, the third-party client intermediary similarly owns the relationship with the retail client and is responsible for distributing the product and servicing the client. The amount of distribution and investment advisory fees fluctuates each period primarily based on a predetermined percentage of the value of AUM during the period. These fees also vary based on the type of investment product sold and the geographic location where it is sold. In addition, the Company may waive fees on certain products that could result in the reduction of payments to the third-party intermediaries.

- (2) Nonoperating income (expense), less net income (loss) attributable to NCI, as adjusted: Management believes nonoperating income (expense), less net income (loss) attributable to NCI, as adjusted, is an effective measure for reviewing BlackRock's nonoperating contribution to its results and provides comparability of this information among reporting periods. Nonoperating income (expense), less net income (loss) attributable to NCI, as adjusted, excludes the gain (loss) on the economic hedge of certain deferred cash compensation plans. As the gain (loss) on investments and derivatives used to hedge these compensation plans over time substantially offsets the compensation expense related to the market valuation changes on these deferred cash compensation plans, which is included in operating income, GAAP basis, management believes excluding the gain (loss) on the economic hedge of the deferred cash compensation plans when calculating nonoperating income (expense), less net income (loss) attributable to NCI, as adjusted, provides a useful measure for both management and investors of BlackRock's nonoperating results that impact book value.
- (3) Net income attributable to BlackRock, Inc., as adjusted: Management believes net income attributable to BlackRock, Inc., as adjusted, and diluted earnings per common share, as adjusted, are useful measures of BlackRock's profitability and financial performance. Net income attributable to BlackRock, Inc., as adjusted, equals net income attributable to BlackRock, Inc., GAAP basis, adjusted for certain items management deems nonrecurring or that occur infrequently, transactions that ultimately will not impact BlackRock's book value or certain tax items that do not impact cash flow.

See notes (1) and (2) above for further information on the updated presentation of non-GAAP adjustments. For each period presented, the non-GAAP adjustments were tax effected at the respective blended rates applicable to the adjustments. Amounts for income tax matters represent net noncash (benefits) expenses primarily associated with the revaluation of certain deferred tax liabilities related to intangible assets and goodwill as a result of tax rate changes. These amounts have been excluded from the as adjusted results as these items will not have a cash flow impact and to enhance comparability among periods presented.

Per share amounts reflect net income attributable to BlackRock, Inc., as adjusted, divided by diluted weighted-average common shares outstanding.

(4) Annual Contract Value ("ACV"): Management believes ACV is an effective metric for reviewing BlackRock's technology services' ongoing contribution to its operating results and provides comparability of this information among reporting periods while also providing a useful supplemental metric for both management and investors of BlackRock's growth in technology services revenue over time, as it is linked to the net new business in technology services. ACV represents forward-looking, annualized estimated value of the recurring subscription fees under client contracts, assuming all client contracts that come up for renewal are renewed, unless we received a notice of termination, even though such notice may not be effective until a later date. ACV also includes the annualized estimated value of new sales, for existing and new clients, when we execute client contracts, even though the recurring fees may not be effective until a later date and excludes nonrecurring fees such as implementation and consulting fees.

ASSETS UNDER MANAGEMENT

AUM for reporting purposes generally is based upon how investment advisory and administration fees are calculated for each portfolio. Net asset values, total assets, committed assets or other measures may be used to determine portfolio AUM.

AUM and Net Inflows (Outflows) by Client Type and Product Type

| | Al | JM | | Net inflows (outflows) | | | | | |
|------------------------|------------------|----|-----------|------------------------|------|----------|--|--|--|
| (in millions) | 2023 | | 2022 | 2023 | 2022 | | | | |
| Retail | \$ 929,697 | \$ | 843,475 | \$ (8,473) | \$ | (19,523) | | | |
| ETFs | 3,499,299 | | 2,909,610 | 185,942 | | 220,335 | | | |
| Institutional: | | | | | | | | | |
| Active | 1,912,673 | | 1,641,591 | 87,106 | | 168,826 | | | |
| Index | 2,902,489 | | 2,528,615 | (55,125) | | 23,612 | | | |
| Institutional subtotal | 4,815,162 | | 4,170,206 | 31,981 | | 192,438 | | | |
| Long-term | 9,244,158 | | 7,923,291 | 209,450 | | 393,250 | | | |
| Cash management | 764,837 | | 671,194 | 79,245 | | (77,374) | | | |
| Advisory | _ | | _ | - | | (9,306) | | | |
| Total | \$ 10,008,995 | \$ | 8,594,485 | \$ 288,695 | \$ | 306,570 | | | |

AUM and Net Inflows (Outflows) by Investment Style and Product Type

| | | Al | UM | | Net inflows (outflows) | | | | | | |
|-----------------|------|------------|----|-----------|------------------------|---------|----|----------|--|--|--|
| (in millions) | 2023 | | | 2022 | | 2023 | | 2022 | | | |
| Active | \$ | 2,621,178 | \$ | 2,317,560 | \$ | 59,221 | \$ | 135,128 | | | |
| Index and ETFs | | 6,622,980 | | 5,605,731 | | 150,229 | | 258,122 | | | |
| Long-term | | 9,244,158 | | 7,923,291 | | 209,450 | | 393,250 | | | |
| Cash management | | 764,837 | | 671,194 | | 79,245 | | (77,374) | | | |
| Advisory | | _ | | _ | | _ | | (9,306) | | | |
| Total | \$ | 10,008,995 | \$ | 8,594,485 | \$ | 288,695 | \$ | 306,570 | | | |

AUM and Net Inflows (Outflows) by Product Type

| , | - | AI | JM | | Net inflows (outflows) | | | | | |
|---|----|------------|----|-----------|------------------------|-------------|----------|--|--|--|
| (in millions) | | 2023 | | 2022 | | 2023 | 2022 | | | |
| Equity | \$ | 5,293,344 | \$ | 4,435,354 | \$ | (11,490) \$ | 105,103 | | | |
| Fixed income | | 2,804,026 | | 2,536,823 | | 143,087 | 249,780 | | | |
| Multi-asset | | 870,804 | | 684,904 | | 82,787 | 31,222 | | | |
| Alternatives: | | | | | | | | | | |
| Illiquid alternatives | | 136,909 | | 117,751 | | 13,665 | 16,052 | | | |
| Liquid alternatives | | 74,233 | | 80,654 | | (11,370) | (1,690) | | | |
| Currency and commodities ⁽¹⁾ | | 64,842 | | 67,805 | | (7,229) | (7,217) | | | |
| Alternatives subtotal | | 275,984 | | 266,210 | | (4,934) | 7,145 | | | |
| Long-term | | 9,244,158 | | 7,923,291 | | 209,450 | 393,250 | | | |
| Cash management | | 764,837 | | 671,194 | | 79,245 | (77,374) | | | |
| Advisory | | _ | | _ | | _ | (9,306) | | | |
| Total | \$ | 10,008,995 | \$ | 8,594,485 | \$ | 288,695 \$ | 306,570 | | | |

⁽¹⁾ Amounts include commodity ETFs.

The following table presents the component changes in BlackRock's AUM for 2023 and 2022.

| (in millions) | 2023 | 2022 | | |
|------------------------------|------------------|------|-------------|--|
| Beginning AUM | \$ 8,594,485 | \$ | 10,010,143 | |
| Net inflows (outflows): | | | | |
| Long-term | 209,450 | | 393,250 | |
| Cash management | 79,245 | | (77,374) | |
| Advisory | _ | | (9,306) | |
| Total net inflows (outflows) | 288,695 | | 306,570 | |
| Acquisition ⁽¹⁾ | 2,177 | | _ | |
| Market change | 1,073,550 | | (1,501,987) | |
| FX impact ⁽²⁾ | 50,088 | | (220,241) | |
| Total change | 1,414,510 | | (1,415,658) | |
| Ending AUM | \$ 10,008,995 | \$ | 8,594,485 | |

BlackRock has historically grown AUM through organic growth and acquisitions. Management believes that the Company will be able to continue to grow AUM organically by focusing on strong investment performance, efficient delivery of beta for index products, client service, developing new products and optimizing distribution capabilities.

Component Changes in AUM for 2023

The following table presents the component changes in AUM by client type and product type for 2023.

| | | | | Net | | | | | | | | F | ull year |
|------------------------|----|------------|----|----------|----|---------------------------|-----------------|----|----------------------|----|-------------|----|--------------------|
| | De | cember 31, | | nflows | | 40 | Market | | FX | De | ecember 31, | | verage |
| (in millions) | | 2022 | (0 | utflows) | Α | cquisition ⁽¹⁾ | change | ir | npact ⁽²⁾ | | 2023 | | AUM ⁽³⁾ |
| Retail: | | | | | | | | | | | | | |
| Equity | \$ | 370,612 | \$ | 2,810 | \$ | _ | \$ 58,248 | \$ | 4,064 | \$ | 435,734 | \$ | 403,530 |
| Fixed income | | 299,114 | | (2,471) | | _ | 11,821 | | 4,335 | | 312,799 | | 306,232 |
| Multi-asset | | 125,168 | | (236) | | _ | 14,022 | | 583 | | 139,537 | | 131,236 |
| Alternatives | | 48,581 | | (8,576) | | | 1,286 | | 336 | | 41,627 | | 45,319 |
| Retail subtotal | | 843,475 | | (8,473) | | _ | 85,377 | | 9,318 | | 929,697 | | 886,317 |
| ETFs: | | | | | | | | | | | | | |
| Equity | | 2,081,742 | | 81,223 | | _ | 362,885 | | 6,781 | | 2,532,631 | | 2,262,361 |
| Fixed income | | 758,093 | | 111,956 | | _ | 24,544 | | 3,810 | | 898,403 | | 824,832 |
| Multi-asset | | 8,875 | | (746) | | _ | 949 | | 62 | | 9,140 | | 8,024 |
| Alternatives | | 60,900 | | (6,491) | | _ | 4,626 | | 90 | | 59,125 | | 61,439 |
| ETFs subtotal | | 2,909,610 | | 185,942 | | _ | 393,004 | | 10,743 | | 3,499,299 | | 3,156,656 |
| Institutional: | | | | | | | | | | | | | |
| Active: | | | | | | | | | | | | | |
| Equity | | 168,734 | | (13,301) | | _ | 29,088 | | 2,167 | | 186,688 | | 174,967 |
| Fixed income | | 774,955 | | 4,714 | | _ | 53,538 | | 3,616 | | 836,823 | | 798,832 |
| Multi-asset | | 544,469 | | 85,665 | | _ | 79,644 | | 7,404 | | 717,182 | | 642,051 |
| Alternatives | | 153,433 | | 10,028 | | 2,177 | 4,925 | | 1,417 | | 171,980 | | 162,871 |
| Active subtotal | | 1,641,591 | | 87,106 | | 2,177 | 167,195 | | 14,604 | | 1,912,673 | | 1,778,721 |
| Index: | | | | | | | | | | | | | |
| Equity | | 1,814,266 | | (82,222) | | _ | 401,047 | | 5,200 | | 2,138,291 | | 1,979,704 |
| Fixed income | | 704,661 | | 28,888 | | _ | 17,774 | | 4,678 | | 756,001 | | 713,802 |
| Multi-asset | | 6,392 | | (1,896) | | _ | 559 | | (110) | | 4,945 | | 5,882 |
| Alternatives | | 3,296 | | 105 | | _ | (138) | | (11) | | 3,252 | | 3,263 |
| Index subtotal | | 2,528,615 | | (55,125) | | _ | 419,242 | | 9,757 | | 2,902,489 | | 2,702,651 |
| Institutional subtotal | | 4,170,206 | | 31,981 | | 2,177 | 586,437 | | 24,361 | | 4,815,162 | | 4,481,372 |
| Long-term | | 7,923,291 | | 209,450 | | 2,177 | 1,064,818 | | 44,422 | | 9,244,158 | | 8,524,345 |
| Cash management | | 671,194 | | 79,245 | | | 8,732 | | 5,666 | | 764,837 | | 696,355 |
| Total | \$ | 8,594,485 | \$ | 288,695 | \$ | 2,177 | \$ 1,073,550 | \$ | 50,088 | \$ | 10,008,995 | \$ | 9,220,700 |

⁽¹⁾ Amounts include AUM attributable to the Kreos Transaction.
(2) Foreign exchange reflects the impact of translating non-US dollar denominated AUM into US dollars for reporting purposes.

⁽¹⁾ Amounts include AUM attributable to the Kreos Transaction.
(2) Foreign exchange reflects the impact of translating non-US dollar denominated AUM into US dollars for reporting purposes.
(3) Average AUM is calculated as the average of the month-end spot AUM amounts for the trailing thirteen months.

The following table presents component changes in AUM by investment style and product type for 2023.

| | De | cember 31, | | Net inflows | | (4) | Market | | FX (2) | De | ecember 31, | Full year average |
|------------------------|----|------------|----|----------------|----|--------------------------|-----------------|----|----------------------|----|-------------|----------------------|
| (in millions) | | 2022 | (0 | utflows) | Ac | quisition ⁽¹⁾ | change | ir | npact ⁽²⁾ | | 2023 | AUM ⁽³⁾ |
| Active: | | | | | | | | | | | | |
| Equity | \$ | 392,836 | \$ | (26,772) | \$ | _ | \$ 57,431 | \$ | 3,953 | \$ | 427,448 | \$ 409,687 |
| Fixed income | | 1,053,083 | | (882) | | _ | 64,203 | | 7,018 | | 1,123,422 | 1,080,917 |
| Multi-asset | | 669,629 | | 85,424 | | _ | 93,665 | | 7,987 | | 856,705 | 773,278 |
| Alternatives | | 202,012 | | 1,451 | | 2,177 | 6,210 | | 1,753 | | 213,603 | 208,189 |
| Active subtotal | | 2,317,560 | | 59,221 | | 2,177 | 221,509 | | 20,711 | | 2,621,178 | 2,472,071 |
| Index and ETFs: | | | | | | | | | | | | |
| ETFs: | | | | | | | | | | | | |
| Equity | | 2,081,742 | | 81,223 | | | 362,885 | | 6,781 | | 2,532,631 | 2,262,361 |
| Fixed income | | 758,093 | | 111,956 | | _ | 24,544 | | 3,810 | | 898,403 | 824,832 |
| Multi-asset | | 8,875 | | (746) | | _ | 949 | | 62 | | 9,140 | 8,024 |
| Alternatives | | 60,900 | | (6,491) | | _ | 4,626 | | 90 | | 59,125 | 61,439 |
| ETFs subtotal | | 2,909,610 | | 185,942 | | _ | 393,004 | | 10,743 | | 3,499,299 | 3,156,656 |
| Non-ETF Index: | | | | | | | | | | | | |
| Equity | | 1,960,776 | | (65,941) | | _ | 430,952 | | 7,478 | | 2,333,265 | 2,148,514 |
| Fixed income | | 725,647 | | 32,013 | | _ | 18,930 | | 5,611 | | 782,201 | 737,949 |
| Multi-asset | | 6,400 | | (1,891) | | _ | 560 | | (110) | | 4,959 | 5,891 |
| Alternatives | | 3,298 | | 106 | | _ | (137) | | (11) | | 3,256 | 3,264 |
| Non-ETF Index subtotal | | 2,696,121 | | (35,713) | | _ | 450,305 | | 12,968 | | 3,123,681 | 2,895,618 |
| Index & ETFs subtotal | | 5,605,731 | | 150,229 | | _ | 843,309 | | 23,711 | | 6,622,980 | 6,052,274 |
| Long-term | • | 7,923,291 | • | 209,450 | | 2,177 | 1,064,818 | | 44,422 | | 9,244,158 | 8,524,345 |
| Cash management | | 671,194 | | 79,245 | | | 8,732 | | 5,666 | | 764,837 | 696,355 |
| Total | \$ | 8,594,485 | \$ | 288,695 | \$ | 2,177 | \$ 1,073,550 | \$ | 50,088 | \$ | 10,008,995 | \$ 9,220,700 |

The following table presents component changes in AUM by product type for 2023.

| (in millions) | De | cember 31, 2022 | Net inflows (outflows) | | cquisition ⁽¹⁾ | Market change | | i | FX impact ⁽²⁾ | De | ecember 31, 2023 | Full year average AUM ⁽³⁾ | |
|---|----|--------------------|------------------------------|----|---------------------------|------------------|-----------|----|-----------------------------|----|---------------------|--|----------|
| Equity | \$ | 4,435,354 | \$ (11,490) | \$ | _ | \$ | 851,268 | \$ | 18,212 | \$ | 5,293,344 | \$ 4 | ,820,562 |
| Fixed income | | 2,536,823 | 143,087 | | _ | | 107,677 | | 16,439 | | 2,804,026 | 2 | ,643,698 |
| Multi-asset | | 684,904 | 82,787 | | _ | | 95,174 | | 7,939 | | 870,804 | | 787,193 |
| Alternatives: | | | | | | | | | | | | | |
| Illiquid alternatives | | 117,751 | 13,665 | | 2,177 | | 1,885 | | 1,431 | | 136,909 | | 127,655 |
| Liquid alternatives | | 80,654 | (11,370) | | _ | | 4,548 | | 401 | | 74,233 | | 77,595 |
| Currency and commodities ⁽⁴⁾ | | 67,805 | (7,229) | | _ | | 4,266 | | _ | | 64,842 | | 67,642 |
| Alternatives subtotal | | 266,210 | (4,934) | | 2,177 | | 10,699 | | 1,832 | | 275,984 | | 272,892 |
| Long-term | | 7,923,291 | 209,450 | | 2,177 | | 1,064,818 | | 44,422 | | 9,244,158 | 8 | ,524,345 |
| Cash management | | 671,194 | 79,245 | | _ | | 8,732 | | 5,666 | | 764,837 | | 696,355 |
| Total | \$ | 8,594,485 | \$ 288,695 | \$ | 2,177 | \$ | 1,073,550 | \$ | 50,088 | \$ | 10,008,995 | \$ 9 | ,220,700 |

(1) Amounts include AUM attributable to the Kreos Transaction.
(2) Foreign exchange reflects the impact of translating non-US dollar denominated AUM into US dollars for reporting purposes.
(3) Average AUM is calculated as the average of the month-end spot AUM amounts for the trailing thirteen months.

(4) Amounts include commodity ETFs.

AUM increased \$1.4 trillion to \$10.0 trillion at December 31, 2023 from \$8.6 trillion at December 31, 2022, driven primarily by net market appreciation, net inflows, led by flows into bond and equity ETFs, cash management, significant outsourcing mandates and growth in private markets.

Net market appreciation of \$1.1 trillion was primarily driven by global equity market appreciation.

AUM increased \$50 billion due to the impact of foreign exchange movements, primarily due to the weakening of the US dollar largely against the British pound and the euro, partially offset by the strengthening of the US dollar against the Japanese yen.

For further discussion on AUM, see Part I, Item 1 - Business - Assets Under Management.

Component Changes in AUM for 2022

The following table presents the component changes in AUM by client type and product type for 2022.

| (in millions) | December 31, 2021 | | Net inflows (outflows) | | Market change | | FX impact ⁽¹⁾ | | December 31, 2022 | Full year average AUM ⁽²⁾ | | |
|------------------------|----------------------|----|------------------------------|----|------------------|----|-----------------------------|----|----------------------|--|-----------|--|
| (in millions) Retail: | 2021 | (0 | utilows | | Citalige | | ппрасс | | 2022 | | AUN | |
| Equity | \$ 471,937 | \$ | (103) | \$ | (90,767) | \$ | (10,455) | \$ | 370,612 | \$ | 401,582 | |
| Fixed income | 365,306 | φ | (20,299) | φ | (41,706) | φ | (4,187) | φ | 299,114 | φ | 323,500 | |
| Multi-asset | 155,461 | | (3,143) | | (26,064) | | (1,086) | | 125,168 | | 136,690 | |
| Alternatives | 47,349 | | 4,022 | | (20,004) | | (519) | | 48,581 | | 48,937 | |
| Retail subtotal | 1,040,053 | | (19,523) | | (160,808) | | (16,247) | | 843,475 | | 910,709 | |
| ETFs: | 1,040,033 | | (19,525) | | (100,000) | | (10,247) | | 043,473 | | 910,709 | |
| Equity | 2,447,248 | | 100,756 | | (449,140) | | (17,122) | | 2,081,742 | | 2,163,108 | |
| Fixed income | 745,373 | | 122,893 | | (103,957) | | (6,216) | | 758,093 | | 719,931 | |
| Multi-asset | 9,119 | | 1,333 | | (1,441) | | (136) | | 8,875 | | 8,231 | |
| Alternatives | 65,614 | | (4,647) | | 70 | | (137) | | 60,900 | | 66.599 | |
| ETFs subtotal | 3,267,354 | | 220,335 | | (554,468) | | (23,611) | | 2,909,610 | | 2,957,869 | |
| Institutional: | 3,207,304 | | 220,000 | | (554,466) | | (20,011) | | 2,505,010 | | 2,557,665 | |
| Active: | | | | | | | | | | | | |
| Equity | 199.980 | | 9.882 | | (34,912) | | (6,216) | | 168.734 | | 175.567 | |
| Fixed income | 767,402 | | 114,742 | | (95,291) | | (11,898) | | 774,955 | | 715,600 | |
| Multi-asset | 642,951 | | 33.950 | | (112,028) | | (20,404) | | 544,469 | | 571,448 | |
| Alternatives | 146,384 | | 10,252 | | (243) | | (2,960) | | 153,433 | | 150,357 | |
| Active subtotal | 1,756,717 | | 168,826 | | (242,474) | | (41,478) | | 1,641,591 | | 1,612,972 | |
| Index: | | | | | , , | | , , | | | | | |
| Equity | 2,223,195 | | (5,432) | | (341,087) | | (62,410) | | 1,814,266 | | 1,937,695 | |
| Fixed income | 943,960 | | 32,444 | | (203,501) | | (68,242) | | 704,661 | | 792,941 | |
| Multi-asset | 8,963 | | (918) | | (1,285) | | (368) | | 6,392 | | 7,550 | |
| Alternatives | 5,534 | | (2,482) | | 569 | | (325) | | 3,296 | | 4,696 | |
| Index subtotal | 3,181,652 | | 23,612 | | (545,304) | | (131,345) | | 2,528,615 | | 2,742,882 | |
| Institutional subtotal | 4,938,369 | | 192,438 | | (787,778) | | (172,823) | | 4,170,206 | | 4,355,854 | |
| Long-term | 9,245,776 | | 393,250 | | (1,503,054) | | (212,681) | | 7,923,291 | | 8,224,432 | |
| Cash management | 755,057 | | (77,374) | | 1,071 | | (7,560) | | 671,194 | | 719,284 | |
| Advisory | 9,310 | | (9,306) | | (4) | | | | | | 4,854 | |
| Total | \$ 10,010,143 | \$ | 306,570 | \$ | (1,501,987) | \$ | (220,241) | \$ | 8,594,485 | \$ | 8,948,570 | |

⁽¹⁾ Foreign exchange reflects the impact of translating non-US dollar denominated AUM into US dollars for reporting purposes.
(2) Average AUM is calculated as the average of the month-end spot AUM amounts for the trailing thirteen months.

The following table presents component changes in AUM by investment style and product type for 2022.

| (in millions) | De | ecember 31, 2021 | Net inflows outflows) | Market change | FX impact ⁽¹⁾ | December 31, 2022 | Full year average AUM ⁽²⁾ |
|------------------------|----|---------------------|-----------------------------|-------------------|-----------------------------|----------------------|--|
| Active: | | | | | | | |
| Equity | \$ | 507,103 | \$ (2,672) | \$ (100,240) | \$ (11,355) | \$ 392,836 | \$ 426,141 |
| Fixed income | | 1,107,085 | 92,721 | (132,590) | (14,133) | 1,053,083 | 1,016,918 |
| Multi-asset | | 798,404 | 30,806 | (138,092) | (21,489) | 669,629 | 708,130 |
| Alternatives | | 193,733 | 14,273 | (2,516) | (3,478) | 202,012 | 199,294 |
| Active subtotal | | 2,606,325 | 135,128 | (373,438) | (50,455) | 2,317,560 | 2,350,483 |
| Index and ETFs: | | | | | | | |
| ETFs: | | | | | | | |
| Equity | | 2,447,248 | 100,756 | (449,140) | (17,122) | 2,081,742 | 2,163,108 |
| Fixed income | | 745,373 | 122,893 | (103,957) | (6,216) | 758,093 | 719,931 |
| Multi-asset | | 9,119 | 1,333 | (1,441) | (136) | 8,875 | 8,231 |
| Alternatives | | 65,614 | (4,647) | 70 | (137) | 60,900 | 66,599 |
| ETFs subtotal | | 3,267,354 | 220,335 | (554,468) | (23,611) | 2,909,610 | 2,957,869 |
| Non-ETF Index: | | | | | | | |
| Equity | | 2,388,009 | 7,019 | (366,526) | (67,726) | 1,960,776 | 2,088,703 |
| Fixed income | | 969,583 | 34,166 | (207,908) | (70,194) | 725,647 | 815,123 |
| Multi-asset | | 8,971 | (917) | (1,285) | (369) | 6,400 | 7,558 |
| Alternatives | | 5,534 | (2,481) | 571 | (326) | 3,298 | 4,696 |
| Non-ETF Index subtotal | | 3,372,097 | 37,787 | (575,148) | (138,615) | 2,696,121 | 2,916,080 |
| Index & ETFs subtotal | | 6,639,451 | 258,122 | (1,129,616) | (162,226) | 5,605,731 | 5,873,949 |
| Long-term | | 9,245,776 | 393,250 | (1,503,054) | (212,681) | 7,923,291 | 8,224,432 |
| Cash management | | 755,057 | (77,374) | 1,071 | (7,560) | 671,194 | 719,284 |
| Advisory | | 9,310 | (9,306) | (4) | _ | _ | 4,854 |
| Total | \$ | 10,010,143 | \$ 306,570 | \$ (1,501,987) | \$ (220,241) | \$ 8,594,485 | \$ 8,948,570 |

The following table presents component changes in AUM by product type for 2022.

| (in millions) | D | ecember 31, 2021 | Net inflows outflows) | Market change | FX impact ⁽¹⁾ | ecember 31, 2022 | Full year average AUM ⁽²⁾ |
|---|----|---------------------|-----------------------------|-------------------|-----------------------------|---------------------|--|
| Equity | \$ | 5,342,360 | \$ 105,103 | \$ (915,906) | \$ (96,203) | \$ 4,435,354 | \$ 4,677,952 |
| Fixed income | | 2,822,041 | 249,780 | (444,455) | (90,543) | 2,536,823 | 2,551,972 |
| Multi-asset | | 816,494 | 31,222 | (140,818) | (21,994) | 684,904 | 723,919 |
| Alternatives: | | | | | | | |
| Illiquid alternatives | | 102,579 | 16,052 | 1,112 | (1,992) | 117,751 | 111,075 |
| Liquid alternatives | | 87,348 | (1,690) | (3,710) | (1,294) | 80,654 | 84,024 |
| Currency and commodities ⁽³⁾ | | 74,954 | (7,217) | 723 | (655) | 67,805 | 75,490 |
| Alternatives subtotal | | 264,881 | 7,145 | (1,875) | (3,941) | 266,210 | 270,589 |
| Long-term | | 9,245,776 | 393,250 | (1,503,054) | (212,681) | 7,923,291 | 8,224,432 |
| Cash management | | 755,057 | (77,374) | 1,071 | (7,560) | 671,194 | 719,284 |
| Advisory | | 9,310 | (9,306) | (4) | | _ | 4,854 |
| Total | \$ | 10,010,143 | \$ 306,570 | \$ (1,501,987) | \$ (220,241) | \$ 8,594,485 | \$ 8,948,570 |

⁽¹⁾ Foreign exchange reflects the impact of translating non-US dollar denominated AUM into US dollars for reporting purposes. (2) Average AUM is calculated as the average of the month-end spot AUM amounts for the trailing thirteen months.

AUM decreased \$1.4 trillion to \$8.6 trillion at December 31, 2022 from \$10.0 trillion at December 31, 2021 driven by net market depreciation and the negative impact of foreign exchange movements, partially offset by positive net inflows, led by flows into bond ETFs, significant outsourcing mandates and growth in private markets.

Net market depreciation of \$1.5 trillion was primarily driven by global equity and fixed income market depreciation.

AUM decreased \$220 billion due to the negative impact of foreign exchange movements, due to the strengthening of the US dollar, largely against the British pound, the Japanese yen and the euro.

⁽³⁾ Amounts include commodity ETFs.

DISCUSSION OF FINANCIAL RESULTS

Introduction

The Company derives a substantial portion of its revenue from investment advisory and administration fees, which are recognized as the services are performed over time because the customer is receiving and consuming the benefits as they are provided by the Company. Fees are primarily based on agreed-upon percentages of AUM and recognized for services provided during the period, which are distinct from services provided in other periods. Such fees are affected by changes in AUM, including market appreciation or depreciation, foreign exchange translation and net inflows or outflows. Net inflows or outflows represent the sum of new client assets, additional fundings from existing clients (including dividend reinvestment), withdrawals of assets from, and termination of, client accounts and distributions to investors representing return of capital and return on investments. Market appreciation or depreciation includes current income earned on, and changes in the fair value of, securities held in client accounts. Foreign exchange translation reflects the impact of translating non-US dollar denominated AUM into US dollars for reporting purposes.

The Company also earns revenue by lending securities on behalf of clients, primarily to highly rated banks and broker-dealers. The securities loaned are secured by collateral in the form of cash or securities, with minimum collateral generally ranging from approximately 102% to 112% of the value of the loaned securities. Generally, the revenue earned is shared between the Company and the funds or accounts managed by the Company from which the securities are borrowed.

Investment advisory agreements for certain separate accounts and investment funds provide for performance fees based upon relative and/or absolute investment performance, in addition to base fees based on AUM. Investment advisory performance fees generally are earned after a given period of time when investment performance exceeds a contractual threshold, and when it is determined that the fees are no longer probable of significant reversal. As such, the timing of recognition of performance fees may increase the volatility of the Company's revenue and earnings. The magnitude of performance fees can fluctuate quarterly due to the timing of carried interest recognition on illiquid alternative products and a greater number and size of liquid products with performance measurement periods that end in the third and fourth quarters.

The Company offers investment management technology systems, risk management services, wealth management and digital distribution tools, all on a fee basis. Clients include banks, insurance companies, official institutions, pension funds, asset managers, retail distributors and other investors. Fees earned for technology services are primarily recorded as services are performed over time and are generally determined using the value of positions on the Aladdin platform, or on a fixed-rate basis. Revenue derived from the sale of software licenses is recognized upon the granting of access rights.

The Company earns distribution and service fees for distributing investment products and providing support services to investment portfolios. The fees are primarily based on AUM and are recognized when the amount of fees is known.

The Company advises global financial institutions, regulators, and government entities across a range of risk, regulatory, capital markets and strategic services. Fees earned for advisory services, which are included in advisory and other revenue, are determined using fixed-rate fees and are recognized over time as the related services are completed.

The Company earns fees for transition management services primarily comprised of commissions recognized in connection with buying and selling securities on behalf of its customers. Commissions related to transition management services, which are included in advisory and other revenue, are recorded on a trade-date basis as transactions occur.

The Company also records revenue related to certain minority investments accounted for as equity method investments.

Operating expense reflects employee compensation and benefits, distribution and servicing costs, direct fund expense, general and administration expense and amortization of finite-lived intangible assets.

- Employee compensation and benefits expense includes salaries, commissions, temporary help, incentive compensation, employer payroll taxes, severance and related benefit costs.
- Distribution and servicing costs, which are primarily AUM driven, include payments to third parties, primarily associated with distribution and servicing of client investments in certain Company products.
- Direct fund expense primarily consists of third-party nonadvisory expenses incurred by the Company related to certain funds for the use of index trademarks, reference data for indices, custodial services, fund administration, fund accounting, transfer agent services, shareholder reporting services, legal expense, audit and tax services as well as other fund-related expenses directly attributable to the nonadvisory operations of the fund. These expenses may vary over time with fluctuations in AUM, number of shareholder accounts, or other attributes directly related to volume of business.
- General and administration expense includes marketing and promotional (including travel and entertainment expense), occupancy and office-related, portfolio services (including clearing expense related to transition management services and market data costs), subadvisory, technology, professional services, communications, contingent consideration fair value adjustments, product launch costs, the net impact of foreign currency remeasurement, and other general and administration expense.

Approximately 80% of the Company's revenue is generated in US dollars. The Company's revenue and expense generated in foreign currencies (primarily the euro and British pound) are impacted by foreign exchange rates. Any effect of foreign exchange rate change on revenue is partially offset by a change in expense driven by the Company's considerable non-dollar expense base related to its operations outside the US.

Nonoperating income (expense) includes the effect of changes in the valuations on investments and earnings on equity method investments as well as interest and dividend income and interest expense. The Company primarily holds seed and co-investments in sponsored investment products that invest in a variety of asset classes, including private equity, private credit, hedge funds and real assets. Investments generally are made for co-investment purposes, to establish a performance track record or for regulatory purposes, including Federal Reserve Bank stock. The Company does not engage in proprietary trading activities that could conflict with the interests of its clients.

In addition, nonoperating income (expense) includes the impact of changes in the valuations of consolidated sponsored investment products ("CIPs"). The portion of nonoperating income (expense) not attributable to the Company is allocated to NCI on the consolidated statements of income.

Revenue

The table below presents detail of revenue for 2023 and 2022 and includes the product type mix of base fees and securities lending revenue and performance fees.

| illions) | | 2023 | 2022 | | |
|---|----|--------|-----------|--|--|
| Revenue: | | | | | |
| Investment advisory, administration fees and securities lending revenue: | | | | | |
| Equity: | | | | | |
| Active | \$ | 2,000 | \$ 2,147 | | |
| ETFs | | 4,418 | 4,345 | | |
| Non-ETF index | | 743 | 711 | | |
| Equity subtotal | | 7,161 | 7,203 | | |
| Fixed income: | | | | | |
| Active | | 1,897 | 1,977 | | |
| ETFs | | 1,230 | 1,122 | | |
| Non-ETF index | | 353 | 396 | | |
| Fixed income subtotal | | 3,480 | 3,495 | | |
| Multi-asset | | 1,203 | 1,299 | | |
| Alternatives: | | | | | |
| Illiquid alternatives | | 889 | 741 | | |
| Liquid alternatives | | 572 | 633 | | |
| Currency and commodities ⁽¹⁾ | | 185 | 216 | | |
| Alternatives subtotal | | 1,646 | 1,590 | | |
| Long-term | | 13,490 | 13,587 | | |
| Cash management | | 909 | 864 | | |
| Total investment advisory, administration fees and securities lending revenue | | 14,399 | 14,451 | | |
| Investment advisory performance fees: | | | | | |
| Equity | | 99 | 49 | | |
| Fixed income | | 4 | 25 | | |
| Multi-asset | | 28 | 25 | | |
| Alternatives: | | | | | |
| Illiquid alternatives | | 273 | 296 | | |
| Liquid alternatives | | 150 | 119 | | |
| Alternatives subtotal | | 423 | 415 | | |
| Total investment advisory performance fees | | 554 | 514 | | |
| Technology services revenue | | 1,485 | 1,364 | | |
| Distribution fees | | 1,262 | 1,381 | | |
| Advisory and other revenue: | | | | | |
| Advisory | | 81 | 56 | | |
| Other | | 78 | 107 | | |
| Total advisory and other revenue | | 159 | 163 | | |
| Total revenue | \$ | 17,859 | \$ 17,873 | | |
| (1) Amounts include commodity ETFs. | | | | | |

⁽¹⁾ Amounts include commodity ETFs.

The table below lists a percentage breakdown of base fees and securities lending revenue and average AUM by product type:

| | | Percentage of Base Fees and Securities P Lending Revenue | | AUM by Product |
|---|-------|--|---------------------|----------------|
| | 2023 | 2022 | Type ⁽¹⁾ | 2022 |
| Equity: | | | | |
| Active | 14 % | 14 % | 4 % | 5 % |
| ETFs | 31 % | 30 % | 24 % | 24 % |
| Non-ETF index | 5 % | 5 % | 23 % | 24 % |
| Equity subtotal | 50 % | 49 % | 51 % | 53 % |
| Fixed income: | | | | |
| Active | 13 % | 14 % | 12 % | 11 % |
| ETFs | 9 % | 8 % | 9 % | 8 % |
| Non-ETF index | 2 % | 3 % | 8 % | 9 % |
| Fixed income subtotal | 24 % | 25 % | 29 % | 28 % |
| Multi-asset | 8 % | 9 % | 9 % | 8 % |
| Alternatives: | | | | |
| Illiquid alternatives | 7 % | 5 % | 1 % | 1 % |
| Liquid alternatives | 4 % | 4 % | 1 % | 1 % |
| Currency and commodities ⁽²⁾ | 1 % | 2 % | 1 % | 1 % |
| Alternatives subtotal | 12 % | 11 % | 3 % | 3 % |
| Long-term | 94 % | 94 % | 92 % | 92 % |
| Cash management | 6 % | 6 % | 8 % | 8 % |
| Total AUM | 100 % | 100 % | 100 % | 100 % |

⁽¹⁾ Average AUM is calculated as the average of the month-end spot AUM amounts for the trailing thirteen months. (2) Amounts include commodity ETFs.

Revenue of \$17.9 billion in 2023 was relatively flat compared with 2022, primarily driven by the negative impact of markets on average AUM, partially offset by higher technology services revenue.

<u>Investment advisory, administration fees and securities lending revenue</u> of \$14.4 billion in 2023 decreased \$52 million from \$14.5 billion in 2022, primarily driven by the negative impact of market beta on average AUM, partially offset by organic base fee growth and higher securities lending revenue. Securities lending revenue of \$675 million increased \$76 million from \$599 million in 2022, primarily reflecting higher spreads.

Investment advisory performance fees of \$554 million in 2023 increased \$40 million from \$514 million in 2022, primarily reflecting higher revenue from long-only equity and liquid alternative products, partially offset by lower revenue from illiquid alternative and long-only fixed income products.

<u>Technology services revenue</u> of \$1.5 billion in 2023 increased \$121 million from \$1.4 billion in 2022, reflecting the onboarding of several large clients and the impact of 2023 eFront on-premise license renewals, for which a majority of the revenue is recognized at the time of renewal.

Distribution fees of \$1.3 billion in 2023 decreased \$119 million from \$1.4 billion in 2022, primarily reflecting impact of lower average AUM.

Expense

The following table presents expense for 2023 and 2022.

| (in millions) | 2023 | 2022 | | |
|---|-----------------|--------|--|--|
| Expense: | | | | |
| Employee compensation and benefits | \$ 5,779 \$ | 5,681 | | |
| Distribution and servicing costs | 2,051 | 2,179 | | |
| Direct fund expense | 1,331 | 1,226 | | |
| General and administration expense: | | | | |
| Marketing and promotional | 344 | 331 | | |
| Occupancy and office related | 418 | 403 | | |
| Portfolio services | 270 | 280 | | |
| Sub-advisory | 81 | 80 | | |
| Technology | 607 | 600 | | |
| Professional services | 195 | 180 | | |
| Communications | 47 | 44 | | |
| Foreign exchange remeasurement | (6) | 10 | | |
| Contingent consideration fair value adjustments | 3 | 3 | | |
| Product launch costs | _ | 6 | | |
| Other general and administration | 252 | 223 | | |
| Total general and administration expense | 2,211 | 2,160 | | |
| Restructuring charge | 61 | 91 | | |
| Amortization of intangible assets | 151 | 151 | | |
| Total expense | \$ 11,584 \$ | 11,488 | | |

Expense increased \$96 million, or 1%, from 2022, reflecting higher direct fund expense, employee compensation and benefits expense and general and administration expense, partially offset by lower distribution and servicing costs.

<u>Employee compensation and benefits expense</u> increased \$98 million from 2022, reflecting higher base compensation, primarily as a result of base salary increases, and higher severance, partially offset by lower incentive compensation, largely driven by lower operating income.

Distribution and servicing costs decreased \$128 million from 2022, primarily reflecting the impact of lower average AUM.

Direct fund expense increased \$105 million from 2022, primarily reflecting the impact of higher average AUM.

<u>General and administration expense</u> increased \$51 million from 2022, primarily reflecting higher occupancy and office related expense, higher professional services expense, and higher marketing and promotional expense, including the impact from higher travel and entertainment expense, and higher other general and administration expense, including costs related to certain legal matters, partially offset by the impact of foreign exchange remeasurement.

Restructuring charges of \$61 million and \$91 million, comprised of severance and compensation expense for accelerated vesting of previously granted deferred compensation awards, were recorded in 2023 and 2022, respectively, as previously described. The impact of these restructuring charges has been excluded from our "as adjusted" financial results. See *Non-GAAP Financial Measures* for further information on as adjusted items.

Nonoperating Results

The summary of nonoperating income (expense), less net income (loss) attributable to NCI for 2023 and 2022 was as follows:

| (in millions) | 2023 | 2022 |
|--|-----------|------------|
| Nonoperating income (expense), GAAP basis | \$ 880 | \$ (95) |
| Less: Net income (loss) attributable to NCI | 174 | (184) |
| Nonoperating income (expense), net of NCI | 706 | 89 |
| Less: Hedge gain (loss) on deferred cash compensation plans ⁽¹⁾ | 58 | _ |
| Nonoperating income (expense), net of NCI, as adjusted ⁽²⁾ | \$ 648 | \$ 89 |
| (in millions) | 2023 | 2022 |
| Net gain (loss) on investments, net of NCI | | |
| Private equity | \$ 349 | \$ 88 |
| Real assets | 13 | 28 |
| Other alternatives ⁽³⁾ | 49 | 5 |
| Other investments ⁽⁴⁾ | 66 | (201) |
| Hedge gain (loss) on deferred cash compensation plans ⁽¹⁾ | 58 | _ |
| Subtotal | 535 | (80) |
| Other gains (losses) ⁽⁵⁾ | (10) | 229 |
| Total net gain (loss) on investments, net of NCI | 525 | 149 |
| Interest and dividend income | 473 | 152 |
| Interest expense | (292) | (212) |
| Net interest income (expense) | 181 | (60) |
| Nonoperating income (expense), net of NCI | 706 | 89 |
| Less: Hedge gain (loss) on deferred cash compensation plans ⁽¹⁾ | 58 | _ |
| Nonoperating income (expense), net of NCI, as adjusted (2) | \$ 648 | \$ 89 |

(1) Amount relates to the gain (loss) from economically hedging BlackRock's deferred cash compensation plans.

(3) Amounts primarily include net gains (losses) related to credit funds, direct hedge fund strategies and hedge fund solutions.

4) Amounts primarily include net gains (losses) related to BlackRock's seed investment portfolio, net of the impact of certain hedges.

Income Tax Expense

| | GAAP | | | | | As Adjusted | | |
|---|------|--------|--------|--------|----|-------------|----|--------|
| (in millions) | | 2023 | | 2022 | | 2023 | | 2022 |
| Operating income ⁽¹⁾ | \$ | 6,275 | \$ | 6,385 | \$ | 6,593 | \$ | 6,711 |
| Total nonoperating income (expense) ⁽¹⁾⁽²⁾ | \$ | 706 | \$ | 89 | \$ | 648 | \$ | 89 |
| Income before income taxes ⁽²⁾ | \$ | 6,981 | \$ | 6,474 | \$ | 7,241 | \$ | 6,800 |
| Income tax expense | \$ | 1,479 | \$ | 1,296 | \$ | 1,549 | \$ | 1,409 |
| Effective tax rate | | 21.2 % | , D | 20.0 % |) | 21.4 % |) | 20.7 % |

⁽¹⁾ As adjusted items are described in more detail in Non-GAAP Financial Measures.

The Company's tax rate is affected by tax rates in foreign jurisdictions and the relative amount of income earned in those jurisdictions, which the Company expects to be fairly consistent in the near term. The significant foreign jurisdictions that have different statutory tax rates than the US federal statutory rate of 21% include the UK, Canada, Germany and Ireland.

2023 Income tax expense (GAAP) reflected:

- a discrete tax benefit of \$201 million, related to the resolution of certain outstanding tax matters; and
- a discrete tax benefit of \$41 million, related to stock-based compensation awards that vested in 2023.

On August 16, 2022, the Inflation Reduction Act of 2022 ("IRA") was enacted into law, which became effective January 1, 2023 and introduced new provisions including a corporate book minimum tax and an excise tax on net stock repurchases. The provisions within the IRA did not have a material impact on BlackRock's consolidated financial statements.

2022 Income tax expense (GAAP) reflected:

- a discrete tax benefit of \$148 million, primarily related to the resolution of certain outstanding tax matters;
- · a discrete tax benefit of \$87 million, related to stock-based compensation awards that vested in 2022; and
- a discrete tax benefit of \$35 million associated with the net noncash tax benefit related to the revaluation of certain deferred income tax liabilities.

The as adjusted effective tax rate of 20.7% for 2022 excluded the \$35 million net noncash benefit mentioned above as it will not have a cash flow impact and to ensure comparability among periods presented.

In January 2024, the Company reorganized certain of its intellectual property framework to better align the corporate structure for future commercial business growth objectives. At this time, the Company is still evaluating the impact to the consolidated financial statements.

⁽²⁾ Management believes nonoperating income (expense), net of NCI, as adjusted, is an effective measure for reviewing BlackRock's nonoperating results, which ultimately impacts BlackRock's book value. See Non-GAAP Financial Measures for further information on other non-GAAP financial measures.

⁽⁵⁾ The amounts for 2022 primarily include nonoperating noncash pre-tax gains in connection with strategic minority investment in iCapital of approximately \$267 million. Additional amounts include noncash pre-tax gains (losses) related to the revaluation of certain other minority investments.

⁽²⁾ Net of net income (loss) attributable to NCI.

STATEMENT OF FINANCIAL CONDITION OVERVIEW

As Adjusted Statement of Financial Condition

The following table presents a reconciliation of the consolidated statement of financial condition presented on a GAAP basis to the consolidated statement of financial condition, excluding the impact of separate account assets and separate account collateral held under securities lending agreements (directly related to lending separate account securities) and separate account liabilities and separate account collateral liabilities under securities lending agreements and CIPs.

The Company presents the as adjusted statement of financial condition as additional information to enable investors to exclude certain assets that have equal and offsetting liabilities or NCI that ultimately do not have an impact on stockholders' equity or cash flows. Management views the as adjusted statement of financial condition, which contains non-GAAP financial measures, as an economic presentation of the Company's total assets and liabilities; however, it does not advocate that investors consider such non-GAAP financial measures in isolation from, or as a substitute for, financial information prepared in accordance with GAAP.

Separate Account Assets and Liabilities and Separate Account Collateral Held under Securities Lending Agreements

Separate account assets are maintained by BlackRock Life Limited, a wholly owned subsidiary of the Company that is a registered life insurance company in the UK, and represent segregated assets held for purposes of funding individual and group pension contracts. The Company records equal and offsetting separate account liabilities. The separate account assets are not available to creditors of the Company and the holders of the pension contracts have no recourse to the Company's assets. The net investment income attributable to separate account assets accrues directly to the contract owners and is not reported on the consolidated statements of income. While BlackRock has no economic interest in these assets or liabilities. BlackRock earns an investment advisory fee for the service of managing these assets on behalf of its clients.

In addition, the Company records on its consolidated statements of financial condition the separate account collateral obtained under BlackRock Life Limited securities lending arrangements for which it has legal title as its own asset in addition to an equal and offsetting separate account collateral liability for the obligation to return the collateral. The collateral is not available to creditors of the Company, and the borrowers under the securities lending arrangements have no recourse to the Company's assets.

Consolidated Sponsored Investment Products

The Company consolidates certain sponsored investment products accounted for as variable interest entities ("VIEs") and voting rights entities ("VREs"). See Note 2, Significant Accounting Policies, in the notes to the consolidated financial statements contained in Part II, Item 8 of this filing for more information on the Company's consolidation policy.

The Company cannot readily access cash and cash equivalents or other assets held by CIPs to use in its operating activities. In addition, the Company cannot readily sell investments held by CIPs in order to obtain cash for use in the Company's operations.

| | December 31, 2023 | | | | | | | |
|--|-------------------|---------------|----|--|----|---------------------|----|----------------|
| (in millions) | | GAAP Basis | A | eparate .ccount Assets/ Ilateral ⁽¹⁾ | | CIPs ⁽²⁾ | | As Adjusted |
| Assets | | | | | | | | |
| Cash and cash equivalents | \$ | 8,736 | \$ | _ | \$ | 288 | \$ | 8,448 |
| Accounts receivable | | 3,916 | | _ | | _ | | 3,916 |
| Investments | | 9,740 | | _ | | 1,866 | | 7,874 |
| Separate account assets and collateral held under securities lending agreements | | 60,656 | | 60,656 | | _ | | _ |
| Operating lease right-of-use assets | | 1,421 | | _ | | _ | | 1,421 |
| Other assets ⁽³⁾ | | 4,960 | | _ | | 122 | | 4,838 |
| Subtotal | | 89,429 | | 60,656 | | 2,276 | | 26,497 |
| Goodwill and intangible assets, net | | 33,782 | | _ | | _ | | 33,782 |
| Total assets | \$ | 123,211 | \$ | 60,656 | \$ | 2,276 | \$ | 60,279 |
| Liabilities | | | | | | | | |
| Accrued compensation and benefits | \$ | 2,393 | \$ | _ | \$ | _ | \$ | 2,393 |
| Accounts payable and accrued liabilities | | 1,240 | | _ | | _ | | 1,240 |
| Borrowings | | 7,918 | | _ | | _ | | 7,918 |
| Separate account liabilities and collateral liabilities under securities lending agreements | | 60,656 | | 60,656 | | _ | | _ |
| Deferred income tax liabilities ⁽⁴⁾ | | 3,506 | | _ | | _ | | 3,506 |
| Operating lease liabilities | | 1,784 | | _ | | _ | | 1,784 |
| Other liabilities | | 4,474 | | _ | | 425 | | 4,049 |
| Total liabilities | | 81,971 | | 60,656 | | 425 | | 20,890 |
| Equity | | | | | | | | |
| Total BlackRock, Inc. stockholders' equity | | 39,347 | | _ | | _ | | 39,347 |
| Noncontrolling interests | | 1,893 | | _ | | 1,851 | | 42 |
| Total equity | | 41,240 | | _ | | 1,851 | | 39,389 |
| Total liabilities and equity | \$ | 123,211 | \$ | 60,656 | \$ | 2,276 | \$ | 60,279 |

(1) Amounts represent segregated client assets and related liabilities, in which BlackRock has no economic interest. BlackRock earns an investment advisory fee for the

service of managing these assets on behalf of its clients. Amounts represent the impact of consolidating CIPs.

Amount includes property and equipment and other assets.

Amount includes approximately \$4.3 billion of deferred income tax liabilities related to goodwill and intangibles. See Note 24, *Income Taxes*, in the notes to the consolidated financial statements contained in Part II, Item 8 of this filing for more information.

The following discussion summarizes the significant changes in assets and liabilities on a GAAP basis. Please see the consolidated statements of financial condition as of December 31, 2023 and 2022 contained in Part II, Item 8 of this filing. The discussion does not include changes related to assets and liabilities that are equal and offsetting and have no impact on BlackRock's stockholders' equity.

Assets. Cash and cash equivalents at December 31, 2023 included \$288 million of cash held by CIPs (see *Liquidity and Capital Resources* for details on the change in cash and cash equivalents during 2023). Accounts receivable at December 31, 2023 increased \$652 million from December 31, 2022, primarily due to higher base fee and technology services receivables. Investments increased \$2.3 billion from December 31, 2022 (for more information see *Investments* herein). Goodwill and intangible assets increased \$139 million from December 31, 2022, primarily due to the Kreos Transaction, partially offset by the amortization of intangible assets. Other assets increased \$468 million from December 31, 2022, primarily related to an increase in unit trust receivables (substantially offset by an increase in unit trust payables recorded within other liabilities), partially offset by a decrease in due from related parties.

Liabilities. Accrued compensation and benefits at December 31, 2023 increased \$121 million from December 31, 2022, primarily due to higher 2023 incentive compensation accruals. Other liabilities at December 31, 2023 increased \$898 million from December 31, 2022, primarily due to higher unit trust payables (substantially offset by an increase in unit trust receivables recorded within other assets) and an increase in the deferred carried interest liability. Net deferred income tax liabilities at December 31, 2023 increased \$125 million from December 31, 2022, primarily due to the effects of temporary differences associated with compensation and benefits and the Kreos Transaction, partially offset by capitalized costs and realized investment gains.

Investments

The Company's investments were \$9.7 billion and \$7.5 billion at December 31, 2023 and 2022, respectively. Investments include CIPs accounted for as VIEs and VREs. Management reviews BlackRock's investments on an "economic" basis, which eliminates the portion of investments that does not impact BlackRock's book value or net income attributable to BlackRock. BlackRock's management does not advocate that investors consider such non-GAAP financial measures in isolation from, or as a substitute for, financial information prepared in accordance with GAAP.

The Company presents investments, as adjusted, to enable investors to understand the portion of investments that is owned by the Company, net of NCI, as a gauge to measure the impact of changes in net nonoperating income (expense) on investments to net income (loss) attributable to BlackRock.

The Company further presents net "economic" investment exposure, net of deferred cash compensation investments and hedged exposures, to reflect another helpful measure for investors. The economic impact of investments held pursuant to deferred cash compensation plans is substantially offset by a change in associated compensation expense, and the impact of the portfolio of seed investments is mitigated by futures entered into as part of the Company's macro hedging strategy. Carried interest capital allocations are excluded as there is no impact to BlackRock's stockholders' equity until such amounts are realized as performance fees. Finally, the Company's regulatory investment in Federal Reserve Bank stock, which is not subject to market or interest rate risk, is excluded from the Company's net economic investment exposure.

| (in millions) | Dece | Dec | cember 31, 2022 | |
|---|------|---------|--------------------|---------|
| Investments, GAAP | \$ | 9,740 | \$ | 7,466 |
| Investments held by CIPs | | (5,977) | | (4,669) |
| Net interest in CIPs ⁽¹⁾ | | 4,111 | | 3,622 |
| Investments, as adjusted | | 7,874 | | 6,419 |
| Investments related to deferred cash compensation plans | | (264) | | _ |
| Hedged exposures | | (1,771) | | (1,461) |
| Federal Reserve Bank stock | | (92) | | (91) |
| Carried interest | | (1,975) | | (1,550) |
| Total "economic" investment exposure(2) | \$ | 3,772 | \$ | 3,317 |

⁽¹⁾ Amounts included \$1.9 billion and \$1.5 billion of carried interest (VIEs) as of December 31, 2023 and 2022, respectively, which has no impact on the Company's "economic" investment exposure.

The following table represents the carrying value of the Company's economic investment exposure, by asset type, at December 31, 2023 and 2022.

| (in millions) | December 31, 2023 | | |
|--|----------------------|----|---------|
| Equity/Fixed income/Multi-asset ⁽¹⁾ | \$ 2,786 | \$ | 2,423 |
| Alternatives: | | | |
| Private equity | 1,491 | | 1,207 |
| Real assets | 509 | | 368 |
| Other alternatives ⁽²⁾ | 757 | | 780 |
| Alternatives subtotal | 2,757 | | 2,355 |
| Hedged exposures | (1,771) | | (1,461) |
| Total "economic" investment exposure | \$ 3,772 | \$ | 3,317 |

⁽¹⁾ Amounts include seed investments in equity, fixed income, and multi-asset mutual funds/strategies.

⁽²⁾ Amounts do not include investments in strategic minority investments included in other assets on the consolidated statements of financial condition.

⁽²⁾ Other alternatives primarily include co-investments in credit funds, direct hedge fund strategies, and hedge fund solutions.

As adjusted investment activity for 2023 and 2022 was as follows:

| (in millions) | 2 | 2023 | 2022 |
|---|----|----------|-------|
| Investments, as adjusted, beginning balance | \$ | 6,419 \$ | 6,030 |
| Purchases/capital contributions | | 1,403 | 1,532 |
| Sales/maturities | | (914) | (695) |
| Distributions ⁽¹⁾ | | (111) | (142) |
| Market appreciation(depreciation)/earnings from equity method investments | | 607 | (224) |
| Carried interest capital allocations/(distributions) | | 425 | (5) |
| Other ⁽²⁾ | | 45 | (77) |
| Investments, as adjusted, ending balance | \$ | 7,874 \$ | 6,419 |

Amount includes distributions representing return of capital and return on investments.
 Amount includes the impact of foreign exchange movements.

LIQUIDITY AND CAPITAL RESOURCES

BlackRock Cash Flows Excluding the Impact of CIPs

The consolidated statements of cash flows include the cash flows of the CIPs. The Company uses an adjusted cash flow statement, which excludes the impact of CIPs, as a supplemental non-GAAP measure to assess liquidity and capital requirements. The Company believes that its cash flows, excluding the impact of the CIPs, provide investors with useful information on the cash flows of BlackRock relating to its ability to fund additional operating, investing and financing activities. BlackRock's management does not advocate that investors consider such non-GAAP measures in isolation from, or as a substitute for, its cash flows presented in accordance with GAAP.

The following table presents a reconciliation of the consolidated statements of cash flows presented on a GAAP basis to the consolidated statements of cash flows, excluding the impact of the cash flows of CIPs:

| (in millions) | GAAP Basis | Impact on Cash Flows of CIPs | Cash Flows Excluding Impact of CIPs |
|---|---------------|------------------------------------|--|
| Cash, cash equivalents and restricted cash, December 31, 2021 | \$ 9,340 | \$ 308 | \$ 9,032 |
| Net cash provided by/(used in) operating activities | 4,956 | (712) | 5,668 |
| Net cash provided by/(used in) investing activities | (1,130) | 77 | (1,207) |
| Net cash provided by/(used in) financing activities | (5,442) | 592 | (6,034) |
| Effect of exchange rate changes on cash, cash equivalents and restricted cash | (291) | _ | (291) |
| Net increase/(decrease) in cash, cash equivalents and restricted cash | (1,907) | (43) | (1,864) |
| Cash, cash equivalents and restricted cash, December 31, 2022 | \$ 7,433 | \$ 265 | \$ 7,168 |
| Net cash provided by/(used in) operating activities | 4,165 | (1,519) | 5,684 |
| Net cash provided by/(used in) investing activities | (959) | (26) | (933) |
| Net cash provided by/(used in) financing activities | (1,992) | 1,568 | (3,560) |
| Effect of exchange rate changes on cash, cash equivalents and restricted cash | 106 | _ | 106 |
| Net increase/(decrease) in cash, cash equivalents and restricted cash | 1,320 | 23 | 1,297 |
| Cash, cash equivalents and restricted cash, December 31, 2023 | \$ 8,753 | \$ 288 | \$ 8,465 |

Sources of BlackRock's operating cash primarily include base fees and securities lending revenue, performance fees, technology services revenue, advisory and other revenue and distribution fees. BlackRock uses its cash to pay all operating expenses, interest and principal on borrowings, income taxes, dividends and repurchases of the Company's stock, acquisitions, capital expenditures and purchases of coinvestments and seed investments.

For details of the Company's GAAP cash flows from operating, investing and financing activities, see the consolidated statements of cash flows contained in Part II, Item 8 of this filing.

Cash flows provided by/(used in) operating activities, excluding the impact of CIPs, primarily include the receipt of base fees, securities lending revenue, performance fees and technology services revenue, offset by the payment of operating expenses incurred in the normal course of business, including year-end incentive and deferred cash compensation accrued during prior years, and income tax payments.

Cash flows used in investing activities, excluding the impact of CIPs, for 2023 were \$933 million and primarily reflected \$446 million of net investment purchases, \$344 million of purchases of property and equipment and \$189 million related to the Kreos Transaction.

Cash flows used in financing activities, excluding the impact of CIPs, for 2023 were \$3.6 billion, primarily resulting from \$3.0 billion of cash dividend payments, and \$1.9 billion of share repurchases, including \$1.5 billion in open market transactions and \$0.4 billion of employee tax withholdings related to employee stock transactions, partially offset by \$1.2 billion of proceeds from long-term borrowings.

The Company manages its financial condition and funding to maintain appropriate liquidity for the business. Management believes that the Company's liquid assets, continuing cash flows from operations, borrowing capacity under the Company's existing revolving credit facility and uncommitted commercial paper private placement program, provide sufficient resources to meet the Company's short-term and long-term cash needs, including operating, debt and other obligations as they come due and anticipated future capital requirements. Liquidity resources at December 31, 2023 and 2022 were as follows:

| (in millions) | Dec | ember 31, 2023 | December 31, 2022 |
|---|-----|-------------------|----------------------|
| Cash and cash equivalents ⁽¹⁾ | \$ | 8,736 | \$ 7,416 |
| Cash and cash equivalents held by CIPs ⁽²⁾ | | (288) | (265) |
| Subtotal ⁽³⁾ | | 8,448 | 7,151 |
| Credit facility — undrawn | | 5,000 | 4,700 |
| Total liquidity resources | \$ | 13,448 | \$ 11,851 |

Amounts exclude restricted cash.

Total liquidity resources increased \$1.6 billion during 2023, primarily reflecting cash flows from other operating activities, \$1.2 billion of proceeds from long-term borrowings and a \$300 million increase in the aggregate commitment amount under the credit facility, partially offset by cash dividend payments of \$3.0 billion, share repurchases of \$1.9 billion and \$189 million related to the Kreos Transaction.

A significant portion of the Company's \$7.9 billion of investments, as adjusted, is illiquid in nature and, as such, cannot be readily convertible to

Share Repurchases. In January 2023, the Company announced that the Board of Directors authorized the repurchase of an additional seven million shares under the Company's existing share repurchase program for a total of up to approximately 7.9 million shares of BlackRock common stock. The timing and actual number of shares repurchased will depend on a variety of factors, including legal limitations, price and

During 2023, the Company repurchased 2.2 million common shares under the Company's existing share repurchase program for approximately \$1.5 billion. At December 31, 2023, there were approximately 5.7 million shares still authorized to be repurchased under the program.

Net Capital Requirements. The Company is required to maintain net capital in certain regulated subsidiaries within a number of jurisdictions, which is partially maintained by retaining cash and cash equivalent investments in those subsidiaries or jurisdictions. As a result, such subsidiaries of the Company may be restricted in their ability to transfer cash between different jurisdictions and to their parents. Additionally, transfers of cash between international jurisdictions may have adverse tax consequences that could discourage such transfers.

BlackRock Institutional Trust Company, N.A. ("BTC") is chartered as a national bank that does not accept deposits or make commercial loans and whose powers are limited to trust and other fiduciary activities. BTC provides investment management and other fiduciary services, including investment advisory and securities lending agency services, to institutional clients. BTC is subject to regulatory capital and liquid asset requirements administered by the US Office of the Comptroller of the Currency.

At December 31, 2023 and 2022, the Company was required to maintain approximately \$1.8 billion and \$2.2 billion, respectively, in net capital in certain regulated subsidiaries, including BTC, entities regulated by the Financial Conduct Authority and Prudential Regulation Authority in the UK, and the Company's broker-dealers. The Company was in compliance with all applicable regulatory net capital requirements.

Undistributed Earnings of Foreign Subsidiaries. As a result of the 2017 Tax Cuts and Jobs Act and the one-time mandatory deemed repatriation tax on untaxed accumulated foreign earnings, US income taxes were provided on the Company's undistributed foreign earnings. The financial statement basis in excess of tax basis of its foreign subsidiaries remains indefinitely reinvested in foreign operations. The Company will continue to evaluate its capital management plans.

Short-Term Borrowings

2023 Revolving Credit Facility. The Company maintains an unsecured revolving credit facility which is available for working capital and general corporate purposes (the "2023 credit facility"). In March 2023, the 2023 credit facility was amended to, among other things, (1) increase the aggregate commitment amount by \$300 million to \$5 billion, (2) extend the maturity date to March 2028 and (3) change the secured overnight financing rate ("SOFR") adjustment to 10 bps per annum for all SOFR-based borrowings. The 2023 credit facility permits the Company to request up to an additional \$1.0 billion of borrowing capacity, subject to lender credit approval, which could increase the overall size of the 2023 credit facility to an aggregate principal amount of up to \$6 billion. The 2023 credit facility requires the Company not to exceed a maximum leverage ratio (ratio of net debt to earnings before interest, taxes, depreciation and amortization, where net debt equals total debt less unrestricted cash) of 3 to 1, which was satisfied with a ratio of less than 1 to 1 at December 31, 2023. At December 31, 2023, the Company had no amount outstanding under the 2023 credit facility.

Commercial Paper Program. The Company can issue unsecured commercial paper notes (the "CP Notes") on a private-placement basis up to a maximum aggregate amount outstanding at any time of \$4 billion. The commercial paper program is currently supported by the 2023 credit facility. At December 31, 2023, BlackRock had no CP Notes outstanding.

⁽²⁾ The Company cannot readily access such cash and cash equivalents to use in its operating activities.
(3) The percentage of cash and cash equivalents held by the Company's US subsidiaries was approximately 50% at both December 31, 2023 and 2022. See Net Capital Requirements herein for more information on net capital requirements in certain regulated subsidiaries

Long-Term Borrowings

The carrying value of long-term borrowings at December 31, 2023 included the following:

| (in millions) | Matur | rity Amount | Carrying Value | Maturity |
|----------------------------|-------|-------------|----------------|---------------|
| 3.50% Notes | \$ | 1,000 | \$ 1,000 | March 2024 |
| 1.25% Notes ⁽¹⁾ | | 772 | 771 | May 2025 |
| 3,20% Notes | | 700 | 698 | March 2027 |
| 3.25% Notes | | 1,000 | 993 | April 2029 |
| 2.40% Notes | | 1,000 | 996 | April 2030 |
| 1.90% Notes | | 1,250 | 1,242 | January 2031 |
| 2.10% Notes | | 1,000 | 988 | February 2032 |
| 4.75% Notes | | 1,250 | 1,230 | May 2033 |
| Total Long-term Borrowings | \$ | 7,972 | \$ 7,918 | |

⁽¹⁾ The carrying value of the 1.25% Notes is calculated using the EUR/USD foreign exchange rate as of December 31, 2023.

In May 2023, the Company issued \$1.25 billion in aggregate principal amount of 4.75% senior unsecured notes maturing on May 25, 2033 (the "2033 Notes"). The net proceeds of the 2033 Notes are being used for general corporate purposes, which may include the future repayment of all or a portion of the \$1.0 billion 3.50% Notes due March 2024. Interest of approximately \$59 million per year is payable semi-annually on May 25 and November 25 of each year, commencing on November 25, 2023. The 2033 Notes may be redeemed at the option of the Company, in whole or in part, at any time prior to February 25, 2033 at a "make-whole" redemption price, or thereafter at 100% of the principal amount of the 2033 Notes, in each case plus accrued but unpaid interest. The unamortized discount and debt issuance costs are being amortized over the remaining term of the 2033 Notes.

For more information on Company's borrowings, see Note 14, *Borrowings*, in the notes to the consolidated financial statements contained in Part II, Item 8 of this filing.

Contractual Obligations, Commitments and Contingencies

The Company's material contractual obligations, commitments and contingencies at December 31, 2023 include borrowings, operating leases, investment commitments, compensation and benefits obligations, and purchase obligations.

Borrowings. At December 31, 2023, the Company had outstanding borrowings with varying maturities for an aggregate principal amount of \$8.0 billion, of which \$1.0 billion is payable within 12 months. Future interest payments associated with these borrowings total \$1.4 billion, of which \$210 million is payable within 12 months. See Note 14, Borrowings, in the notes to the consolidated financial statements contained in Part II, Item 8 of this filing.

Operating Leases. The Company leases its primary office locations under agreements that expire on varying dates through 2043. At December 31, 2023, the Company had operating lease payment obligations of approximately \$2.2 billion, of which \$180 million is payable within 12 months. See Note 12, Leases, in the notes to the consolidated financial statements contained in Part II, Item 8 of this filing.

Investment Commitments. At December 31, 2023, the Company had \$738 million of various capital commitments to fund sponsored investment products, including CIPs. These products include various illiquid alternative products, including private equity funds and real assets funds, and opportunistic funds. This amount excludes additional commitments made by consolidated funds of funds to underlying third-party funds as third-party noncontrolling interest holders have the legal obligation to fund the respective commitments of such funds of funds. Generally, the timing of the funding of these commitments is unknown and the commitments are callable on demand at any time prior to the expiration of the commitment. These unfunded commitments are not recorded on the consolidated statements of financial condition. These commitments do not include potential future commitments approved by the Company that are not yet legally binding. The Company intends to make additional capital commitments from time to time to fund additional investment products for, and with, its clients.

Compensation and Benefit Obligations. The Company has various compensation and benefit obligations, including bonuses, commissions and incentive payments payable, defined contribution plan matching contribution obligations, and deferred compensation arrangements. Accrued compensation and benefits at December 31, 2023 totaled \$2.4 billion and included annual incentive compensation of \$1.5 billion, deferred compensation of \$0.5 billion and other compensation and benefits related obligations of \$0.4 billion. Substantially all of the incentive compensation liability was paid in the first quarter of 2024, while the deferred compensation obligations are payable over various periods, with the majority payable over periods of up to three years.

Purchase Obligations. In the ordinary course of business, BlackRock enters into contracts or purchase obligations with third parties whereby the third parties provide services to or on behalf of BlackRock. Purchase obligations represent executory contracts, which are either noncancelable or cancelable with a penalty. At December 31, 2023, the Company's obligations primarily reflected standard service contracts for market data, technology, office-related services, marketing and promotional services, and obligations for equipment. Purchase obligations are recorded on the consolidated financial statements when services are provided and, as such, obligations for services and equipment not received are not included in the consolidated statement of financial condition at December 31, 2023. At December 31, 2023, the Company had purchase obligations of approximately \$735 million, of which \$280 million is payable within 12 months.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expense during the reporting periods. Actual results could differ significantly from those estimates. These estimates, judgments and assumptions are affected by the Company's application of accounting policies. Management considers the following accounting policies and estimates critical to understanding the consolidated financial statements. These policies and estimates are considered critical because they had a material impact, or are reasonably likely to have a material impact on the Company's consolidated financial statements and because they require management to make significant judgments, assumptions or estimates. For a summary of these and additional accounting policies see Note 2, Significant Accounting Policies, in the notes to the consolidated financial statements included in Part II, Item 8 of this filing.

Consolidation

The Company consolidates entities in which the Company has a controlling financial interest. The company has a controlling financial interest when it owns a majority of the VRE or is a primary beneficiary ("PB") of a VIE. Assessing whether an entity is a VIE or a VRE involves judgment and analysis on a structure-by-structure basis. Factors considered in this assessment include the entity's legal organization, the entity's capital structure, the rights of equity investment holders, the Company's contractual involvement with and economic interest in the entity and any related party or de facto agent implications of the Company's involvement with the entity. Entities that are determined to be VREs are consolidated if the Company can exert absolute control over the financial and operating policies of the investee, which generally exists if there is greater than 50% voting interest. Entities that are determined to be VIEs are consolidated if the Company is the PB of the entity. BlackRock is deemed to be the PB of a VIE if it (1) has the power to direct the activities that most significantly impact the entities' economic performance and (2) has the obligation to absorb losses or the right to receive benefits that potentially could be significant to the VIE. There is judgment involved in assessing whether the Company is the PB of a VIE. In addition, the Company's ownership interest in VIEs is subject to variability and is impacted by actions of other investors such as on-going redemptions and contributions. The Company generally consolidates VIEs in which it holds an economic interest of 10% or greater and deconsolidates such VIEs once its economic interest falls below 10%. As of December 31, 2023, the Company was deemed to be the PB of approximately 100 VIEs. See Note 5, *Consolidated Sponsored Investment Products*, in the notes to the consolidated financial statements contained in Part II, Item 8 of this filing for more information.

Fair Value Measurements

The Company's assessment of the significance of a particular input to the fair value measurement according to the fair value hierarchy (i.e., Level 1, 2 and 3 inputs, as defined) in its entirety requires judgment and considers factors specific to the financial instrument. See Note 2, Significant Accounting Policies, and Note 7, Fair Value Disclosures, in the consolidated financial statements contained in Part II, Item 8 of this filling for more information on fair value measurements.

Changes in Valuation. Changes in value on \$7.1 billion of investments will impact the Company's nonoperating income (expense), \$709 million are held at cost or amortized cost and the remaining \$2.0 billion relates to carried interest, which will not impact nonoperating income (expense). At December 31, 2023, changes in fair value of \$4.1 billion of CIPs will impact BlackRock's net income (loss) attributable to NCI on the consolidated statements of income. BlackRock's net exposure to changes in fair value of CIPs was \$2.2 billion.

Goodwill and Intangible Assets

Goodwill. Goodwill represents the cost of a business acquisition in excess of the fair value of the net assets acquired. The Company assesses its goodwill for impairment at least annually, considering such factors as the book value and the market capitalization of the Company. The impairment assessment performed as of July 31, 2023 indicated no impairment charge was required. The Company continues to monitor its book value per share compared with closing prices of its common stock for potential indicators of impairment. At December 31, 2023, the Company's common stock closed at \$811.80, which exceeded its book value of \$264.96 per share.

Indefinite-lived and finite-lived intangibles. Indefinite-lived intangible assets represent the value of advisory contracts acquired in business acquisitions to manage AUM in proprietary open-end investment funds, collective trust funds and certain other commingled products without a specified termination date. The assignment of indefinite lives to such contracts primarily is based upon the following: (1) the assumption that there is no foreseeable limit on the contract period to manage these products; (2) the Company expects to, and has the ability to, continue to operate these products indefinitely; (3) the products have multiple investors and are not reliant on a single investor or small group of investors for their continued operation; (4) current competitive factors and economic conditions do not indicate a finite life; and (5) there is a high likelihood of continued renewal based on historical experience. In addition, trade names/trademarks are considered indefinite-lived intangibles if they are expected to generate cash flows indefinitely. Indefinite-lived intangible assets are not amortized.

Finite-lived intangible assets represent finite-lived investor/customer relationships, technology related assets, and management contracts, which relate to acquired separate accounts and funds, that are expected to contribute to the future cash flows of the Company for a specified period of time. Finite-lived intangible assets are amortized over their remaining expected useful lives, which, at December 31, 2023 ranged from approximately 1 to 10 years with a weighted-average remaining estimated useful life of approximately 5 years.

The Company performs assessments to determine if any intangible assets are impaired at least annually, as of July 31, or more frequently if events or changes in circumstances indicate that it is more likely than not that the intangible asset might be impaired.

In evaluating whether it is more likely than not that the fair value of indefinite-lived intangibles is less than its carrying value, BlackRock performed certain quantitative assessments and assessed various significant quantitative factors including AUM, revenue basis points, projected AUM growth rates, operating margins, tax rates and discount rates. In addition, the Company considered other qualitative factors including: (1) macroeconomic conditions such as a deterioration in general economic conditions, limitations on accessing capital, fluctuations in foreign exchange rates, or other developments in equity and credit markets; (2) industry and market considerations such as a deterioration in the environment in which the Company operates, an increased competitive environment, a decline in market-dependent multiples or metrics, a change in the market for an entity's services, or regulatory, legal or political developments; and (3) Company-specific events, such as a change in management or key personnel, overall financial performance and litigation that could affect significant inputs used to determine the fair value of the indefinite-lived intangible asset. If an indefinite-lived intangible is determined to be more likely than not impaired, then the fair value over the fair value would be recognized as an expense in the period in which the impairment occurs.

For finite-lived intangible assets, if potential impairment circumstances are considered to exist, the Company will perform a recoverability test, using an undiscounted cash flow analysis. Factors included in evaluating finite-lived customer relationships, technology related assets and trade names include technology services revenue trends, customer attrition rates, obsolescence rates, and royalty rates. For finite-lived management contracts, evaluation is based on changes in assumptions including AUM, revenue basis points, projected AUM growth rates, operating margins, tax rates and discount rates. Actual results could differ from these cash flow estimates, which could materially impact the impairment conclusion. If the carrying value of the asset is determined not to be recoverable based on the undiscounted cash flow test, the difference between the book value of the asset and its current estimated fair value would be recognized as an expense in the period in which the impairment occurs.

In addition, management judgment is required to estimate the period over which finite-lived intangible assets will contribute to the Company's cash flows and the pattern in which these assets will be consumed and whether the indefinite-life and finite-life classifications are still appropriate. A change in the remaining useful life of any of these assets, or the reclassification of an indefinite-lived intangible asset to a finite-lived intangible asset, could have a significant impact on the Company's amortization expense, which was \$151 million, \$151 million and \$147 million for 2023, 2022 and 2021, respectively.

In 2023, 2022 and 2021, the Company performed impairment tests, including evaluating various qualitative factors and performing certain quantitative assessments. The Company determined that no impairment charges were required and that the classification of indefinite-lived versus finite-lived intangibles was still appropriate and no changes were required to the expected lives of the finite-lived intangibles. The Company continuously monitors various factors, including AUM, for potential indicators of impairment.

Revenue Recognition

The Company recognizes revenues when its obligations related to the services are satisfied and it is probable that a significant reversal of the revenue amount would not occur in future periods. The Company enters into contracts that can include multiple services, which are accounted for separately if they are determined to be distinct. Management judgment is required in assessing the probability of significant revenue reversal and in identification of distinct services.

The Company derives a substantial portion of its revenue from investment advisory and administration fees which are recognized as the services are performed over time because the customer is receiving and consuming the benefits as they are provided by the Company. Fees are primarily based on agreed-upon percentages of AUM and recognized for services provided during the period, which are distinct from services provided in other periods. Such fees are affected by changes in AUM, including market appreciation or depreciation, foreign exchange translation and net inflows or outflows. AUM represents the broad range of financial assets the Company manages for clients on a discretionary basis pursuant to investment management and trust agreements that are expected to continue for at least 12 months. In general, reported AUM reflects the valuation methodology that corresponds to the basis used for determining revenue (for example, net asset values).

The Company receives investment advisory performance fees, including incentive allocations (carried interest) from certain actively managed investment funds and certain separately managed accounts ("SMAs"). These performance fees are dependent upon exceeding specified relative or absolute investment return thresholds, which vary by product or account, and include monthly, quarterly, annual or longer measurement periods.

Performance fees, including carried interest, are generated on certain management contracts when performance hurdles are achieved. Such performance fees are recognized when the contractual performance criteria have been met and when it is determined that they are no longer probable of significant reversal. Given the unique nature of each fee arrangement, contracts with customers are evaluated on an individual basis to determine the timing of revenue recognition. Significant judgment is involved in making such determination. Performance fees typically arise from investment management services that began in prior reporting periods. Consequently, a portion of the fees the Company recognizes may be partially related to the services performed in prior periods that meet the recognition criteria in the current period. At each reporting date, the Company considers various factors in estimating performance fees to be recognized, including carried interest. These factors include but are not limited to whether: (1) the amounts are dependent on the financial markets and, thus, are highly susceptible to factors outside the Company's influence; (2) the ultimate payments have a large number and a broad range of possible amounts; and (3) the funds or SMAs have the ability to (a) invest or reinvest their sales proceeds or (b) distribute their sales proceeds, and determine the timing of such distributions.

The Company is allocated/distributed carried interest from certain alternative investment products upon exceeding performance thresholds. The Company may be required to reverse/return all, or part, of such carried interest allocations/distributions depending upon future performance of these products. Carried interest subject to such clawback provisions is recorded in investments or cash and cash equivalents to the extent that it is distributed, on the Company's consolidated statements of financial condition.

The Company records a liability for deferred carried interest to the extent it receives cash or capital allocations related to carried interest prior to meeting the revenue recognition criteria. At December 31, 2023 and 2022, the Company had \$1.8 billion and \$1.4 billion, respectively, of deferred carried interest recorded in other liabilities on the consolidated statements of financial condition. A portion of the deferred carried interest may also be paid to certain employees and other third parties. The ultimate timing of the recognition of performance fee revenue and related compensation expense, if any, is unknown. See Note 16, *Revenue*, in the notes to the consolidated financial statements for detailed changes in the deferred carried interest liability balance for 2023 and 2022.

The Company earns revenue for providing technology services. Determining the amount of revenue to recognize requires judgment and estimates. Complex arrangements with nonstandard terms and conditions may require contract interpretation to determine the appropriate accounting, including whether promised goods and services specified in an arrangement, are distinct performance obligations, and should be accounted for separately. Other judgments include determining whether performance obligations are satisfied over time or at a point in time. Fees earned for technology services are primarily recorded as services are performed over time and are generally determined using the value of positions on the Aladdin platform or on a fixed-rate basis. Revenue derived from the sale of software licenses is recognized upon the granting of access rights.

Adjustments to revenue arising from initial estimates recorded historically have been immaterial since the majority of BlackRock's investment advisory and administration revenue is calculated based on AUM, recognized when known, and given the Company does not record performance fee revenue until: (1) performance thresholds have been exceeded and (2) management determines the fees are no longer probable of significant reversal. See Note 2, Significant Accounting Policies, in the consolidated financial statements contained in Part II, Item 8 of this filing for more information on revenue recognition, including other revenue streams.

Income Taxes

The Company records income taxes based upon its estimated income tax liability or benefit. The Company's actual tax liability or benefit may differ from the estimated income tax liability or benefit.

Deferred income tax assets and liabilities are recognized for future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases using currently enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

Significant management judgment is required in estimating the ranges of possible outcomes and determining the probability of favorable or unfavorable tax outcomes and potential interest and penalties related to such unfavorable outcomes. Actual future tax consequences relating to uncertain tax positions may be materially different than the Company's current estimates. At December 31, 2023, BlackRock had \$749 million of gross unrecognized tax benefits, of which \$505 million, if recognized, would affect the effective tax rate.

Management is required to estimate the timing of the recognition of deferred tax assets and liabilities, make assumptions about the future deductibility of deferred income tax assets and assets and assets and liabilities based on enacted tax rates for the appropriate tax jurisdictions to determine the amount of such deferred income tax assets and liabilities. At December 31, 2023, the Company had deferred income tax assets of \$208 million and deferred income tax liabilities of \$3.5 billion on the consolidated statement of financial condition. Changes in deferred tax assets and liabilities may occur in certain circumstances, including statutory income tax rate changes, statutory tax law changes, changes in the anticipated timing of recognition of deferred tax assets and liabilities or changes in the structure or tax status of the Company.

The Company assesses whether a valuation allowance should be established against its deferred income tax assets based on consideration of all available evidence, both positive and negative, using a more likely than not standard. The assessment considers, among other matters, the nature, frequency and severity of recent losses, forecast of future profitability, the duration of statutory carry back and carry forward periods, the Company's experience with tax attributes expiring unused, and tax planning alternatives.

Accounting Developments

For accounting pronouncements not yet adopted by the Company, see Note 2, Significant Accounting Policies, in the consolidated financial statements contained in Part II, Item 8 of this filling.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

AUM Market Price Risk. BlackRock's investment advisory and administration fees are primarily comprised of fees based on a percentage of the value of AUM and, in some cases, performance fees expressed as a percentage of the returns realized on AUM. At December 31, 2023, the majority of the Company's investment advisory and administration fees were based on average or period end AUM of the applicable investment funds or separate accounts. Movements in equity market prices, interest rates/credit spreads, foreign exchange rates or all three could cause the value of AUM to decline, which would result in lower investment advisory and administration fees.

Corporate Investments Portfolio Risks. As a leading investment management firm, BlackRock devotes significant resources across all of its operations to identifying, measuring, monitoring, managing and analyzing market and operating risks, including the management and oversight of its own investment portfolio. The Board of Directors of the Company has adopted guidelines for the review of investments (or commitments to invest) to be made by the Company, requiring, among other things, that certain investments be referred to the Board of Directors, depending on the circumstances, for notification or approval.

In the normal course of its business, BlackRock is exposed to equity market price risk, interest rate/credit spread risk and foreign exchange rate risk associated with its corporate investments.

BlackRock has investments primarily in sponsored investment products that invest in a variety of asset classes, including real assets, private equity and hedge funds. Investments generally are made for co-investment purposes, to establish a performance track record, to hedge exposure to certain deferred cash compensation plans or for regulatory purposes. The Company has a seed capital hedging program in which it enters into futures to hedge market and interest rate exposure with respect to its total portfolio of seed investments in sponsored investment products. The Company had outstanding futures related to its seed capital hedging program with an aggregate notional value of approximately \$1.8 billion and \$1.5 billion at December 31, 2023 and 2022, respectively.

At December 31, 2023 and 2022, approximately \$6.0 billion and \$4.7 billion, respectively, of BlackRock's investments were held in consolidated sponsored investment products accounted for as variable interest entities or voting rights entities. Excluding the impact of the Federal Reserve Bank stock, carried interest, investments made to hedge exposure to certain deferred cash compensation plans and certain investments that are hedged via the seed capital hedging program, the Company's economic exposure to its investment portfolio at December 31, 2023 and 2022 were \$3.8 billion and \$3.3 billion, respectively. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations-Statement of Financial Condition Overview-Investments for further information on the Company's investments.

Equity Market Price Risk. Investments subject to market price risk include public and private equity and real assets investments, hedge funds and funds of funds as well as mutual funds. The following table provides our net exposure to equity market price risk and our hypothetical exposure to a 10% adverse change in market prices:

| | | | F | s of December | r 31, | | | |
|--------------------------|-----|----------|-------------------|---------------|--------------|----------------------|-----|--|
| | | 202 | 23 | | 2022 | | | |
| (in millions) | Net | Exposure | Effect of -10% Ch | nange | Net Exposure | Effect of -10% Chang | је | |
| Equity Market Price Risk | | | | | | | | |
| Investments | \$ | 1.684 | \$ | 168 \$ | 1.417 | \$ | 142 | |

Interest-Rate/Credit Spread Risk. Investments subject to interest-rate and credit spread risk include debt securities and sponsored investment products that invest primarily in debt securities. The following table provides our exposure to interest rate risk and credit spread risk and our hypothetical exposure to an adverse 100 basis point fluctuation in interest rates or credit spreads:

| | | As of December 31, | | | | | | |
|----------------------------------|---------|--------------------|--------------------|----------|----------|-------|----------------------|-------|
| | | 20 |)23 | | | 20 | 22 | |
| | | | Effect of -100 Bas | is Point | | | Effect of -100 Basis | Point |
| (in millions) | Exposur | е | Change | | Exposure | | Change | |
| Interest-Rate/Credit Spread Risk | | | | | | | | |
| Investments | \$ | 2,088 | \$ | 53 \$ | | 1,900 | \$ | 43 |

Foreign Exchange Rate Risk. As discussed above, the Company invests in sponsored investment products that invest in a variety of asset classes. The carrying value of the total economic investment exposure denominated in foreign currencies are primarily based in the British pound and euro. The following table provides our exposure to foreign currencies and our hypothetical exposure to a 10% adverse change in the applicable foreign exchange rates:

| | As of December 31, | | | | | | | | |
|----------------------------|--------------------|-------|------|-------------------|----|----------|-----|-----------|------------|
| | 2023 2022 | | | | | | | | |
| (in millions) | Exposure | | Effe | ct of -10% Change | | Exposure | | Effect of | 10% Change |
| Foreign Exchange Rate Risk | | | | | | | | | |
| Investments | \$ | 1 125 | \$ | 112 | \$ | | 998 | \$ | 100 |

Other Market Risks. The Company executes forward foreign currency exchange contracts to mitigate the risk of certain foreign exchange risk movements. At December 31, 2023 and 2022, the Company had outstanding forward foreign currency exchange contracts with an aggregate notional value of approximately \$3.1 billion and \$2.2 billion with expiration dates in January 2024 and 2023, respectively. In addition, the Company entered into futures to hedge economically the exposure to market movements on certain deferred cash compensation plans. At December 31, 2023, the Company had outstanding exchange traded futures with aggregate notional values related to its deferred cash compensation hedging program of approximately \$204 million, with expiration dates during the first quarter of 2024.

Item 8. Financial Statements and Supplemental Data

The report of the independent registered public accounting firm and financial statements listed in the accompanying index are included in Item 15 of this report. See Index to the consolidated financial statements on page F-1 of this Form 10-K.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

There have been no disagreements on accounting and financial disclosure matters. BlackRock has not changed accountants in the two most recent fiscal years.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures. Under the direction of BlackRock's Chief Executive Officer and Chief Financial Officer, BlackRock evaluated the effectiveness of its disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this annual report on Form 10-K. Based on this evaluation, BlackRock's Chief Executive Officer and Chief Financial Officer have concluded that BlackRock's disclosure controls and procedures were effective.

Internal Control over Financial Reporting. There were no changes in our internal control over financial reporting that occurred during the fourth quarter of the fiscal year ending December 31, 2023 that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

Management's Report on Internal Control Over Financial Reporting

Management of BlackRock, Inc. (the "Company") is responsible for establishing and maintaining effective internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended, as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers, or persons performing similar functions, and effected by the Company's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America and includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America, and that receipts and expenditures of the Company are being made only in accordance with the authorizations of management and directors of the Company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of effectiveness of the internal control over financial reporting to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2023 based on the criteria established in *Internal Control* — *Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management concluded that, as of December 31, 2023, the Company's internal control over financial reporting is effective.

The Company's independent registered public accounting firm has issued an attestation report on the effectiveness of the Company's internal control over financial reporting.

February 23, 2024

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of BlackRock, Inc.:

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of BlackRock, Inc. and subsidiaries (the "Company") as of December 31, 2023, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the financial statements as of and for the year ended December 31, 2023, of the Company and our report dated February 23, 2024, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP New York, New York February 23, 2024

Item 9B. Other Information

The Company is furnishing no other information in this Form 10-K.

Item 9C. Disclosure Regarding Foreign Jurisdictions That Prevent Inspections Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information regarding directors and executive officers set forth under the captions "Item 1: Election of Directors – Director Nominee Biographies" and "Corporate Governance – Other Executive Officers" of the Proxy Statement is incorporated herein by reference.

Information regarding compliance with Section 16(a) of the Exchange Act required by Item 10, if any, is set forth under the caption "Delinquent Section 16(a) Reports" of the Proxy Statement and incorporated herein by reference.

The information regarding BlackRock's Code of Ethics for Chief Executive and Senior Financial Officers under the caption "Corporate Governance – Our Corporate Governance Framework" of the Proxy Statement is incorporated herein by reference.

The information regarding BlackRock's Audit Committee under the caption "Corporate Governance – Board Committees" of the Proxy Statement is incorporated herein by reference.

Item 11. Executive Compensation

The information contained in the sections captioned "Management Development & Compensation Committee Interlocks and Insider Participation," "Executive Compensation – Compensation Discussion and Analysis" and "Corporate Governance – 2023 Director Compensation" of the Proxy Statement is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information contained in the sections captioned "Ownership of BlackRock Common Stock" and "Executive Compensation – Compensation Discussion and Analysis – 6. Executive Compensation Tables – Equity Compensation Plan Information" of the Proxy Statement is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information contained in the sections captioned "Certain Relationships and Related Transactions" and "Item 1: Election of Directors – Criteria for Board Membership – Director Independence" of the Proxy Statement is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

The information regarding BlackRock's independent auditor fees and services in the section captioned "Item 4: Ratification of the Appointment of the Independent Registered Public Accounting Firm" of the Proxy Statement is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

1. Financial Statements

The Company's consolidated financial statements are included beginning on page F-1.

2. Financial Statement Schedules

Financial statement schedules have been omitted because they are not applicable, not required or the information required is included in the Company's consolidated financial statements or notes thereto.

3. Exhibit Index

As used in this exhibit list, "BlackRock" refers to BlackRock, Inc. (formerly named New BlackRock, Inc. and previously, New Boise, Inc.) (Commission File No. 001-33099) and "Old BlackRock" refers to BlackRock Holdco 2, Inc. (formerly named BlackRock, Inc.) (Commission File No. 001-15305), which is the predecessor of BlackRock. The following exhibits are filed as part of this Annual Report on Form 10-K:

Please note that the agreements included as exhibits to this Form 10-K are included to provide information regarding their terms and are not intended to provide any other factual or disclosure information about BlackRock or the other parties to the agreements. The agreements contain representations and warranties by each of the parties to the applicable agreement that have been made solely for the benefit of the other parties to the applicable agreement and may not describe the actual state of affairs as of the date they were made or at any other time.

| Exhibit No. | Description |
|-------------|--|
| 3.1(1) | Amended and Restated Certificate of Incorporation of BlackRock. |
| 3.1.1(2) | Certificate of Change of Registered Agent and/or Registered Office. |
| 3.2(3) | Amended and Restated Bylaws of BlackRock. |
| 4.1(4) | Specimen of Common Stock Certificate. |
| 4.2(5) | Indenture, dated September 17, 2007, between BlackRock and The Bank of New York, as trustee, relating to senior debt securities. |
| 4.3(6) | Form of 3.500% Notes due 2024. |
| 4.4(7) | Form of 1.250% Notes due 2025. |
| 4.5(8) | Form of 3.200% Notes due 2027. |
| 4.6(9) | Form of 3.250% Notes due 2029. |
| 4.7(10) | Form of 2.400% Notes due 2030. |
| 4.8(11) | Form of 1.900% Notes due 2031. |
| 4.9(12) | Form of 2.10% Notes due 2032. |
| 4.10(13) | Form of 4.750% Notes due 2033. |
| 4.11(7) | Officers' Certificate, dated May 6, 2015, for the 1.250% Notes due 2025 issued pursuant to the Indenture. |
| 4.12(14) | Description of Securities. |
| 10.1(15) | BlackRock, Inc. Second Amended and Restated 1999 Stock Award and Incentive Plan.+ |
| 10.2(16) | Amendment to the BlackRock, Inc. Second Amended and Restated 1999 Stock Award and Incentive Plan.+ |
| 10.3(17) | Amended and Restated BlackRock, Inc. 1999 Annual Incentive Performance Plan.+ |
| 10.4(18) | Amendment No. 1 to the BlackRock, Inc. Amended and Restated 1999 Annual Incentive Performance Plan.+ |
| 10.5(19) | Form of Restricted Stock Unit Agreement under the BlackRock, Inc. Second Amended and Restated 1999 Stock Award and Incentive Plan.+ |
| 10.6(19) | Form of Performance-Based Restricted Stock Unit Agreement (BPIP) under the BlackRock, Inc. Second Amended and Restated 1999 Stock Award and Incentive Plan.+ |
| 10.7(20) | Form of Performance-Based Stock Option Agreement under the BlackRock, Inc. Second Amended and Restated 1999 Stock Award and Incentive Plan. + |
| 10.8(21) | Form of Stock Option Agreement expected to be used in connection with future grants of Stock Options under the BlackRock, Inc. Second Amended and Restated 1999 Stock Award and Incentive Plan.+ |
| 10.9(21) | Form of Restricted Stock Agreement expected to be used in connection with future grants of Restricted Stock under the BlackRock, Inc. Second Amended and Restated 1999 Stock Award and Incentive Plan.+ |
| 10.10(21) | Form of Directors' Restricted Stock Unit Agreement expected to be used in connection with future grants of Restricted Stock Units under the BlackRock, Inc. Second Amended and Restated 1999 Stock Award and Incentive Plan.+ |
| 10.11(15) | BlackRock, Inc. Amended and Restated Voluntary Deferred Compensation Plan, as amended and restated as of November 16, 2015.+ |
| 10.12(22) | Five-Year Revolving Credit Agreement, dated as of March 10, 2011, by and among BlackRock, Inc., certain of its subsidiaries, Wells Fargo Bank, National Association, as administrative agent, swingline lender, issuing lender and L/C agent, Sumitomo Mitsui Banking Corporation, as Japanese Yen lender, a group of lenders, Wells Fargo Securities, LLC, Citigroup Global Markets Inc., Merrill Lynch, Pierce, Fenner & Smith Incorporated, Barclays Capital, J.P. Morgan Securities LLC and Morgan Stanley Senior Funding, Inc., as joint lead arrangers and joint bookrunners, Citibank, N.A., as syndication agent and Bank of America, N.A., Barclays Bank PLC, JPMorgan Chase Bank, N.A. and Morgan Stanley Senior Funding, Inc., as documentation agents. |
| 10.13(23) | Amendment No. 1, dated as of March 30, 2012, by and among BlackRock, Inc., certain of its subsidiaries, Wells Fargo Bank National Association, as administrative agent, swingline lender, issuing lender, L/C agent and a lender, and the banks and other financial institutions referred to therein. |
| 10.14(24) | Amendment No. 2, dated as of March 28, 2013, by and among BlackRock, Inc., certain of its subsidiaries, Wells Fargo Bank National Association, as administrative agent, swingline lender, issuing lender, L/C agent and a lender, and the banks and other |

financial institutions referred to therein.

| Exhibit No. | Description |
|------------------|---|
| 10.15(25) | Amendment No. 3, dated as of March 28, 2014, by and among BlackRock, Inc., certain of its subsidiaries, Wells Fargo Bank, National Association, as administrative agent, swingline lender, issuing lender, L/C agent and a lender, and the banks and other financial institutions referred to therein. |
| 10.16(26) | Amendment No. 4, dated as of April 2, 2015, by and among BlackRock, Inc., certain of its subsidiaries, Wells Fargo Bank, National Association, as administrative agent, swingline lender, issuing lender, L/C agent and a lender, and the banks and other financial institutions referred to therein. |
| 10.17(27) | Amendment No. 5, dated as of April 8, 2016, by and among BlackRock, Inc., certain of its subsidiaries, Wells Fargo Bank, National Association, as administrative agent, swingline lender, issuing lender, L/C agent and a lender, and the banks and other financial institutions referred to therein. |
| 10.18(28) | Amendment No. 6, dated as of April 6, 2017, by and among BlackRock, Inc., certain of its subsidiaries, Wells Fargo Bank, National Association, as administrative agent, swingline lender, issuing lender, L/C agent and a lender, and the banks and other financial institutions referred to therein. |
| 10.19(29) | Amendment No. 7, dated as of April 3, 2018, by and among BlackRock, Inc., certain of its subsidiaries, Wells Fargo Bank, National Association, as administrative agent, swingline lender, issuing lender, L/C agent and a lender, and the banks and other financial institutions referred to therein. |
| 10.20(30) | Amendment No. 8, dated as of March 29, 2019, by and among BlackRock, Inc., certain of its subsidiaries, Wells Fargo Bank, National Association, as administrative agent, swingline lender, issuing lender, L/C agent and a lender, and the banks and other financial institutions referred to therein. |
| 10.21(31) | Amendment No. 9, dated as of March 31, 2020, by and among BlackRock, Inc., certain of its subsidiaries, Wells Fargo Bank, National Association, as administrative agent, swingline lender, issuing lender, L/C agent and a lender, and the banks and other financial institutions referred to therein. |
| 10.22(32) | Amendment No. 10, dated as of March 31, 2021, by and among BlackRock, Inc., certain of its subsidiaries, Wells Fargo Bank, National Association, as administrative agent, a swingline lender, an issuing lender, L/C agent and a lender, and the banks and other financial institutions referred to therein. |
| 10.23(33) | Amendment No. 11, dated as of December 13, 2021, by and among BlackRock, Inc., certain of its subsidiaries, Wells Fargo Bank, National Association, as administrative agent, a swingline lender, an issuing lender, L/C agent and a lender, and the banks and other financial institutions referred to therein. |
| 10.24(34) | Amendment No. 12, dated as of March 31, 2022, by and among BlackRock, Inc., certain of its subsidiaries, Wells Fargo Bank, National Association, as administrative agent, a swingline lender, an issuing lender, L/C agent and a lender, and the banks and other financial institutions referred to therein. |
| 10.25(35) | Amendment No. 13, dated as of March 31, 2023, by and among BlackRock, Inc., certain of its subsidiaries, Wells Fargo Bank, National Association, as administrative agent, a swingline lender, an issuing lender, L/C agent and a lender, and the banks and other financial institutions referred to therein. |
| 10.26(36) | Lease Agreement, dated as of February 17, 2010, among BlackRock Investment Management (UK) Limited and Mourant & Co Trustees Limited and Mourant Property Trustees Limited as Trustees of the Drapers Gardens Unit Trust for the lease of Drapers Gardens, 12 Throgmorton Avenue, London, EC2, United Kingdom. |
| 10.27(37) | Lease, by and between BlackRock, Inc. and 50 HYMC Holdings LLC.* |
| 10.28(38) | Letter Agreement, dated February 12, 2013, between Gary S. Shedlin and BlackRock.+ |
| 10.29(39) | Amended and Restated Commercial Paper Dealer Agreement between BlackRock and Barclays Capital Inc., dated as of December 23, 2014. |
| 10.30(39) | Amended and Restated Commercial Paper Dealer Agreement between BlackRock and Citigroup Global Markets Inc., dated as of December 23, 2014. |
| 10.31(39) | Amended and Restated Commercial Paper Dealer Agreement between BlackRock and Merrill Lynch, Pierce, Fenner & Smith Incorporated, dated as of January 6, 2015. |
| 10.32(39) | Amended and Restated Commercial Paper Dealer Agreement between BlackRock and Credit Suisse Securities (USA) LLC dated as of January 6, 2015. |
| 10.33(40) | BlackRock, Inc. Leadership Retention Carry Plan.+ |
| 10.34(41) | Form of Percentage Points Award Agreement pursuant to the BlackRock, Inc. Leadership Retention Carry Plan.+ |
| 10.35(42) | Form of Performance-Based Stock Option Agreement under the BlackRock, Inc. Second Amended and Restated 1999 Stock Award and Incentive Plan.+ |
| 21.1 | Subsidiaries of Registrant. |
| 23.1 | Deloitte & Touche LLP Consent. |
| 31.1 | Section 302 Certification of Chief Executive Officer. |
| 31.2 | Section 302 Certification of Chief Financial Officer. |
| 32.1 | Section 906 Certification of Chief Executive Officer and Chief Financial Officer. |
| 97.1 | Policy Relating to Recovery of Erroneously Awarded Compensation. |
| 101.INS | Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document |
| 101.SCH | Inline XBRL Taxonomy Extension Schema with Embedded Linkbases Document. |
| 104 | Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101). |
| (1) Incorporated | l by reference to BlackRock's Current Report on Form 8-K filed on May 28, 2021. |

- (1) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on May 28, 2021.
- (2) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on July 23, 2021.
- (3) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on September 15, 2023.
- (4) Incorporated by reference to BlackRock's Registration Statement on Form S-8 (Registration No. 333-137708) filed on September 29, 2006.
- (5) Incorporated by reference to BlackRock's Annual Report on Form 10-K for the year ended December 31, 2007.
- (6) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on March 18, 2014.
- (7) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on May 6, 2015.
- (8) Incorporated by reference to BlackRock's Current Report on Form 8-K filed 39 Warsh 28, 2017.

- (9) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on April 29, 2019.
- (10) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on January 27, 2020.
- (11) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on May 6, 2020.
- (12) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on December 10, 2021.
- (13) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on May 25, 2023.
- (14) Incorporated by reference to BlackRock's Quarterly Report on Form 10-Q for the quarter ended March 31, 2022.
- (15) Incorporated by reference to BlackRock's Annual Report on Form 10-K for the year ended December 31, 2015.
- (16) Incorporated by reference to BlackRock's Definitive Proxy Statement on Form DEF 14A filed on April 13, 2018.
- (17) Incorporated by reference to Old BlackRock's Annual Report on Form 10-K for the year ended December 31, 2002.
- (18) Incorporated by reference to Old BlackRock's Current Report on Form 8-K filed on May 24, 2006.
- (19) Incorporated by reference to BlackRock's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015.
- (20) Incorporated by reference to BlackRock's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018.
- (21) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on October 5, 2006.
- (22) Incorporated by reference to BlackRock's Current Report on Form 8-K/A filed on August 24, 2012.
- (23) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on April 4, 2012.
- (24) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on April 3, 2013.
- (25) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on March 28, 2014.
- (26) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on April 3, 2015.
- (27) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on April 14, 2016.
- (28) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on April 11, 2017.
- (29) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on April 6, 2018.
- (30) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on March 29, 2019.
- (31) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on April 1, 2020.
- (32) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on April 6, 2021.
- (33) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on December 13, 2021.
- (34) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on April 1, 2022.
- (35) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on April 3, 2023.
- (36) Incorporated by reference to BlackRock's Annual Report on Form 10-K for the year ended December 31, 2009.
- (37) Incorporated by reference to BlackRock's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017.
- (38) Incorporated by reference to BlackRock's Current Report on Form 8-K filed on February 19, 2013.
- (39) Incorporated by reference to BlackRock's Annual Report on Form 10-K for the year ended December 31, 2014.
- (40) Incorporated by reference to BlackRock's Annual Report on Form 10-K for the year ended December 31, 2019.
- (41) Incorporated by reference to BlackRock's Quarterly Report on Form 10-Q for the guarter ended June 30, 2019.
- (42) Incorporated by reference to BlackRock's Quarterly Report on Form 10-Q for the quarter ended June 30, 2023.
- + Denotes compensatory plans or arrangements.
- * Portions of this exhibit have been omitted pursuant to a confidential treatment order from the SEC.

Item 16. Form 10-K Summary

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BLACKROCK, INC.

| Ву:_ | /s/ Laurence D. Fink | | |
|------------------|--|--|--|
| Laurence D. Fink | | | |
| | Chairman, Chief Executive Officer and Director | | |

February 23, 2024

Each of the officers and directors of BlackRock, Inc. whose signature appears below, in so signing, also makes, constitutes and appoints Laurence D. Fink, Martin S. Small, Christopher J. Meade, Laura Hildner and R. Andrew Dickson III, his or her true and lawful attorneys-in-fact, with full power and substitution, for him or her in any and all capacities, to execute and cause to be filed with the Securities and Exchange Commission any and all amendments to the Annual Report on Form 10-K, with exhibits thereto and other documents connected therewith and to perform any acts necessary to be done in order to file such documents, and hereby ratifies and confirms all that said attorney-in-fact or his or her substitute or substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

| Signature | Title | Date |
|------------------------------|--|-------------------|
| /s/ Laurence D. Fink | Chairman, Chief Executive Officer and Director | February 23, 2024 |
| Laurence D. Fink | (Principal Executive Officer) | |
| /s/ Martin S. Small | Senior Managing Director and Chief Financial Officer | February 23, 2024 |
| Martin S. Small | (Principal Financial Officer) | |
| /s/ Marc D. Comerchero | Managing Director and Chief Accounting Officer | February 23, 2024 |
| Marc D. Comerchero | (Principal Accounting Officer) | |
| /s/ Bader M. Alsaad | _ Director | February 23, 2024 |
| Bader M. Alsaad | | |
| /s/ Pamela Daley | _ Director | February 23, 2024 |
| Pamela Daley | | |
| /s/ William E. Ford | _ Director | February 23, 2024 |
| William E, Ford | | |
| /s/ Fabrizio Freda | _ Director | February 23, 2024 |
| Fabrizio Freda | | |
| /s/ Murry S. Gerber | Director | February 23, 2024 |
| Murry S. Gerber | | |
| /s/ Margaret L. Johnson | _ Director | February 23, 2024 |
| Margaret L. Johnson | | |
| /s/ Robert S. Kapito | _ Director | February 23, 2024 |
| Robert S. Kapito | | |
| /s/ Cheryl D. Mills | _ Director | February 23, 2024 |
| Cheryl D. Mills | | |
| /s/ Amin H. Nasser | _ Director | February 23, 2024 |
| Amin H. Nasser | | |
| /s/ Gordon M. Nixon | _ Director | February 23, 2024 |
| Gordon M. Nixon | | |
| /s/ Kristin Peck | _ Director | February 23, 2024 |
| Kristin Peck | | |
| /s/ Charles H. Robbins | _ Director | February 23, 2024 |
| Charles H. Robbins | | |
| /s/ Marco Antonio Slim Domit | Director | February 23, 2024 |
| Marco Antonio Slim Domit | | |
| /s/ Hans E. Vestberg | _ Director | February 23, 2024 |
| Hans E. Vestberg | | |
| /s/ Susan L. Wagner | _ Director | February 23, 2024 |
| Susan L. Wagner | | |
| /s/ Mark Wilson | _ Director | February 23, 2024 |
| Mark Wilson | 136 of 252 | |

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of BlackRock, Inc.:

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial condition of BlackRock, Inc. and subsidiaries (the "Company") as of December 31, 2023 and 2022, the related consolidated statements of income, comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2023, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 23, 2024, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Impairment of indefinite-lived intangible assets related to certain management contracts — Refer to Notes 2 and 11 to the financial statements Critical Audit Matter Description

The Company's indefinite-lived intangible assets are comprised of management contracts, trade names/trademarks and licenses acquired in business acquisitions. The Company performs its impairment assessment of its indefinite-lived intangible assets at least annually, as of July 31st. In evaluating whether it is more likely than not that the fair value of indefinite-lived intangibles is less than carrying value, the Company performs certain quantitative assessments and assesses various significant qualitative factors. If an indefinite-lived intangible asset is determined to be more likely than not impaired, the fair value of the asset is then compared with its carrying value and any excess of the carrying value over the fair value would be recognized as an expense in the period in which the impairment occurs. The determination of fair value requires management to make estimates and assumptions related to revenue basis points, projected assets under management ("AUM") growth rates, operating margins, tax rates and discount rates.

Given the significant judgments made by management to estimate the fair value of indefinite-lived intangible assets related to certain management contracts, performing audit procedures to evaluate the reasonableness of management's estimates and assumptions related to projected AUM growth rates, revenue basis points, operating margins, tax rates, and discount rates, required a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the determination of fair value of indefinite-lived intangible assets related to certain management contracts included the following, among others:

- We tested the design and operating effectiveness of controls over the Company's indefinite-lived intangible asset impairment analysis, including those related to management's assessment of the factors that impact the fair value of the Company's indefinite-lived intangible assets. This includes controls related to management's revenue basis points, projected AUM growth rates, operating margins, tax rates, and the selection of the discount rates.
- We evaluated the reasonableness of management's AUM, revenue basis points, projected AUM growth rates, operating margins, tax rates and discount rates by comparing management's projections to:
 - · historical amounts.
 - Internal communications to management and the Board of Directors.
 - · Forecasted information included in analyst and industry reports for the Company and certain of its peer companies.
- We evaluated management's ability to accurately project revenue basis points, AUM growth rates, operating margins and tax rates, by comparing actual results to management's historical forecasts.
- With the assistance of our fair value specialists, we evaluated the reasonableness of the Company's valuation methodology and assumptions, including the selection of the discount rates by: (1) testing the source information underlying the determination of the discount rate and the mathematical accuracy of the evaluation and (2) developing a range of independent estimates and comparing those to the discount rate selected by management.
- We evaluated the impact of changes in management's forecasts from July 31, 2023, the annual impairment assessment date, to December 31, 2023.

BlackRock, Inc. Consolidated Statements of Financial Condition

| n millions, except shares and per share data) | | cember 31, 2023 | December 31, 2022 | | |
|---|----|--------------------|----------------------|----------|--|
| Assets | | | | | |
| Cash and cash equivalents ⁽¹⁾ | \$ | 8,736 | \$ | 7,416 | |
| Accounts receivable | | 3,916 | | 3,264 | |
| Investments ⁽¹⁾ | | 9,740 | | 7,466 | |
| Separate account assets | | 56,098 | | 54,066 | |
| Separate account collateral held under securities lending agreements | | 4,558 | | 5,765 | |
| Property and equipment (net of accumulated depreciation and amortization of \$1,439 and \$1,390 at December 31, 2023 and 2022, respectively) | | 1,112 | | 1,031 | |
| Intangible assets (net of accumulated amortization of \$618 and \$483 at | | | | | |
| December 31, 2023 and 2022, respectively) | | 18,258 | | 18,302 | |
| Goodwill | | 15,524 | | 15,341 | |
| Operating lease right-of-use assets | | 1,421 | | 1,516 | |
| Other assets ⁽¹⁾ | | 3,848 | | 3,461 | |
| Total assets | \$ | 123,211 | \$ | 117,628 | |
| Liabilities | | | | | |
| Accrued compensation and benefits | \$ | 2,393 | \$ | 2,272 | |
| Accounts payable and accrued liabilities | | 1,240 | | 1,294 | |
| Borrowings | | 7,918 | | 6,654 | |
| Separate account liabilities | | 56,098 | | 54,066 | |
| Separate account collateral liabilities under securities lending agreements | | 4,558 | | 5,765 | |
| Deferred income tax liabilities | | 3,506 | | 3,381 | |
| Operating lease liabilities | | 1,784 | | 1,835 | |
| Other liabilities ⁽¹⁾ | | 4,474 | | 3,576 | |
| Total liabilities | | 81,971 | | 78,843 | |
| Commitments and contingencies (Note 15) | | | | | |
| Temporary equity | | | | | |
| Redeemable noncontrolling interests | | 1,740 | | 909 | |
| Permanent equity | | | | | |
| BlackRock, Inc. stockholders' equity | | | | | |
| Common stock, \$0.01 par value; | | 2 | | 2 | |
| Shares authorized: 500,000,000 at December 31, 2023 and 2022; Shares issued: 172,075,373 at December 31, 2023 and 2022; Shares outstanding: 148,500,074 and 149,756,492 at December 31, 2023 and 2022, respectively | | | | | |
| Additional paid-in capital | | 19,833 | | 19,772 | |
| Retained earnings | | 32,343 | | 29,876 | |
| Accumulated other comprehensive loss | | (840) | | (1,101) | |
| Treasury stock, common, at cost (23,575,299 and 22,318,881 shares held at December 31, 2023 and 2022, respectively) | | (11,991) | | (10,805) | |
| Total BlackRock, Inc. stockholders' equity | | 39,347 | | 37,744 | |
| Nonredeemable noncontrolling interests | | 153 | | 132 | |
| Total permanent equity | | 39,500 | | 37,876 | |
| Total liabilities, temporary equity and permanent equity | \$ | 123,211 | \$ | 117,628 | |

⁽¹⁾ At December 31, 2023, cash and cash equivalents, investments, other assets and other liabilities include \$234 million, \$5.0 billion, \$83 million and \$2.2 billion, respectively, related to consolidated variable interest entities ("VIEs"). At December 31, 2022, cash and cash equivalents, investments, other assets and other liabilities include \$234 million, \$3.9 billion, \$68 million and \$1.9 billion, respectively, related to consolidated VIEs.

BlackRock, Inc. Consolidated Statements of Income

| (in millions, except per share data) | 2023 | | 2022 | | 2021 | |
|---|------|--------|--------------|----|--------|--|
| Revenue | | | | | | |
| Investment advisory, administration fees and securities lending revenue: | | | | | | |
| Related parties | \$ | 10,757 | \$ 10,848 | \$ | 11,474 | |
| Other third parties | | 3,642 | 3,603 | | 3,786 | |
| Total investment advisory, administration fees and securities lending revenue | | 14,399 | 14,451 | | 15,260 | |
| Investment advisory performance fees | | 554 | 514 | | 1,143 | |
| Technology services revenue | | 1,485 | 1,364 | | 1,281 | |
| Distribution fees | | 1,262 | 1,381 | | 1,521 | |
| Advisory and other revenue | | 159 | 163 | | 169 | |
| Total revenue | | 17,859 | 17,873 | | 19,374 | |
| Expense | | | | | | |
| Employee compensation and benefits | | 5,779 | 5,681 | | 6,043 | |
| Distribution and servicing costs | | 2,051 | 2,179 | | 2,200 | |
| Direct fund expense | | 1,331 | 1,226 | | 1,313 | |
| General and administration expense | | 2,211 | 2,160 | | 2,221 | |
| Restructuring charge | | 61 | 91 | | _ | |
| Amortization of intangible assets | | 151 | 151 | | 147 | |
| Total expense | | 11,584 | 11,488 | | 11,924 | |
| Operating income | | 6,275 | 6,385 | | 7,450 | |
| Nonoperating income (expense) | | | | | | |
| Net gain (loss) on investments | | 699 | (35) | | 841 | |
| Interest and dividend income | | 473 | 152 | | 87 | |
| Interest expense | | (292) | (212) | | (205) | |
| Total nonoperating income (expense) | | 880 | (95) | | 723 | |
| Income before income taxes | | 7,155 | 6,290 | | 8,173 | |
| Income tax expense | | 1,479 | 1,296 | | 1,968 | |
| Net income | | 5,676 | 4,994 | | 6,205 | |
| Less: | | • | · | | | |
| Net income (loss) attributable to noncontrolling interests | | 174 | (184) | | 304 | |
| Net income attributable to BlackRock, Inc. | \$ | 5,502 | \$ 5,178 | \$ | 5,901 | |
| Earnings per share attributable to BlackRock, Inc. common stockholders: | | | | | | |
| Basic | \$ | 36.85 | \$ 34.31 | \$ | 38.76 | |
| Diluted | \$ | 36.51 | \$ 33.97 | \$ | 38.22 | |
| Weighted-average common shares outstanding: | | | | | | |
| Basic | | 149.3 | 150.9 | | 152.2 | |
| Diluted | | 150.7 | 152.4 | | 154.4 | |

BlackRock, Inc. Consolidated Statements of Comprehensive Income

| (in millions) | ; | 2023 | | 2022 | 2021 | | |
|--|-----|-------|---------------------|-------|-------|-------|--|
| Net income | \$ | 5,676 | \$ | 4,994 | \$ | 6,205 | |
| Other comprehensive income (loss): | | | | | | | |
| Foreign currency translation adjustments ⁽¹⁾ | | 261 | 261 (551) (2 | | (213) | | |
| Comprehensive income | | 5,937 | | 4,443 | | 5,992 | |
| Less: Comprehensive income (loss) attributable to noncontrolling interests | 174 | | | (184) | | 304 | |
| Comprehensive income attributable to BlackRock, Inc. | \$ | 5,763 | \$ | 4,627 | \$ | 5,688 | |

⁽¹⁾ Amount for 2023 includes a loss from a net investment hedge of \$20 million (net of tax benefit of \$6 million). Amount for 2022 includes a gain from a net investment hedge of \$37 million (net of tax expense of \$12 million). Amount for 2021 includes a gain from a net investment hedge of \$46 million (net of tax expense of \$14 million).

BlackRock, Inc. Consolidated Statements of Changes in Equity

| (in millions) | | Additional Paid-in Capital ⁽¹⁾ | | etained arnings | Accumulated Other Comprehensive Income (Loss) | | Treasury Stock Common | | Total BlackRock Stockholders' Equity | | Nonredeemable Noncontrolling Interests | | Total Permanent Equity | | Redeemable Noncontrolling Interests / Temporary Equity | |
|--|----|---|----|--------------------|--|---------|-----------------------------|----------|---|---------|--|------|------------------------------|---------|--|---------|
| December 31, 2020 | \$ | 19,295 | \$ | 24,334 | \$ | (337) | \$ | (8,009) | \$ | 35,283 | \$ | 51 | \$ | 35,334 | \$ | 2,322 |
| Net income | | _ | | 5,901 | | _ | | _ | | 5,901 | | (2) | | 5,899 | | 306 |
| Dividends declared (\$16.52 per share) | | _ | | (2,547) | | _ | | _ | | (2,547) | | | | (2,547) | | _ |
| Stock-based compensation | | 734 | | _ | | _ | | _ | | 734 | | _ | | 734 | | _ |
| Issuance of common shares related to employee stock transactions | | (387) | | _ | | _ | | 407 | | 20 | | _ | | 20 | | _ |
| Employee tax withholdings related to employee stock transactions | | _ | | _ | | _ | | (285) | | (285) | | _ | | (285) | | _ |
| Shares repurchased | | _ | | _ | | _ | | (1,200) | | (1,200) | | _ | | (1,200) | | _ |
| Subscriptions (redemptions/distributions) — noncontrolling interest holders | | _ | | | | _ | | _ | | _ | | 67 | | 67 | | 1,408 |
| Net consolidations (deconsolidations) of sponsored investment funds | | _ | | _ | | _ | | _ | | _ | | (3) | | (3) | | (2,949) |
| Other comprehensive income (loss) | | _ | | _ | | (213) | | _ | | (213) | | _ | | (213) | | _ |
| December 31, 2021 | \$ | 19,642 | \$ | 27,688 | \$ | (550) | \$ | (9,087) | \$ | 37,693 | \$ | 113 | \$ | 37,806 | \$ | 1,087 |
| Net income | | _ | | 5,178 | | _ | | _ | | 5,178 | | 6 | | 5,184 | | (190) |
| Dividends declared (\$19.52 per share) | | _ | | (2,990) | | _ | | _ | | (2,990) | | _ | | (2,990) | | _ |
| Stock-based compensation | | 708 | | _ | | _ | | _ | | 708 | | _ | | 708 | | _ |
| Issuance of common shares related to employee stock transactions | | (576) | | _ | | _ | | 614 | | 38 | | _ | | 38 | | _ |
| Employee tax withholdings related to employee stock transactions | | _ | | | | _ | | (457) | | (457) | | _ | | (457) | | _ |
| Shares repurchased | | _ | | _ | | _ | | (1,875) | | (1,875) | | _ | | (1,875) | | _ |
| Subscriptions (redemptions/distributions) — noncontrolling interest holders | | _ | | _ | | _ | | _ | | _ | | 4 | | 4 | | 614 |
| Net consolidations (deconsolidations) of sponsored investment funds | | _ | | _ | | _ | | _ | | _ | | 9 | | 9 | | (602) |
| Other comprehensive income (loss) | | _ | | _ | | (551) | | _ | | (551) | | _ | | (551) | | _ |
| December 31, 2022 | \$ | 19,774 | \$ | 29,876 | \$ | (1,101) | \$ | (10,805) | \$ | 37,744 | \$ | 132 | \$ | 37,876 | \$ | 909 |
| Net income | | _ | | 5,502 | | _ | | _ | | 5,502 | | 16 | | 5,518 | | 158 |
| Dividends declared (\$20.00 per share) | | _ | | (3,035) | | _ | | _ | | (3,035) | | _ | | (3,035) | | _ |
| Stock-based compensation | | 630 | | _ | | _ | | _ | | 630 | | _ | | 630 | | _ |
| Issuance of common shares related to employee stock transactions | | (569) | | _ | | _ | | 698 | | 129 | | _ | | 129 | | _ |
| Employee tax withholdings related to employee stock transactions | | _ | | _ | | _ | | (375) | | (375) | | _ | | (375) | | _ |
| Shares repurchased | | _ | | _ | | _ | | (1,509) | | (1,509) | | _ | | (1,509) | | _ |
| Subscriptions (redemptions/distributions) — noncontrolling interest holders | | _ | | _ | | _ | | _ | | _ | | (16) | | (16) | | 1,643 |
| Net consolidations (deconsolidations) of sponsored investment funds | | _ | | _ | | _ | | _ | | _ | | 21 | | 21 | | (970) |
| Other comprehensive income (loss) | | _ | | _ | | 261 | | _ | | 261 | | _ | | 261 | | |
| December 31, 2023 | \$ | 19,835 | \$ | 32,343 | \$ | (840) | \$ | (11,991) | \$ | 39,347 | \$ | 153 | \$ | 39,500 | \$ | 1,740 |

⁽¹⁾ Amounts include \$2 million of common stock at December 31, 2023, 2022, 2021 and 2020.

BlackRock, Inc. Consolidated Statements of Cash Flows

| (in millions) | | 2023 | | 2022 | | 2021 |
|--|----|-------------------|----|------------------|----|---------------|
| Operating activities | | | | | | |
| Net income | \$ | 5,676 | \$ | 4,994 | \$ | 6,205 |
| Adjustments to reconcile net income to net cash provided by/(used in) operating activities: | | | | | | |
| Depreciation and amortization | | 427 | | 418 | | 415 |
| Noncash lease expense | | 140 | | 165 | | 144 |
| Stock-based compensation | | 630 | | 708 | | 734 |
| Deferred income tax expense (benefit) | | 124 | | 602 | | (865) |
| Contingent consideration fair value adjustments | | 3 | | 3 | | 34 |
| Other investment gains | | _ | | (268) | | (165) |
| Net (gains) losses within CIPs | | (380) | | 400 | | (302) |
| Net (purchases) proceeds within CIPs | | (1,780) | | (1,190) | | (1,683) |
| (Earnings) losses from equity method investees | | (378) | | (29) | | (315) |
| Distributions of earnings from equity method investees | | ` 49 [´] | | `50 [′] | | ` 84 <i>`</i> |
| Changes in operating assets and liabilities: | | | | | | |
| Accounts receivable | | (586) | | 416 | | (322) |
| Investments, trading | | ` 72 [′] | | 196 | | 323 |
| Other assets | | (326) | | (166) | | (172) |
| Accrued compensation and benefits | | 145 | | (711) | | 412 |
| Accounts payable and accrued liabilities | | (26) | | (151) | | 342 |
| Other liabilities | | 375 | | (481) | | 75 |
| Net cash provided by/(used in) operating activities | | 4,165 | | 4,956 | | 4,944 |
| Investing activities | | | | | | |
| Purchases of investments | | (846) | | (824) | | (910) |
| Proceeds from sales and maturities of investments | | 400 | | 242 | | 429 |
| Distributions of capital from equity method investees | | 46 | | 70 | | 95 |
| Net consolidations (deconsolidations) of sponsored investment funds | | (26) | | (85) | | (104) |
| Acquisitions, net of cash acquired | | (189) | | _ | | (1,106) |
| Purchases of property and equipment | | (344) | | (533) | | (341) |
| Net cash provided by/(used in) investing activities | | (959) | | (1,130) | | (1,937) |
| Financing activities | | | | / \ | | |
| Repayments of long-term borrowings | | | | (750) | | (750) |
| Proceeds from long-term borrowings | | 1,238 | | _ | | 991 |
| Cash dividends paid | | (3,035) | | (2,990) | | (2,547) |
| Proceeds from stock options exercised | | 95 | | 11 | | _ |
| Repurchases of common stock | | (1,884) | | (2,332) | | (1,485) |
| Net proceeds from (repayments of) borrowings by CIPs | | (59) | | (26) | | 32 |
| Net (redemptions/distributions paid)/subscriptions received from noncontrolling interest holders | | 1,627 | | 618 | | 1,475 |
| Other financing activities | | 26 | | 27 | | (3) |
| Net cash provided by/(used in) financing activities | | (1,992) | | (5,442) | | (2,287) |
| Effect of exchange rate changes on cash, cash equivalents and restricted cash | | 106 | | (291) | | (61) |
| Net increase/(decrease) in cash, cash equivalents and restricted cash | | 1,320 | | (1,907) | | 659 |
| Cash, cash equivalents and restricted cash, beginning of year | | 7,433 | | 9,340 | | 8,681 |
| Cash, cash equivalents and restricted cash, end of year | \$ | 8,753 | \$ | 7,433 | \$ | 9,340 |
| Supplemental disclosure of cash flow information: | | | | | | |
| Cash paid for: | œ | 200 | ¢ | 477 | œ | 400 |
| Interest | \$ | 200 | \$ | 177 | \$ | 189 |
| Income taxes (net of refunds) | \$ | 1,392 | \$ | 1,067 | \$ | 2,720 |
| Supplemental schedule of noncash investing and financing transactions: | • | 500 | Φ. | F70 | Φ. | 007 |
| Issuance of common stock | \$ | 569 | \$ | 576 | \$ | 387 |
| Increase/(decrease) in noncontrolling interests due to net consolidation (deconsolidation) of sponsored investment funds | \$ | (949) | \$ | (593) | \$ | (2,952) |
| o. oponos.ou introdution fundo | * | (0-0) | Ψ | (000) | Ψ | (2,002) |

See accompanying notes to consolidated financial statements.

BlackRock, Inc. Notes to the Consolidated Financial Statements

1. Business Overview

BlackRock, Inc. (together, with its subsidiaries, unless the context otherwise indicates, "BlackRock" or the "Company") is a leading publicly traded investment management firm providing a broad range of investment management and technology services to institutional and retail clients worldwide.

BlackRock's diverse platform of alpha-seeking active, index and cash management investment strategies across asset classes enables the Company to offer choice and tailor investment and asset allocation solutions for clients. Product offerings include single- and multi-asset portfolios investing in equities, fixed income, alternatives and money market instruments. Products are offered directly and through intermediaries in a variety of vehicles, including open-end and closed-end mutual funds, iShares® and BlackRock exchange-traded funds ("ETFs"), separate accounts, collective trust funds and other pooled investment vehicles. BlackRock also offers technology services, including the investment and risk management technology platform, Aladdin®, Aladdin Wealth, eFront and Cachematrix, as well as advisory services and solutions to a broad base of institutional and wealth management clients.

2. Significant Accounting Policies

Basis of Presentation

These consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") and include the accounts of the Company and its controlled subsidiaries. Noncontrolling interests ("NCI") on the consolidated statements of financial condition represent the portion of consolidated sponsored investment products ("CIPs") and a consolidated affiliate (collectively, "consolidated entities") in which the Company does not have direct equity ownership. Intercompany balances and transactions have been eliminated upon consolidation.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expense during the reporting periods. Actual results could differ from those estimates.

Certain prior period presentations and disclosures, while not required to be recast, may be reclassified to ensure comparability with current period classifications.

Accounting Developments

Segment Reporting. In November 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2023-07, *Improvements to Reportable Segment Disclosures* ("ASU 2023-07"), which requires incremental disclosures about reportable segments but does not change the definition of a segment or the guidance for determining reportable segments. The new guidance requires disclosure of significant segment expenses that are (1) regularly provided to (or easily computed from information regularly provided to) the chief operating decision maker ("CODM") and (2) included in the reported measure of segment profit or loss. The new standard also requires companies to disclose the title and position of the individual (or the name of the committee) identified as the CODM, allows companies to disclose multiple measures of segment profit or loss if those measures are used to assess performance and allocate resources, and is applicable to companies with a single reportable segment. The requirements are effective for annual reporting periods beginning on January 1, 2024, and are required to be applied retrospectively. Early adoption is permitted. The Company does not expect the additional disclosure requirements under ASU 2023-07 to have a material impact on the consolidated financial statements.

Income Tax Disclosure Requirements. In December 2023, the FASB issued ASU 2023-09, Improvements to Income Tax Disclosures ("ASU 2023-09"), which enhances interim and annual income tax disclosures. The two primary enhancements disaggregate existing income tax disclosures related to the effective tax rate reconciliation and income taxes paid. The additional disclosure requirements under ASU 2023-09 are required to be applied prospectively and are effective for the Company on January 1, 2025. The Company does not expect the additional disclosure requirements under ASU 2023-09 to have a material impact on the consolidated financial statements.

Cash and Cash Equivalents. Cash and cash equivalents primarily consists of cash, money market funds and short-term, highly liquid investments with original maturities of three months or less. Cash and cash equivalent balances that are legally restricted from use by the Company are recorded in other assets on the consolidated statements of financial condition. Cash balances maintained by consolidated VIEs and voting rights entities ("VREs") are not considered legally restricted and are included in cash and cash equivalents on the consolidated statements of financial condition.

Investments

Investments in Debt Securities. The Company classifies debt investments as held-to-maturity or trading based on the Company's intent and ability to hold the debt security to maturity or its intent to sell the security.

Held-to-maturity securities are purchased with the positive intent and ability to be held to maturity and are recorded at amortized cost on the consolidated statements of financial condition.

Trading securities are those investments that are purchased principally for the purpose of selling them in the near term. Trading securities are carried at fair value on the consolidated statements of financial condition with changes in the fair value recorded through net income ("FVTNI") within nonoperating income (expense). Trading securities include certain investments in collateralized loan obligations ("CLOs") for which the fair value option is elected in order to reduce operational complexity of bifurcating embedded derivatives.

Investments in Equity Securities. Equity securities are generally carried at fair value on the consolidated statements of financial condition with changes in the FVTNI within nonoperating income (expense). For nonmarketable equity securities, the Company generally elects to apply the practicality exception to fair value measurement, under which such securities will be measured at cost, less impairment, plus or minus observable price changes for identical or similar securities of the same issuer with such changes recorded through net income within nonoperating income (expense). Dividends received are recorded as dividend income within nonoperating income (expense).

Equity Method. The Company applies the equity method of accounting for equity investments where the Company does not consolidate the investee, but can exert significant influence over the financial and operating policies of the investee. The evaluation of whether the Company exerts control or significant influence over the financial and operational policies of its investees is based on the facts and circumstances surrounding each individual investment. Factors considered in these evaluations may include the type of investment, the legal structure of the investee, the terms of BlackRock's contractual agreements, including investor voting or other rights, any influence BlackRock may have on the governing board of the investee, the legal rights of other investors in the entity pursuant to the entity's operating documents and the relationship between BlackRock and other investors in the entity. The Company's share of the investee's underlying net income or loss is recorded as net gain (loss) on investments within nonoperating income (expense) and as other revenue for certain strategic minority investments since such investees are considered to be an extension of the Company's core business. The Company's share of net income of the investee is recorded based upon the most current information available at the time, which may precede the date of the consolidated statement of financial condition. Distributions received reduce the Company's carrying value of the investment and the cost basis if deemed to be a return of capital. The Company classifies distributions in the consolidated statements of cash flows as either distributions of earnings (operating) or distributions of capital (investing) based on the nature of the distribution.

Impairments of Investments. Management periodically assesses equity method, nonmarketable investments, and held-to-maturity investments for impairment. If impairment exists, an impairment charge would be recorded for the excess of the carrying amount of the investment over its estimated fair value in the consolidated statements of income.

For equity method investments and nonmarketable investments, impairment evaluation considers qualitative factors, including the financial conditions and specific events related to an investee, that may indicate the fair value of the investment is less than its carrying value. For held-to-maturity investments, impairment is evaluated using market values, where available, or the expected future cash flows of the investment.

For the Company's investments in CLOs, the Company reviews cash flow estimates over the life of each CLO investment. On a quarterly basis, if the present value of the estimated future cash flows is lower than the carrying value of the investment and there is an adverse change in estimated cash flows, an impairment is considered to be other-than-temporary.

Consolidation. The Company performs an analysis for investment products to determine if the product is a VIE or a VRE. Factors considered in this analysis include the entity's legal organization, the entity's capital structure, the rights of equity investment holders and the Company's contractual involvement with, and economic interest in, the entity and any related party or de facto agent implications of the Company's involvement with the entity. Entities that are determined to be VIEs are consolidated if the Company is the primary beneficiary ("PB") of the entity. VREs are typically consolidated if the Company holds the majority voting interest. Upon the occurrence of certain events (such as contributions and redemptions, either by the Company, or third parties, or amendments to an entity's governing documents), management reviews and reconsiders its previous conclusion regarding the status of an entity as a VIE or a VRE.

Consolidation of Variable Interest Entities. Certain investment products for which a controlling financial interest is achieved through arrangements that do not involve or are not directly linked to voting interests are deemed consolidated VIEs. BlackRock reviews factors, including whether or not (1) the entity has equity at risk that is sufficient to permit the entity to finance its activities without additional subordinated support from other parties and (2) the equity holders at risk have the obligation to absorb losses, the right to receive residual returns, and the right to direct the activities of the entity that most significantly impact the entity's economic performance, to determine if the investment product is a VIE.

The PB of a VIE is defined as the variable interest holder that has a controlling financial interest in the VIE. A controlling financial interest is defined as (1) the power to direct the activities of the VIE that most significantly impact its economic performance and (2) the obligation to absorb losses of the entity or the right to receive benefits from the entity that potentially could be significant to the VIE. The Company generally consolidates VIEs in which it holds an economic interest of 10% or greater and deconsolidates such VIEs once economic interest falls below 10%.

Management continually reconsiders whether the Company is deemed to be a VIE's PB.

Consolidation of Voting Rights Entities. BlackRock is required to consolidate an investee to the extent that BlackRock can exert absolute control over the financial and operating policies of the investee, which generally exists if there is a greater than 50% voting equity interest.

Retention of Specialized Investment Company Accounting Principles. Upon consolidation of sponsored investment products, the Company retains the specialized investment company accounting principles of the underlying funds. All of the underlying investments held by such CIPs are carried at fair value with corresponding changes in the investments' fair values reflected in net income within nonoperating income (expense). When the Company no longer controls these funds due to reduced ownership percentage or other reasons, the funds are deconsolidated and accounted for as an equity method investment or equity securities FVTNI.

Separate Account Assets and Liabilities. Separate account assets are maintained by BlackRock Life Limited, a wholly owned subsidiary of the Company, which is a registered life insurance company in the United Kingdom ("UK"), and represent segregated assets held for purposes of funding individual and group pension contracts. The life insurance company does not underwrite any insurance contracts that involve any insurance risk transfer from the insured to the life insurance company. The separate account assets primarily include equity securities, debt securities, money market funds and derivatives. The separate account assets are not subject to general claims of the creditors of BlackRock. These separate account assets and the related equal and offsetting liabilities are recorded as separate account assets and separate account liabilities on the consolidated statements of financial condition.

The net investment income attributable to separate account assets supporting individual and group pension contracts accrues directly to the contract owner and is not reported on the consolidated statements of income. While BlackRock has no economic interest in these separate account assets and liabilities, BlackRock earns policy administration and management fees associated with these products, which are included in investment advisory, administration fees and securities lending revenue on the consolidated statements of income.

Separate Account Collateral Assets Held and Liabilities Under Securities Lending Agreements. The Company facilitates securities lending arrangements whereby securities held by separate accounts maintained by BlackRock Life Limited are lent to third parties under global master securities lending agreements. In exchange, the Company receives collateral by obtaining either (1) legal title or (2) first ranking priority security interest. The minimum collateral values generally range from approximately 102% to 112% of the value of the securities lent in order to reduce counterparty risk. The required collateral value is calculated on a daily basis. The global master securities lending agreements provide the Company the right to request additional collateral or, in the event of borrower default, the right to liquidate collateral. The securities lending transactions entered into by the Company are accompanied by an agreement that entitles the Company to request the borrower to return the securities at any time; therefore, these transactions are not reported as sales.

In situations where the Company receives the legal title to collateral under these securities lending arrangements, the Company records an asset on the consolidated statements of financial condition and an equal collateral liability for the obligation to return the collateral. Additionally, in situations where the Company obtains a first ranking priority security interest in the collateral, the Company does not have the ability to pledge or resell the collateral and therefore does not record the collateral on the consolidated statements of financial condition. At December 31, 2023 and 2022, the fair value of loaned securities held by separate accounts was approximately \$9.3 billion and \$10.2 billion, respectively, and the fair value of the collateral under these securities lending agreements was approximately \$10.1 billion and \$11.0 billion, respectively, of which approximately \$4.6 billion as of 2023 and \$5.8 billion as of 2022 was recognized on the consolidated statements of financial condition. During 2023 and 2022, the Company had not resold or repledged any of the collateral received under these arrangements. The securities lending revenue earned from lending securities held by the separate accounts is included in investment advisory, administration fees and securities lending revenue on the consolidated statements of income.

Property and Equipment. Property and equipment are recorded at cost less accumulated depreciation. Depreciation is generally determined by cost less any estimated residual value using the straight-line method over the estimated useful lives of the various classes of property and equipment. Leasehold improvements are amortized using the straight-line method over the shorter of the estimated useful life or the remaining lease term.

The Company capitalizes certain costs incurred in connection with developing or obtaining software within property and equipment. Capitalized software costs are amortized, beginning when the software product is ready for its intended use, over the estimated useful life of the software of approximately three years.

Goodwill and Intangible Assets. Goodwill represents the cost of a business acquisition in excess of the fair value of the net assets acquired. The Company has determined that it has one reporting unit for goodwill impairment testing purposes, the consolidated BlackRock single operating segment, which is consistent with internal management reporting and management's oversight of operations. The Company performs an impairment assessment of its goodwill at least annually, as of July 31st. In its assessment of goodwill for impairment, the Company considers such factors as the book value and market capitalization of the Company.

Intangible assets are comprised of indefinite-lived intangible assets and finite-lived intangible assets acquired in a business acquisition. The value of contracts to manage assets in proprietary open-end funds and collective trust funds and certain other commingled products without a specified termination date is generally classified as indefinite-lived intangible assets. In addition, trade names/trademarks are considered indefinite-lived intangible assets when they are expected to generate cash flows indefinitely.

Indefinite-lived intangible assets and goodwill are not amortized. Finite-lived investor/customer relationships, technology-related assets, and management contracts, which relate to acquired separate accounts and funds, that are expected to contribute to the future cash flows of the Company for a specified period of time, are amortized over their estimated useful lives. On a quarterly basis, the Company considers whether the indefinite-lived and finite-lived classifications are still appropriate.

The Company performs assessments to determine if any intangible assets are potentially impaired at least annually, as of July 31st. The carrying value of finite-lived assets and their remaining useful lives are reviewed to determine if circumstances exist which may indicate a potential impairment or revisions to the amortization period.

In evaluating whether it is more likely than not that the fair value of indefinite-lived intangibles is less than its carrying value, BlackRock assesses various significant quantitative factors, including assets under management ("AUM"), revenue basis points, projected AUM growth rates, operating margins, tax rates and discount rates. If an indefinite-lived intangible is determined to be more likely than not impaired, then the fair value of the asset is compared with its carrying value and any excess of the carrying value over the fair value would be recognized as an expense in the period in which the impairment occurs.

For finite-lived intangible assets, if potential impairment circumstances are considered to exist, the Company will perform a recoverability test using an undiscounted cash flow analysis. If the carrying value of the asset is determined not to be recoverable based on the undiscounted cash flow test, the difference between the carrying value of the asset and its current fair value would be recognized as an expense in the period in which the impairment occurs.

Consolidated Affiliate. The Company owns 50.1% of an asset management company in China - BlackRock CCB Wealth Management Company Ltd. ("WMC"). The Company consolidates WMC, which it deems to be a VRE, because it exerts control over the financial and operating policies of the entity, based on the Company's 50.1% ownership and voting rights.

Noncontrolling Interests. NCI consist of third-party investments in the Company's CIPs ("NCI – CIPs") and the WMC. The Company reports NCI in stockholders' equity, separate from the parent's equity, on the consolidated statements of financial condition. NCI that are redeemable at the option of the holders are classified as temporary equity at estimated redemption value and nonredeemable NCI are classified as a component of permanent equity in the consolidated statements of financial condition. In addition, the Company reports net income (loss) attributable to redeemable and nonredeemable NCI holders in net income (loss) attributable to NCI in the consolidated statements of income.

Treasury Stock. The Company records common stock purchased for treasury at cost. At the date of subsequent reissuance, the treasury stock account is reduced by the cost of such stock using the average cost method.

Revenue Recognition. Revenue is recognized upon transfer of control of promised services to customers in an amount to which the Company expects to be entitled in exchange for those services. The Company enters into contracts that can include multiple services, which are accounted for separately if they are determined to be distinct. Consideration for the Company's services is generally in the form of variable consideration because the amount of fees is subject to market conditions that are outside of the Company's influence. The Company includes variable consideration in revenue when it is no longer probable of significant reversal, i.e. when the associated uncertainty is resolved. For some contracts with customers, the Company has discretion to involve a third party in providing services to the customer. Generally, the Company is deemed to be the principal in these arrangements because the Company controls the promised services before they are transferred to customers, and accordingly presents the revenue gross of related costs.

Investment Advisory, Administration Fees and Securities Lending Revenue. Investment advisory and administration fees are recognized as the services are performed over time because the customer is receiving and consuming the benefits as they are provided by the Company. Fees are primarily based on agreed-upon percentages of AUM and recognized for services provided during the period, which are distinct from services provided in other periods. Such fees are affected by changes in AUM, including market appreciation or depreciation, foreign exchange translation and net inflows or outflows. Investment advisory and administration fees for investment funds are shown net of fee waivers. In addition, the Company may contract with third parties to provide sub-advisory services on its behalf. The Company presents the investment advisory fees and associated costs to such third-party advisors on a gross basis where it is deemed to be the principal and on a net basis where it is deemed to be the agent. Management judgment involved in making these assessments is focused on ascertaining whether the Company is primarily responsible for fulfilling the promised service.

The Company also earns revenue by lending securities on behalf of clients, primarily to highly rated banks and broker-dealers. The securities loaned are collateralized by either cash or securities, generally ranging from 102% to 112% of the value of the loaned securities. Securities lending fees are based on (1) a percentage of the notional value of the loaned securities and (2) a spread between the interest earned on the reinvested cash collateral and the amount rebated to the borrower. Revenue is recognized over time as services are performed. Generally, the securities lending fees are shared between the Company and the funds or other third-party accounts managed by the Company from which the securities are borrowed. For 2023, 2022 and 2021, securities lending revenue earned by the Company totaled \$675 million, \$599 million and \$555 million, respectively, and is recorded in investment advisory, administration and securities lending revenue on the consolidated statements of income. Investment advisory, administration fees and securities lending revenue are reported together as the fees for these services often are agreed upon with clients as a bundled fee.

Money Market Fee Waivers. The Company may voluntarily waive a portion of its management fees on certain money market funds to ensure that they maintain a targeted level of daily net investment income (the "Yield Support waivers"). There were no Yield Support waivers during 2023. During 2022 and 2021, these waivers resulted in a reduction of management fees of approximately \$72 million, and \$500 million respectively, which was partially offset by a reduction of BlackRock's distribution and servicing costs paid to financial intermediaries. The Company may increase or decrease the level of Yield Support waivers in future periods.

Investment Advisory Performance Fees / Carried Interest. The Company receives investment advisory performance fees, including incentive allocations (carried interest) from certain actively managed investment funds and certain separately managed accounts. These performance fees are dependent upon exceeding specified relative or absolute investment return thresholds, which vary by product or account, and include monthly, quarterly, annual or longer measurement periods.

Performance fees, including carried interest, are generated on certain management contracts when performance hurdles are achieved. Such performance fees are recognized when the contractual performance criteria have been met and when it is determined that they are no longer probable of significant reversal. Given the unique nature of each fee arrangement, contracts with customers are evaluated on an individual basis to determine the timing of revenue recognition. Significant judgment is involved in making such determination. Performance fees typically arise from investment management services that began in prior reporting periods. Consequently, a portion of the fees the Company recognizes may be partially related to the services performed in prior periods that meet the recognition criteria in the current period. At each reporting date, the Company considers various factors in estimating performance fees to be recognized, including carried interest.

The Company is allocated carried interest from certain alternative investment products upon exceeding performance thresholds. The Company may be required to reverse/return all, or part, of such carried interest allocations/distributions depending upon future performance of these funds. Carried interest subject to such clawback provisions is recorded in investments or cash and cash equivalents to the extent that it is distributed, on its consolidated statements of financial condition.

The Company records a liability for deferred carried interest to the extent it receives cash or capital allocations related to carried interest prior to meeting the revenue recognition criteria. A portion of the deferred carried interest may also be paid to certain employees. The ultimate timing of the recognition of performance fee revenue and related compensation expense, if any, is unknown.

Technology services revenue. The Company offers investment management technology systems, risk management services, wealth management and digital distribution tools, all on a fee basis. Clients include banks, insurance companies, official institutions, pension funds, asset managers, retail distributors and other investors. Fees earned for technology services are primarily recorded as services are performed over time and are generally determined using the value of positions on the Aladdin platform, or on a fixed-rate basis. Revenue derived from the sale of software licenses is recognized upon the granting of access rights.

Distribution Fees. The Company earns distribution and service fees related to distributing investment products and shareholder support services for investment portfolios. Distribution fees are passed-through to third-party distributors, which perform various fund distribution services and shareholder servicing of certain funds on the Company's behalf, and are recognized as distribution and servicing costs. The Company presents distribution fees and related distribution and servicing costs incurred on a gross basis.

Distribution fees primarily consist of ongoing distribution fees, shareholder servicing fees and upfront sales commissions for serving as the principal underwriter and/or distributor for certain managed mutual funds. The service of distribution is satisfied at the point in time when an investor makes an investment in a share class of the managed mutual funds. Fees are generally considered variable consideration because they are based on the value of AUM and are uncertain on trade date. Accordingly, the Company recognizes distribution fees when the amounts become known and the portion recognized in the current period may relate to distribution services performed in prior periods. Upfront sales commissions are recognized on a trade date basis. Shareholder servicing fees are based on AUM and recognized in revenue as the services are performed.

Advisory and other revenue. Advisory and other revenue primarily includes fees earned for advisory services, fees earned for transition management services primarily comprised of commissions recognized in connection with buying and selling securities on behalf of customers, and equity method investment earnings related to certain strategic minority investments.

Advisory services fees are determined using fixed-rate fees and are recognized over time as the related services are completed.

Commissions related to transition management services are recorded on a trade-date basis as transactions occur.

Stock-based Compensation. The Company recognizes compensation cost for equity classified awards based on the grant-date fair value of the award. The compensation cost is recognized over the period during which an employee is required to provide service (usually the vesting period) in exchange for the stock-based award.

The Company measures the grant-date fair value of restricted stock units ("RSUs") using the Company's stock price on the date of grant. Stock-based awards may have performance, market and/or service conditions. For employee stock options and awards with market conditions, the Company uses pricing models. Compensation cost for awards containing performance conditions is recognized if it is probable that the conditions will be achieved. The probability of achievement is assessed on a quarterly basis. If a stock-based award is modified after the grant-date, incremental compensation cost is recognized for an amount equal to the excess of the fair value of the modified award over the fair value of the original award immediately before the modification. Awards under the Company's stock-based compensation plans vest over various periods. Compensation cost is recorded by the Company on a straight-line basis over the requisite service period for each separate vesting portion of the award as if the award is, in-substance, multiple awards and is adjusted for actual forfeitures as they occur.

The Company amortizes the grant-date fair value of stock-based compensation awards made to retirement-eligible employees over the requisite service period. Upon notification of retirement, the Company accelerates the unamortized portion of the award over the contractually required retirement notification period.

The Company recognizes all excess tax benefits and deficiencies in income tax expense on the consolidated statements of income, which results in volatility of income tax expense as a result of fluctuations in the Company's stock price. Accordingly, the Company recorded a discrete income tax benefit of \$41 million, \$87 million and \$43 million during 2023, 2022 and 2021, respectively, for vested RSUs where the grant date stock price was lower than the vesting date stock price.

Distribution and Servicing Costs. Distribution and servicing costs include payments to third parties, primarily associated with distribution and servicing of client investments in certain BlackRock products. Distribution and servicing costs are expensed as incurred.

Direct Fund Expense. Direct fund expense, which is expensed as incurred, primarily consists of third-party nonadvisory expense incurred by BlackRock related to certain investment products for the use of certain index trademarks, reference data for certain indices, custodial services, fund administration, fund accounting, transfer agent services, shareholder reporting services, audit and tax services as well as other fund-related expense directly attributable to the nonadvisory operations of the fund.

Leases. The Company determines if a contract is a lease or contains a lease at inception. The Company accounts for its office facility leases as operating leases, which may include escalation clauses that are based on an index or market rate. The Company accounts for lease and non-lease components, including common areas maintenance charges, as a single component for its leases. The Company elected the short-term lease exception for leases with an initial term of 12 months or less. Consequently, such leases are not recorded on the consolidated statements of financial condition. The Company's lease terms include options to extend or terminate the lease when it is reasonably certain they will be exercised or not

The Company recognizes operating right-of-use ("ROU") assets and operating lease liabilities on the consolidated statements of financial condition based on the present value of future lease payments over the lease term at the commencement date discounted using an incremental borrowing rate ("IBR"). The IBR for individual leases is estimated considering the Company's or a subsidiary's credit rating using various financial metrics, such as revenue, operating margin and revenue growth, and, as appropriate, performing market analysis of yields on publicly traded bonds (secured or unsecured) with similar terms of companies in a similar economic environment. ROU assets are tested for impairment when there is an indication that the carrying value of an asset may not be recoverable. Fixed lease payments made over the lease term are recorded as lease expense on a straight-line basis. Variable lease payments based on usage, changes in an index or market rate are expensed as incurred.

Foreign Exchange. Foreign currency transactions are recorded at the exchange rates prevailing on the dates of the transactions. Monetary assets and liabilities that are denominated in foreign currencies are subsequently remeasured into the functional currencies of the Company's subsidiaries at the rates prevailing at each statement of financial condition date. Gains and losses arising on remeasurement are included in general and administration expense on the consolidated statements of income. Revenue and expenses are translated at average exchange rates during the period. Gains or losses resulting from translating foreign currency financial statements into United States ("US") dollars are included in accumulated other comprehensive income (loss) ("AOCI"), a separate component of stockholders' equity, on the consolidated statements of financial condition.

Income Taxes. Deferred income tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases using currently enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred income tax assets and liabilities is recognized on the consolidated statements of income in the period that includes the enactment date.

Management periodically assesses the recoverability of its deferred income tax assets based upon expected future earnings, taxable income in prior carryback years, future deductibility of the asset, changes in applicable tax laws and other factors. If management determines that it is not more likely than not that the deferred tax asset will be fully recoverable in the future, a valuation allowance will be established for the difference between the asset balance and the amount expected to be recoverable in the future. This allowance will result in additional income tax expense. Further, the Company records its income taxes receivable and payable based upon its estimated income tax position.

Earnings per Share ("EPS"). Basic EPS is calculated by dividing net income applicable to common shareholders by the weighted-average number of shares outstanding during the period. Diluted EPS includes the determinants of basic EPS and common stock equivalents outstanding during the period. Diluted EPS is computed using the treasury stock method.

Business Segments. The Company's management directs BlackRock's operations as one business, the asset management business. The Company utilizes a consolidated approach to assess performance and allocate resources. As such, the Company operates in one business segment.

Fair Value Measurements

Hierarchy of Fair Value Inputs. The Company uses a fair value hierarchy that prioritizes inputs to valuation approaches used to measure fair value. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. Assets and liabilities measured and reported at fair value are classified and disclosed in one of the following categories:

Level 1 Inputs:

Quoted prices (unadjusted) in active markets for identical assets or liabilities at the reporting date.

• Level 1 assets may include listed mutual funds, ETFs, listed equities, commodities and certain exchange-traded derivatives.

Level 2 Inputs:

Quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities that are not active; quotes from pricing services or brokers for which the Company can determine that orderly transactions took place at the quoted price or that the inputs used to arrive at the price are observable; and inputs other than quoted prices that are observable, such as models or other valuation methodologies.

• Level 2 assets may include debt securities, loans held within consolidated CLOs, short-term floating-rate notes, asset-backed securities, as well as over-the-counter derivatives, including interest rate swaps and foreign currency exchange contracts that have inputs to the valuations that generally can be corroborated by observable market data.

Level 3 Inputs:

Unobservable inputs for the valuation of the asset or liability, which may include nonbinding broker quotes. Level 3 assets include investments for which there is little, if any, market activity. These inputs require significant management judgment or estimation.

- Level 3 assets may include direct private equity investments, including those held within CIPs, investments in CLOs and loans held within consolidated CLOs and CIPs.
- Level 3 liabilities may include borrowings of consolidated CLOs and contingent liabilities related to acquisitions valued based upon discounted cash flow analyses using unobservable market data, or other valuation techniques.

Significance of Inputs. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the financial instrument.

Valuation Approaches. The fair values of certain Level 3 assets and liabilities were determined using various valuation approaches as appropriate, including third-party pricing vendors, broker quotes and market and income approaches.

A significant number of inputs used to value equity, debt securities, and loans held within CLOs and CIPs are sourced from third-party pricing vendors. Generally, prices obtained from pricing vendors are categorized as Level 1 inputs for identical securities traded in active markets and as Level 2 for other similar securities if the vendor uses observable inputs in determining the price.

In addition, quotes obtained from brokers generally are nonbinding and categorized as Level 3 inputs. However, if the Company is able to determine that market participants have transacted for the asset in an orderly manner near the quoted price or if the Company can determine that the inputs used by the broker are observable, the quote is classified as a Level 2 input.

Investments Measured at Net Asset Values. As a practical expedient, the Company uses net asset value ("NAV") as the fair value for certain investments. The inputs to value these investments may include the Company's capital accounts for its partnership interests in various alternative investments, including hedge funds, real assets and private equity funds, which may be adjusted by using the returns of certain market indices. The various partnerships are investment companies, which record their underlying investments at fair value based on fair value policies established by management of the underlying fund. Fair value policies at the underlying fund generally require the fund to utilize pricing/valuation information from third-party sources, including independent appraisals. However, in some instances, current valuation from third-party sources are not active may not be available from any third-party source or fund management may conclude that the valuations that are available from third-party sources are not reliable. In these instances, fund management may perform model-based analytical valuations that could be used as an input to value these investments.

Fair Value Assets and Liabilities of Consolidated CLO. The Company applies the fair value option provisions for eligible assets, including loans, held by a consolidated CLO. As the fair value of the financial assets of the consolidated CLO is more observable than the fair value of the borrowings of the consolidated CLO, the Company measures the fair value of the borrowings of the consolidated CLO equal to the fair value of the assets of the consolidated CLO less the fair value of the Company's economic interest in the CLO.

Derivatives and Hedging Activities. The Company does not use derivative financial instruments for trading or speculative purposes. The Company uses derivative financial instruments primarily for purposes of hedging exposures to fluctuations in foreign currency exchange rates of certain assets and liabilities, and market price and interest rate exposures with respect to its total portfolio of seed investments in sponsored investment products. Certain CIPs also utilize derivatives as a part of their investment strategy.

In addition, during 2023, the Company acquired both investments and derivatives to economically hedge market valuation changes on certain deferred cash compensation plans, for which the final value of the deferred amount distributed to employees in cash upon vesting is determined based on the returns of specified investment funds. The Company recognizes compensation expense for the appreciation (depreciation) of the deferred cash compensation liability in proportion to the vested amount of the award during a respective period, while the gain (loss) to economically hedge these plans is immediately recognized in nonoperating income (expense). See Note 4, *Investments*, and Note 8, *Derivatives and Hedging*, for further information on the Company's investments and derivatives, respectively, used to economically hedge these deferred cash compensation plans.

The Company records all derivative financial instruments as either assets or liabilities at fair value on a gross basis in the consolidated statements of financial condition. Credit risks are managed through master netting and collateral support agreements. The amounts related to the right to reclaim or the obligation to return cash collateral may not be used to offset amounts due under the derivative instruments in the normal course of settlement. Therefore, such amounts are not offset against fair value amounts recognized for derivative instruments with the same counterparty and are included in other assets and other liabilities. Changes in the fair value of the Company's derivative financial instruments are recognized in earnings and, where applicable, are offset by the corresponding gain or loss on the related foreign-denominated or hedged assets or liabilities, on the consolidated statements of income.

The Company may also use financial instruments designated as net investment hedges for accounting purposes to hedge net investments in international subsidiaries whose functional currency is not US dollars. The gain or loss from revaluing net investment hedges at the spot rate is deferred and reported within AOCI on the consolidated statements of financial condition. The Company reassesses the effectiveness of its net investment hedge at least quarterly.

3. Cash, Cash Equivalents, and Restricted Cash

The following table provides a reconciliation of cash and cash equivalents reported within the consolidated statements of financial condition to the cash, cash equivalents, and restricted cash reported within the consolidated statements of cash flows.

| | Decen | nber 31, | Decemb | ber 31, |
|--|-------|----------|--------|---------|
| (in millions) | 20 |)23 | 202 | 22 |
| Cash and cash equivalents | \$ | 8,736 | 5 | 7,416 |
| Restricted cash included in other assets | | 17 | | 17 |
| Total cash, cash equivalents and restricted cash | \$ | 8,753 | 5 | 7,433 |

4. Investments

A summary of the carrying value of total investments is as follows:

| (in millions) | Dece | ember 31, 2023 | December 31, 2022 |
|---|------|-------------------|----------------------|
| Debt securities: | | | |
| Trading securities (including \$1,829 and \$1,279 held by CIPs at December 31, 2023 and December 31, 2022, respectively) | \$ | 1,871 | \$ 1,331 |
| Held-to-maturity investments | | 617 | 544 |
| Total debt securities | | 2,488 | 1,875 |
| Equity securities at FVTNI (including \$1,429 and \$1,089 held by CIPs at December 31, 2023 and December 31, 2022, respectively) ⁽¹⁾ | | 1,585 | 1,211 |
| Equity method investments: | | | |
| Equity method investments ⁽²⁾ | | 2,515 | 1,895 |
| Investments related to deferred cash compensation plans ⁽¹⁾ | | 241 | _ |
| Total equity method investments | | 2,756 | 1,895 |
| Loans held by CIPs | | 205 | 354 |
| Federal Reserve Bank stock ⁽³⁾ | | 92 | 91 |
| Carried interest ⁽⁴⁾ | | 1,975 | 1,550 |
| Other investments ⁽¹⁾⁽⁵⁾ | | 639 | 490 |
| Total investments | \$ | 9,740 | \$ 7,466 |

- (1) Amounts include investments held to economically hedge the impact of market valuation changes on certain deferred cash compensation plans of \$241 million, \$14 million, and \$9 million included within equity method investments, equity securities at FVTNI and other investments, respectively, as of December 31, 2023. Equity method investments primarily include BlackRock's direct investments in certain BlackRock sponsored investment funds.

- Equity mention investments primary include blackrook's direct investments in certain blackrook sponsored investment units.

 Federal Reserve Bank stock is held for regulatory purposes and is restricted from sale.

 Carried interest represents allocations to BlackRook's general partner capital accounts from certain sponsored investment funds. These balances are subject to change upon cash distributions, additional allocations or reallocations back to limited partners within the respective funds.
- Other investments include BlackRock's investments in nonmarketable equity securities, which are measured at cost, adjusted for observable price changes, and private equity, real asset, and commodity investments held by CIPs, which are measured at fair value.

Held-to-Maturity Investments

Held-to-maturity investments included certain investments in BlackRock sponsored CLOs. The amortized cost (carrying value) of these investments approximated fair value (primarily a Level 2 input). At December 31, 2023, \$10 million of these investments mature between one year to five years, \$304 million of these investments mature between five to ten years and \$303 million of these investments mature after ten vears.

Trading Debt Securities and Equity Securities at FVTNI

A summary of the cost and carrying value of trading debt securities and equity securities at FVTNI is as follows:

| | | Decembe | December 31, 2022 | | | | | |
|--------------------------------|----|---------|-------------------|----|-------------------|----|----------|--|
| (in millions) | | | Cost | | Carrying Value | | | |
| Trading debt securities: | | | | | | | | |
| Corporate debt | \$ | 1,225 | \$ 1,218 | \$ | 823 | \$ | 795 | |
| Government debt | | 501 | 489 | | 420 | | 400 | |
| Asset/mortgage-backed debt | | 185 | 164 | | 154 | | 136 | |
| Total trading debt securities | \$ | 1,911 | \$ 1,871 | \$ | 1,397 | \$ | 1,331 | |
| Equity securities at FVTNI: | | | | | | | <u>.</u> | |
| Equity securities/mutual funds | \$ | 1,520 | \$ 1,585 | \$ | 1,216 | \$ | 1,211 | |

5. Consolidated Sponsored Investment Products

In the normal course of business, the Company is the manager of various types of sponsored investment products, which may be considered VIE or VREs. The Company consolidates certain sponsored investment funds accounted for as VREs because it is deemed to control such funds. In addition, the Company may from time to time own equity or debt securities or enter into derivatives or loan arrangements with the vehicles, each of which are considered variable interests. The Company's involvement in financing the operations of the VIEs is generally limited to its economic interest in the entity. The Company's consolidated VIEs include certain sponsored investment products in which BlackRock has an economic interest and as the investment manager, is deemed to have both the power to direct the most significant activities of the products and the right to receive benefits (or the obligation to absorb losses) that could potentially be significant to these sponsored investment products. The assets of these VIEs are not available to creditors of the Company. In addition, the investors in these VIEs have no recourse to the credit of the Company.

The following table presents the balances related to these CIPs accounted for as VIEs and VREs that were recorded on the consolidated statements of financial condition, including BlackRock's net interest in these products:

| | | Dece | mber 31, 2023 | | December 31, 2022 | | | | | | |
|--|-------------|------|---------------|-------------|-------------------|----|-------|----|---------|--|--|
| (in millions) | VIEs | | VREs | Total | VIEs | | VREs | | Total | | |
| Cash and cash equivalents ⁽¹⁾ | \$ 234 | \$ | 54 | \$ 288 | \$ 234 | \$ | 31 | \$ | 265 | | |
| Investments: | | | | | | | | | | | |
| Trading debt securities | 1,423 | | 406 | 1,829 | 949 | | 330 | | 1,279 | | |
| Equity securities at FVTNI | 1,059 | | 370 | 1,429 | 821 | | 268 | | 1,089 | | |
| Loans | 195 | | 10 | 205 | 234 | | 120 | | 354 | | |
| Other investments | 427 | | 171 | 598 | 373 | | 77 | | 450 | | |
| Carried interest | 1,916 | | _ | 1,916 | 1,497 | | _ | | 1,497 | | |
| Total investments | 5,020 | | 957 | 5,977 | 3,874 | | 795 | | 4,669 | | |
| Other assets | 83 | | 39 | 122 | 68 | | 29 | | 97 | | |
| Other liabilities ⁽²⁾ | (2,233) | | (108) | (2,341) | (1,876) | | (48) | | (1,924) | | |
| Noncontrolling interest - CIPs | (1,625) | | (226) | (1,851) | (857) | | (125) | | (982) | | |
| BlackRock's net interest in CIPs | \$ 1,479 | \$ | 716 | \$ 2,195 | \$ 1,443 | \$ | 682 | \$ | 2,125 | | |

(1) The Company generally cannot readily access cash and cash equivalents held by CIPs to use in its operating activities.

BlackRock's total exposure to CIPs represents the value of its economic interest in these CIPs. Valuation changes associated with financial instruments held at fair value by these CIPs are reflected in nonoperating income (expense) and partially offset in net income (loss) attributable to NCI for the portion not attributable to BlackRock.

Net gain (loss) related to consolidated VIEs is presented in the following table:

| (in millions) | 2023 | | 2022 | | 2021 | |
|--|------|-----|------|-------|------|-----|
| Nonoperating net gain (loss) on consolidated VIEs | \$ | 310 | \$ | (311) | \$ | 296 |
| Net income (loss) attributable to NCI on consolidated VIEs | \$ | 174 | \$ | (161) | \$ | 289 |

6. Variable Interest Entities

Nonconsolidated VIEs. At December 31, 2023 and 2022, the Company's carrying value of assets and liabilities included on the consolidated statements of financial condition pertaining to nonconsolidated VIEs and its maximum risk of loss related to VIEs for which it held a variable interest, but for which it was not the PB, was as follows:

| (in millions) | _ Inve | stments | visory Fee eivables | A | ner Net ssets bilities) | of Loss ⁽¹⁾ |
|-------------------------------|--------|---------|---------------------------|----|-------------------------------|------------------------|
| December 31, 2023 | · | | | | | |
| Sponsored investment products | \$ | 2,377 | \$ 116 | \$ | (11) | \$ 2,510 |
| December 31, 2022 | | | | | | |
| Sponsored investment products | \$ | 1,060 | \$ 95 | \$ | (12) | \$ 1,172 |

⁽¹⁾ At both December 31, 2023 and 2022, BlackRock's maximum risk of loss associated with these VIEs primarily related to BlackRock's investments and the collection of advisory fee receivables.

The net assets of sponsored investment products that are nonconsolidated VIEs approximated \$39 billion and \$19 billion at December 31, 2023 and 2022, respectively.

⁽²⁾ At December 31, 2023 and 2022, other liabilities of VIEs primarily include deferred carried interest liabilities and borrowings of a consolidated CLO.

7. Fair Value Disclosures

Fair Value Hierarchy

Assets and liabilities measured at fair value on a recurring basis

| December 31, 2023 (in millions) | in Mar Identic | ed Prices Active kets for cal Assets evel 1) | Obse | nificant Other ervable Inputs (Level 2) | Uno | gnificant bservable Inputs Level 3) | Me | estments easured : NAV ⁽¹⁾ | c | other ⁽²⁾ | Dec | December 31, 2023 | |
|---|----------------------|--|------|---|-----|--|----|---|----|----------------------|-----|----------------------|--|
| Assets: | | | | | | | | | | | | | |
| <u>Investments</u> | | | | | | | | | | | | | |
| Debt securities: | | | | | | | | | | | | | |
| Trading securities | \$ | _ | \$ | 1,829 | \$ | 42 | \$ | | \$ | _ | \$ | 1,871 | |
| Held-to-maturity investments | | _ | | _ | | _ | | _ | | 617 | | 617 | |
| Total debt securities | | _ | | 1,829 | | 42 | | _ | | 617 | | 2,488 | |
| Equity securities at FVTNI: | | | | | | | | | | | | | |
| Equity securities/mutual funds | | 1,585 | | _ | | _ | | _ | | _ | | 1,585 | |
| Equity method: | | | | | | | | | | | | | |
| Equity, fixed income, and multi-asset mutual funds | | 246 | | | | | | | | | | 246 | |
| Hedge funds/funds of hedge | | 240 | | | | | | | | | | 240 | |
| funds/other | | | | _ | | _ | | 588 | | _ | | 588 | |
| Private equity funds | | _ | | _ | | _ | | 1,264 | | _ | | 1.264 | |
| Real assets funds | | _ | | _ | | _ | | 417 | | _ | | 417 | |
| Investments related to deferred cash | | | | | | | | | | | | | |
| compensation plans | | _ | | _ | | _ | | 241 | | _ | | 241 | |
| Total equity method | | 246 | | _ | | _ | | 2,510 | | _ | | 2,756 | |
| Loans | | _ | | 30 | | 175 | | _ | | _ | | 205 | |
| Federal Reserve Bank Stock | | _ | | _ | | _ | | _ | | 92 | | 92 | |
| Carried interest | | _ | | _ | | _ | | _ | | 1,975 | | 1,975 | |
| Other investments | | 15 | | _ | | _ | | 467 | | 157 | | 639 | |
| Total investments | | 1,846 | | 1,859 | | 217 | | 2,977 | | 2,841 | | 9,740 | |
| Other assets ⁽³⁾ | | 117 | | 19 | | 120 | | _ | | _ | | 256 | |
| Separate account assets | | 34,621 | | 20,810 | | _ | | _ | | 667 | | 56,098 | |
| Separate account collateral held under securities lending agreements: | | , | | | | | | | | | | • | |
| Equity securities | | 1,686 | | _ | | _ | | _ | | _ | | 1,686 | |
| Debt securities | | _ | | 2,872 | | _ | | _ | | _ | | 2,872 | |
| Total separate account collateral held under | | | | · · · · · · · · · · · · · · · · · · · | | | | | | | | <u> </u> | |
| securities lending agreements | | 1,686 | | 2,872 | | _ | | _ | | _ | | 4,558 | |
| Total | \$ | 38,270 | \$ | 25,560 | \$ | 337 | \$ | 2,977 | \$ | 3,508 | \$ | 70,652 | |
| Liabilities: | | | | | | | | | | | | | |
| Separate account collateral liabilities | | | | | | | | | | | | | |
| under securities lending agreements | \$ | 1,686 | \$ | 2,872 | \$ | _ | \$ | _ | \$ | _ | \$ | 4,558 | |
| Other liabilities ⁽⁴⁾ | | | | 17 | | 279 | | | | | | 296 | |
| Total | \$ | 1,686 | \$ | 2,889 | \$ | 279 | \$ | _ | \$ | _ | \$ | 4,854 | |

(3) Level 1 amount includes a minority investment in a publicly traded company. Level 3 amount includes a strategic private debt investment with changes in fair value recorded in AOCI, net of tax.

⁽¹⁾ Amounts are comprised of certain investments measured at fair value using NAV (or its equivalent) as a practical expedient.
(2) Amounts are comprised of investments held at amortized cost and cost, adjusted for observable price changes, carried interest and certain equity method investments, which include sponsored investment funds and other assets, which are not accounted for under a fair value measure. In accordance with GAAP, certain equity method investees do not account for both their financial assets and liabilities under fair value measures; therefore, the Company's investment in such equity method investees may not represent fair value.

⁽⁴⁾ Level 2 amount primarily includes fair value of derivatives (See Note 8, *Derivatives and Hedging*, for more information). Level 3 amount primarily includes borrowings of a consolidated CLO classified based on the significance of unobservable inputs used for calculating the fair value of consolidated CLO assets, and contingent liabilities related to certain acquisitions.

| December 31, 2022 (in millions) | Quoted in Ac Market Identical (Leve | tive ts for Assets | Obse | nificant Other ervable Inputs (Level 2) | | Significant nobservable Inputs (Level 3) | M | vestments leasured at NAV ⁽¹⁾ | Other ⁽²⁾ | | Dec | ember 31, 2022 |
|---|---|--------------------------|------|---|----|---|----|--|----------------------|-------|-----|-------------------|
| Assets: | | | | | | | | | | | | |
| <u>Investments</u> | | | | | | | | | | | | |
| Debt securities: | | | | | | | | | | | | |
| Trading securities | \$ | _ | \$ | 1,279 | \$ | 52 | \$ | _ | \$ | _ | \$ | 1,331 |
| Held-to-maturity investments | | | | _ | | _ | | _ | | 544 | | 544 |
| Total debt securities | | _ | | 1,279 | | 52 | | _ | | 544 | | 1,875 |
| Equity securities at FVTNI: | | | | | | | | | | | | |
| Equity securities/mutual funds | | 1,211 | | _ | | _ | | _ | | _ | | 1,211 |
| Equity method: | | | | | | | | | | | | |
| Equity, fixed income, and multi-asset mutual funds | | 181 | | _ | | _ | | _ | | _ | | 181 |
| Hedge funds/funds of hedge | | | | | | | | | | | | |
| funds/other | | _ | | _ | | _ | | 525 | | _ | | 525 |
| Private equity funds | | _ | | _ | | _ | | 885 | | _ | | 885 |
| Real assets funds | | | | | | | | 304 | | _ | | 304 |
| Total equity method | | 181 | | _ | | _ | | 1,714 | | _ | | 1,895 |
| Loans | | _ | | 106 | | 248 | | _ | | _ | | 354 |
| Federal Reserve Bank Stock | | _ | | _ | | _ | | _ | | 91 | | 91 |
| Carried interest | | _ | | _ | | _ | | | | 1,550 | | 1,550 |
| Other investments | | 28 | | _ | | _ | | 316 | | 146 | | 490 |
| Total investments | | 1,420 | | 1,385 | | 300 | | 2,030 | | 2,331 | | 7,466 |
| Other assets ⁽³⁾ | | 145 | | 1 | | _ | | _ | | _ | | 146 |
| Separate account assets | | 34,823 | | 18,544 | | _ | | _ | | 699 | | 54,066 |
| Separate account collateral held under securities lending agreements: | | | | | | | | | | | | |
| Equity securities | | 2,163 | | _ | | _ | | _ | | _ | | 2,163 |
| Debt securities | | | | 3,602 | | | | | | | | 3,602 |
| Total separate account collateral held under securities lending agreements | r | 2,163 | | 3,602 | | _ | | _ | | _ | | 5,765 |
| Total | \$ | 38,551 | \$ | 23,532 | \$ | 300 | \$ | 2,030 | \$ | 3,030 | \$ | 67,443 |
| Liabilities: | | | | | | | | | | | | |
| Separate account collateral liabilities under securities lending agreements | \$ | 2,163 | \$ | 3,602 | \$ | | \$ | _ | \$ | _ | \$ | 5,765 |
| Other liabilities ⁽⁴⁾ | * | | Ψ | 31 | Ψ | 280 | Ψ | _ | Ψ | _ | Ψ | 311 |
| Total | \$ | 2,163 | \$ | 3,633 | \$ | 280 | \$ | _ | \$ | | \$ | 6,076 |
| 77. | - | _, | Ψ . | 5,550 | Ψ. | | Ψ | | Ψ | | Ψ | 0,0.0 |

(1) Amounts are comprised of certain investments measured at fair value using NAV (or its equivalent) as a practical expedient.

(3) Level 1 amount includes a minority investment in a publicly traded company. Level 2 amount primarily includes fair value of derivatives (See Note 8, Derivatives and Hedging, for more information).

Level 3 Assets. Level 3 assets predominantly include investments in CLOs, loans of consolidated CIPs, and a strategic private debt investment. Investments in CLOs and loans were valued based on single-broker nonbinding quotes or quotes from pricing services which use significant unobservable inputs. BlackRock's strategic private debt investment was valued using the income approach by discounting the expected cash flows to a single present value. For investments utilizing a discounted cashflow valuation technique, an increase (decrease) in the discount rate or risk premium in isolation could have resulted in a significantly lower (higher) fair value measurement as of December 31, 2023.

Level 3 Liabilities. Level 3 liabilities primarily include borrowings of a consolidated CLO, which were valued based on the fair value of the assets of the consolidated CLO less the fair value of the Company's economic interest in the CLO, as well as contingent liabilities related to certain acquisitions, which were valued based upon discounted cash flow analyses, using unobservable market data inputs, or other valuation techniques.

⁽²⁾ Amounts are comprised of investments held at amortized cost and cost, adjusted for observable price changes, carried interest and certain equity method investments, which include sponsored investment funds and other assets, which are not accounted for under a fair value measure. In accordance with GAAP, certain equity method investees do not account for both their financial assets and liabilities under fair value measures; therefore, the Company's investment in such equity method investees may not represent fair value.

⁽⁴⁾ Level 2 amount primarily includes fair value of derivatives (See Note 8, *Derivatives and Hedging*, for more information). Level 3 amount primarily includes borrowings of a consolidated CLO classified based on the significance of unobservable inputs used for calculating the fair value of consolidated CLO assets, and a contingent liability related to an acquisition.

Changes in Level 3 Assets and Liabilities Measured at Fair Value on a Recurring Basis for 2023

| (in millions) | mber 31, 1022 | unre Ga | alized nd alized ains sses) | Pur | chases | es and urities | ssuances and Other ttlements ⁽¹⁾ | i | nsfers nto vel 3 | 0 | nsfers ut of evel 3 | Dec | cember 31, 2023 | Unre Ga (Lo Inclu | al Net ealized ains esses) uded in nings ⁽²⁾ |
|-----------------------|------------------|------------|---|-----|--------|-------------------|--|----|------------------------|----|---------------------------|-----|--------------------|----------------------------|--|
| Assets: | | | | | | | | | | | | | | | |
| Investments: | | | | | | | | | | | | | | | |
| Debt securities: | | | | | | | | | | | | | | | |
| Trading | \$ 52 | \$ | _ | \$ | 8 | \$ (18) | \$ _ | \$ | _ | \$ | _ | \$ | 42 | \$ | |
| Total debt securities | 52 | | _ | | 8 | (18) | _ | | | | | | 42 | | |
| Loans | 248 | | 13 | | 76 | (58) | (122) | | 38 | | (20) | | 175 | | (1) |
| Total investments | 300 | | 13 | | 84 | (76) | (122) | | 38 | | (20) | | 217 | | (1) |
| Other assets | _ | | 7 | | 113 | _ | _ | | _ | | _ | | 120 | | 7 |
| Total assets | \$ 300 | \$ | 20 | \$ | 197 | \$ (76) | \$ (122) | \$ | 38 | \$ | (20) | \$ | 337 | \$ | 6 |
| Liabilities: | | | | | | | | | | | | | | | |
| Other liabilities | \$ 280 | \$ | 1 | \$ | _ | \$ _ | \$ _ | \$ | _ | \$ | _ | \$ | 279 | \$ | 1 |

⁽¹⁾ Issuances and other settlements amount includes a deconsolidation related to a previously consolidated VRE. In addition, issuances and other settlements include a contingent liability in connection with the acquisition of Kreos Capital in August 2023 (the "Kreos Transaction"), offset by repayments of borrowings of a consolidated CLO. (2) Earnings attributable to the change in unrealized gains (losses) relating to assets and liabilities still held at the reporting date.

Changes in Level 3 Assets and Liabilities Measured at Fair Value on a Recurring Basis for 2022

| (in millions) | Dec | ember 31, 2021 | Uni | ealized and realized Gains osses) | Pu | rchases | les and turities | suances and Other ttlements ⁽¹⁾ | i | nsfers nto evel 3 | 0 | nsfers ut of evel 3 | De | ecember 31, 2022 | Unr G (Le Incl | tal Net realized rains osses) uded in nings ⁽²⁾ |
|-----------------------|-----|-------------------|-----|---|----|---------|---------------------|---|----|-------------------------|----|---------------------------|----|---------------------|-------------------------|---|
| Assets: | | | | | | | | | | | | | | | | |
| Investments: | | | | | | | | | | | | | | | | |
| Debt securities: | | | | | | | | | | | | | | | | |
| Trading | \$ | 17 | \$ | (5) | \$ | 36 | \$ (18) | \$ _ | \$ | 26 | \$ | (4) | \$ | 52 | \$ | (5) |
| Total debt securities | | 17 | | (5) | | 36 | (18) | | | 26 | | (4) | | 52 | | (5) |
| Private equity | | 5 | | (2) | | _ | _ | _ | | _ | | (3) | | _ | | _ |
| Loans | | 270 | | (6) | | 59 | (61) | _ | | 9 | | (23) | | 248 | | (6) |
| Total investments | \$ | 292 | \$ | (13) | \$ | 95 | \$ (79) | \$ _ | \$ | 35 | \$ | (30) | \$ | 300 | \$ | (11) |
| Liabilities: | | | | | | | | | | | | | | | | J |
| Other liabilities | \$ | 342 | \$ | 3 | \$ | _ | \$ _ | \$ (59) | \$ | _ | \$ | _ | \$ | 280 | \$ | 3 |

⁽¹⁾ Amounts include proceeds from borrowings of a consolidated CLO and a contingent liability payment related to a prior acquisition. (2) Earnings attributable to the change in unrealized gains (losses) relating to assets and liabilities still held at the reporting date.

Realized and Unrealized Gains (Losses) for Level 3 Assets and Liabilities. Realized and unrealized gains (losses) recorded for Level 3 assets and liabilities are primarily reported in nonoperating income (expense) on the consolidated statements of income. A portion of net income (loss) related to securities held by CIPs is allocated to NCI to reflect net income (loss) not attributable to the Company.

Transfers in and/or out of Levels. Transfers in and/or out of levels are reflected when significant inputs, including market inputs or performance attributes, used for the fair value measurement become observable/unobservable.

Disclosures of Fair Value for Financial Instruments Not Held at Fair Value, At December 31, 2023 and 2022, the fair value of the Company's financial instruments not held at fair value are categorized in the table below.

| | December 31, 2023 | | | | Decembe | r 31, 20 | 22 | |
|--|-------------------|----|---------------------|----|-------------------|----------|---------------------|--|
| (in millions) | arrying mount | | timated ir Value | | arrying .mount | | timated ir Value | Fair Value Hierarchy |
| Financial Assets ⁽¹⁾ : Cash and cash equivalents Other assets | \$ 8,736 80 | \$ | 8,736 80 | \$ | 7,416 86 | \$ | 7,416 86 | Level 1 ⁽²⁾⁽³⁾ Level 1 ⁽²⁾⁽⁴⁾ |
| Financial Liabilities: Long-term borrowings | \$ 7,918 | \$ | 7,413 | \$ | 6,654 | \$ | 5,949 | Level 2 ⁽⁵⁾ |

⁽¹⁾ See Note 4, Investments, for further information on investments not held at fair value.

(1) See Note: Interest information or investments not need at rail value.
 (2) Cash and cash equivalents are carried at either cost or amortized cost, which approximates fair value due to their short-term maturities.
 (3) At December 31, 2023 and 2022, approximately \$3.4 billion and \$2.2 billion, respectively, of money market funds were recorded within cash and cash equivalents on the consolidated statements of financial condition. Money market funds are valued based on quoted market prices, or \$1.00 per share, which generally is the NAV of the fund.

At December 31, 2023 and 2022, other assets included cash collateral of approximately \$63 million and \$69 million, respectively. See Note 8, Derivatives and Hedging for

further information on derivatives held by the Company. In addition, other assets included \$17 million of restricted cash at both December 31, 2023 and 2022. Long-term borrowings are recorded at amortized cost, net of debt issuance costs. The fair value of the long-term borrowings, including the current portion of long-term borrowings, is determined using market prices and the EUR/USD foreign exchange rate at the end of December 2023 and 2022, respectively. See Note 14, *Borrowings*, for the fair value of each of the Company's long-term borrowings.

Investments in Certain Entities that Calculate NAV Per Share

As a practical expedient to value certain investments that do not have a readily determinable fair value and have attributes of an investment company, the Company uses NAV as the fair value. The following tables list information regarding all investments that use a fair value measurement to account for both their financial assets and financial liabilities in their calculation of a NAV per share (or equivalent).

December 31, 2023

| (in millions) | Ref | Fa | ir Value | Uni | Гotal funded mitments | Redemption Frequency | Redemption Notice Period |
|---|-----|----|----------|-----|-----------------------------|---|-----------------------------|
| Equity method ⁽¹⁾ : | | | | | | • | |
| Hedge funds/funds of hedge funds/other | (a) | \$ | 588 | \$ | 134 | Daily/Monthly (4%) Quarterly (8%) N/R (88%) | 1 – 90 days |
| Private equity funds | (b) | | 1,264 | | 218 | N/R | N/R |
| Real assets funds | (c) | | 417 | | 210 | Quarterly (10%) N/R (90%) | 60 days |
| Investments related to deferred cash | | | | | | | |
| compensation plan | (e) | | 241 | | _ | Monthly | 1 – 90 days |
| Consolidated sponsored investment products: | | | | | | | |
| Real assets funds | (c) | | 154 | | 62 | N/R | N/R |
| Private equity funds | (d) | | 145 | | 37 | N/R | N/R |
| Hedge funds/other | (a) | | 168 | | 64 | Quarterly (83%) N/R (17%) | 90 days |
| Total | | \$ | 2,977 | \$ | 725 | _ | |

December 31, 2022

| | | _ | | Un | Total funded | Redemption | Redemption |
|---|-----|----|-----------|-------------|-----------------|---|---------------|
| (in millions) | Ref | Fa | air Value | Commitments | | Frequency | Notice Period |
| Equity method ⁽¹⁾ : | | | | | | | |
| Hedge funds/funds of hedge funds/other | (a) | \$ | 525 | \$ | 149 | Daily/Monthly (23%) Quarterly (13%) N/R (64%) | 1 – 90 days |
| Private equity funds | (b) | | 885 | | 174 | N/R | N/R |
| Real assets funds | (c) | | 304 | | 304 | Quarterly (17%) N/R (83%) | 60 days |
| Consolidated sponsored investment products: | | | | | | | |
| Real assets funds | (c) | | 116 | | 94 | N/R | N/R |
| Private equity funds | (d) | | 183 | | 37 | N/R | N/R |
| Other funds | | | 17 | | 31 | Quarterly | 90 days |
| Total | | \$ | 2,030 | \$ | 789 | _ | |

N/R - Not Redeemable

- (1) Comprised of equity method investments, which include investment companies that account for their financial assets and most financial liabilities under fair value measures; therefore, the Company's investment in such equity method investees approximates fair value.
- (a) This category includes hedge funds, funds of hedge funds, and other funds that invest primarily in equities, fixed income securities, private credit, opportunistic and mortgage instruments and other third-party hedge funds. The fair values of the investments have been estimated using the NAV of the Company's ownership interest in partners' capital. The liquidation period for the investments in the funds that are not subject to redemption is unknown at both December 31, 2023 and 2022.
- (b) This category includes private equity funds that initially invest in nonmarketable securities of private companies, which ultimately may become public in the future. The fair values of these investments have been estimated using capital accounts representing the Company's ownership interest in the funds and may also include other performance inputs. The Company's investment in each fund is not subject to redemption and is normally returned through distributions as a result of the liquidation of the underlying assets of the private equity funds. The liquidation period for the investments in these funds is unknown at both December 31, 2023 and 2022.
- underlying assets of the private equity funds. The industation period for the investments in these trans is unknown at both December 31, 2023 and 2022.

 (c) This category includes several real assets funds that invest directly and indirectly in real estate or infrastructure. The fair values of the investments have been estimated using capital accounts representing the Company's ownership interest in the funds. The Company's investments that are not subject to redemption or are not currently redeemable are normally returned through distributions and realizations of the underlying assets of the funds. The liquidation period for the investments in the funds that are not subject to redemptions is unknown at both December 31, 2023 and 2022. The total remaining unfunded commitments were \$272 million and \$398 million at December 31, 2023 and 2022, respectively. The Company's portion of the total remaining unfunded commitments was \$248 million and \$364 million at December 31, 2023 and 2022, respectively.
- (d) This category includes the underlying third-party private equity funds within consolidated BlackRock sponsored private equity funds of funds. These investments are not subject to redemption or are not currently redeemable; however, for certain funds, the Company may sell or transfer its interest, which may need approval by the general partner of the underlying funds. Due to the nature of the investments in this category, the Company reduces its investment by distributions that are received through the realization of the underlying assets of the funds. The liquidation period for the underlying assets of these funds is unknown.
 (e) This category includes hedge funds and funds of hedge funds that invest primarily in equities, fixed income securities, mortgage instruments and other third-party hedge
- (e) This category includes hedge funds and funds of hedge funds that invest primarily in equities, fixed income securities, mortgage instruments and other third-party hedge funds. The fair values of the investments have been estimated using the NAV of the Company's ownership interest in partners' capital. The investments in hedge funds will be redeemed upon settlement of certain deferred cash compensation liabilities.

Fair Value Option

At December 31, 2023 and 2022, the Company elected the fair value option for certain investments in CLOs of approximately \$42 million and \$52 million, respectively, reported within investments.

In addition, the Company elected the fair value option for bank loans and borrowings of a consolidated CLO, recorded within investments and other liabilities, respectively. The following table summarizes the information related to these bank loans and borrowings at December 31, 2023 and 2022:

| (in millions) | December 31, 2023 | | | December 31, 2022 | | |
|--|----------------------|-----|----|----------------------|--|--|
| CLO Bank loans: | | | | | | |
| Aggregate principal amounts outstanding | \$ | 203 | \$ | 238 | | |
| Fair value | | 194 | | 234 | | |
| Aggregate unpaid principal balance in excess of (less than) fair value | \$ | 9 | \$ | 4 | | |
| CLO Borrowings: | | | | | | |
| Aggregate principal amounts outstanding | \$ | 190 | \$ | 245 | | |
| Fair value | \$ | 180 | \$ | 245 | | |

At December 31, 2023, the principal amounts outstanding of the borrowings issued by the CLOs mature in 2030 and may be repaid prior to maturity at any time.

During the year ended December 31, 2023 and 2022, the net gains (losses) from the change in fair value of the bank loans and borrowings held by the consolidated CLO were not material and were recorded in net gain (loss) on the consolidated statements of income. The change in fair value of the assets and liabilities included interest income and expense, respectively.

8. Derivatives and Hedging

The Company maintains a program to enter into exchange traded futures as a macro hedging strategy to hedge market price and interest rate exposures with respect to its total portfolio of seed investments in sponsored investment products. At December 31, 2023 and 2022, the Company had outstanding exchange traded futures related to this macro hedging strategy with aggregate notional values of approximately \$1.8 billion and \$1.5 billion, with expiration dates during the first quarter of 2024 and 2023, respectively.

In addition, beginning in the first quarter of 2023, the Company entered into futures to economically hedge the exposure to market movements on certain deferred cash compensation plans. At December 31, 2023, the Company had outstanding exchange traded futures with aggregate notional values related to its deferred cash compensation hedging program of approximately \$204 million, with expiration dates during the first quarter of 2024.

Changes in the value of the futures contracts are recognized as gains or losses within nonoperating income (expense). Variation margin payments, which represent settlements of profit/loss, are generally received or made daily, and are reflected in other assets and other liabilities on the consolidated statements of financial condition. These amounts were not material as of December 31, 2023 and 2022.

The Company executes forward foreign currency exchange contracts to mitigate the risk of certain foreign exchange movements. At December 31, 2023 and 2022, the Company had outstanding forward foreign currency exchange contracts with aggregate notional values of approximately \$3.1 billion and \$2.2 billion, with expiration dates in January 2024 and January 2023, respectively.

At both December 31, 2023 and 2022, the Company had a derivative providing credit protection with a notional amount of approximately \$17 million to a counterparty, representing the Company's maximum risk of loss with respect to the derivative. The Company carries the derivative at fair value based on the expected discounted future cash outflows under the arrangement.

The following table presents the fair values of derivative instruments recognized in the consolidated statements of financial condition at December 31, 2023:

| | | Assets | 3 | | | Liabil | ities | | |
|---|---|---------------|----|------------------|---|-------------|-----------------|----|----|
| (in millions) | Statement of Financial Condition Classification | December 2023 | , | mber 31, 2022 | Statement of Financial Condition Classification | Decem 20 | mber 31, 022 | | |
| Derivative instruments | | | | | | | | | |
| Forward foreign currency exchange contracts | Other assets | \$ | 19 | \$ 1 | Other liabilities | \$ | 6 | \$ | 19 |

The following table presents realized and unrealized gains (losses) recognized in the consolidated statements of income on derivative instruments:

| | | | Gains (Losses) | | | | | |
|---|------------------------------------|----|----------------|----|-------|----|-------|--|
| (in millions) | Statement of Income Classification | 2 | 023 | | 2022 | | 2021 | |
| Derivative Instruments | | | | | | | , | |
| Exchange traded futures ⁽¹⁾ | Nonoperating income (expense) | \$ | (88) | \$ | 36 | \$ | _ | |
| Forward foreign currency exchange contracts | General and administration expense | | 98 | | (222) | | (29) | |
| Total return swaps | Nonoperating income (expense) | | _ | | 83 | | (99) | |
| Total gain (loss) from derivative instruments | | \$ | 10 | \$ | (103) | \$ | (128) | |

⁽¹⁾ Amounts include \$112 million of losses and \$36 million of gains on futures used as a macro hedging strategy of seed investments for 2023 and 2022, respectively. In addition, amounts include \$24 million of gains on futures used to economically hedge certain deferred cash compensation plans for 2023.

The Company's CIPs may utilize derivative instruments as a part of the funds' investment strategies. The change in fair value of such derivatives, which is recorded in nonoperating income (expense), was not material for 2023, 2022 and 2021.

See Note 14, Borrowings, for more information on the Company's net investment hedge.

9. Property and Equipment

Property and equipment consists of the following:

| | Estimated Useful | December 31, | | | | |
|---|------------------|--------------|------|-------|--|--|
| (in millions) | Life-In Years | 2023 | 2022 | | | |
| Property and equipment: | | | | | | |
| Land | N/A | \$ 6 | \$ | 6 | | |
| Building | 39 | 33 | | 33 | | |
| Building improvements | 15 | 31 | | 31 | | |
| Leasehold improvements ⁽¹⁾ | 1-15 | 1,036 | | 613 | | |
| Equipment and computer software | 3 | 1,088 | | 1,033 | | |
| Other transportation equipment | 10 | 192 | | 192 | | |
| Furniture and fixtures | 7 | 99 | | 96 | | |
| Construction in progress ⁽¹⁾ | N/A | 66 | | 417 | | |
| Total | | 2,551 | | 2,421 | | |
| Less: accumulated depreciation and amortization | | 1,439 | | 1,390 | | |
| Property and equipment, net | | \$ 1,112 | \$ | 1,031 | | |

N/A - Not Applicable

Qualifying software costs of approximately \$103 million, \$91 million and \$87 million have been capitalized within equipment and computer software during 2023, 2022 and 2021, respectively, and are being amortized over an estimated useful life of three years.

Depreciation and amortization expense was \$263 million, \$251 million and \$249 million for 2023, 2022 and 2021, respectively.

10. Goodwill

Goodwill activity during 2023 and 2022 was as follows:

| (in millions) | 2023 | | 2022 |
|-----------------------------|-----------|--------|--------------|
| Beginning of year balance | \$ | 15,341 | \$ 15,351 |
| Acquisitions ⁽¹⁾ | | 184 | _ |
| Other | | (1) | (10) |
| End of year balance | \$ | 15,524 | \$ 15,341 |

(1) Amount represents goodwill in connection with the Kreos Transaction. The Company believes this acquisition will add to the Company's position as a leading global credit asset manager and advance its ambitions to provide clients with a diverse range of private market investment products and solutions. Total consideration for the transaction was approximately \$250 million, which included contingent consideration.

BlackRock assessed its goodwill for impairment as of July 31, 2023, 2022 and 2021 and considered such factors as the book value and the market capitalization of the Company. The impairment assessment indicated no impairment charges were required. The Company continues to monitor its book value per share compared with closing prices of its common stock for potential indicators of impairment. At December 31, 2023, the Company's common stock closed at a market price of \$811.80, which exceeded its book value of \$264.96 per share.

⁽¹⁾ During 2023, approximately \$400 million was reclassed from construction in progress to leasehold improvements primarily related to the Company's new headquarters located at 50 Hudson Yards in New York.

11. Intangible Assets

Intangible assets at December 31, 2023 and 2022 consisted of the following:

| (in millions) | Remaining Weighted- Average Estimated Useful Life | s Carrying Imount | Accumulated Amortization | Net Carrying Amount |
|---|---|----------------------|-----------------------------|------------------------|
| At December 31, 2023 | | | | |
| Indefinite-lived intangible assets: | | | | |
| Management contracts | N/A | \$ 16,169 | \$ _ | \$ 16,169 |
| Trade names/trademarks | N/A | 1,403 | _ | 1,403 |
| License | N/A | 6 | _ | 6 |
| Total indefinite-lived intangible assets | | 17,578 | _ | 17,578 |
| Finite-lived intangible assets ⁽¹⁾ : | | | | |
| Management contracts | 3.7 | 244 | 156 | 88 |
| Investor/customer relationships | 6.0 | 785 | 338 | 447 |
| Technology-related | 4.6 | 260 | 118 | 142 |
| Trade names/trademarks | 1.8 | 9 | 6 | 3 |
| Total finite-lived intangible assets | 5.4 | 1,298 | 618 | 680 |
| Total intangible assets | | \$ 18,876 | \$ 618 | \$ 18,258 |
| At December 31, 2022 | | | | |
| Indefinite-lived intangible assets: | | | | |
| Management contracts | N/A | \$ 16,169 | \$ _ | \$ 16,169 |
| Trade names/trademarks | N/A | 1,403 | _ | 1,403 |
| License | N/A | 6 | _ | 6 |
| Total indefinite-lived intangible assets | | 17,578 | _ | 17,578 |
| Finite-lived intangible assets: | | | | , |
| Management contracts | 2.9 | 177 | 130 | 47 |
| Investor/customer relationships | 7.0 | 746 | 254 | 492 |
| Technology-related | 4.6 | 261 | 81 | 180 |
| Trade names/trademarks | 2.6 | 23 | 18 | 5 |
| Total finite-lived intangible assets | 6.1 | 1,207 | 483 | 724 |
| Total intangible assets | | \$ 18,785 | \$ 483 | \$ 18,302 |
| N/A - Not Applicable | | | | |

N/A – Not Applicable
(1) In connection with the Kreos Transaction, the Company acquired approximately \$67 million of finite-lived management contracts and \$39 million of finite-lived investor relationships with weighted-average estimated lives of approximately five and ten years, respectively.

The impairment tests performed for intangible assets as of July 31, 2023, 2022 and 2021 indicated no impairment charges were required.

Estimated amortization expense for finite-lived intangible assets for each of the five succeeding years is as follows:

| (in millions) | |
|---------------|--------|
| Year | Amount |
| 2024 | \$ 151 |
| 2025 | 143 |
| 2026 | 129 |
| 2027 | 103 |
| 2028 | 83 |

12. Leases

The following table presents components of lease cost included in general and administration expense on the consolidated statements of income:

| (in millions) | 2023 | | 2022 | | 2021 | |
|-------------------------------------|------|-----|----------|-----|------|-----|
| Lease cost: | | | | | | , |
| Operating lease cost ⁽¹⁾ | \$ | 189 | \$ 21 | 6 5 | \$ | 184 |
| Variable lease cost ⁽²⁾ | | 49 | 3 | 9 | | 44 |
| Total lease cost | \$ | 238 | \$ 25 | 5 5 | \$ | 228 |

(1) Amounts include short-term leases, which are immaterial for 2023, 2022 and 2021.

(2) Amounts include operating lease payments, which may be adjusted based on usage, changes in an index or market rate, as well as common area maintenance charges and other variable costs not included in the measurement of ROU assets and operating lease liabilities.

Supplemental information related to operating leases is summarized below:

| (in millions) | 2023 | | 2022 | | 2021 |
|---|-----------|----|------|----|-------|
| Supplemental cash flow information: | | | | | |
| Operating cash flows from operating leases included in the measurement of operating lease liabilities | \$ 142 | \$ | 162 | \$ | 75 |
| | | | | | |
| Supplemental noncash information: | | | | | |
| ROU assets in exchange for operating lease liabilities | \$ 32 | \$ | 115 | \$ | 1,165 |

| | December 31, 2 | 2023 | December 31, 2 | 2022 |
|---------------------------------------|--------------------|-------|----------------|-------|
| Lease term and discount rate: | | | | |
| Weighted-average remaining lease term | 15 | years | 16 | years |
| Weighted-average discount rate | 3 | % | 3 | % |

| (in | mil | lion | S |
|-----|-----|------|---|

| Maturity of operating lease liabilities at December 31, 2023 | An | Amount | | | | |
|--|----|--------|--|--|--|--|
| 2024 | \$ | 180 | | | | |
| 2025 | | 164 | | | | |
| 2026 | | 153 | | | | |
| 2027 | | 147 | | | | |
| 2028 | | 141 | | | | |
| Thereafter | | 1,379 | | | | |
| Total lease payments | | 2,164 | | | | |
| Less: imputed interest | | (380) | | | | |
| Present value of lease liabilities | \$ | 1,784 | | | | |

13. Other Assets

At December 31, 2023 and 2022, the Company had \$773 million and \$809 million, respectively, of equity method investments recorded within other assets on the consolidated statements of financial condition, since such investees are considered to be an extension of BlackRock's core business. BlackRock's share of these investees' underlying net income or loss is based upon the most currently available information and is recorded within advisory and other revenue. In 2022, the Company recorded a nonoperating, noncash, pre-tax gain of approximately \$267 million in connection with the dilution of its ownership interest to approximately 25% in its strategic minority investment in iCapital Network, Inc. ("iCapital"). At December 31, 2023 and 2022, the Company's ownership interest in iCapital was approximately 25%, and the carrying value of the Company's interest was \$641 million and \$669 million, respectively. In accordance with GAAP, certain equity method investees, including iCapital, do not account for both their financial assets and liabilities under fair value measures; therefore, the Company's investment in such equity method investees may not represent fair value.

At December 31, 2023 and 2022, the Company had \$484 million and \$375 million, respectively, of other nonequity method corporate minority investments recorded within other assets on the consolidated statements of financial condition, since such investees are considered to be an extension of BlackRock's core business. These investments included equity securities, generally measured at fair value or under the measurement alternative to fair value for nonmarketable securities, and a strategic private debt investment measured at fair value. Changes in value of the equity securities are recorded in nonoperating income (expense) and changes in value of the debt security is recorded in AOCI, net of tax. See Note 2, Significant Accounting Policies, for further information.

14. Borrowings

Short-Term Borrowings

2023 Revolving Credit Facility. The Company maintains an unsecured revolving credit facility which is available for working capital and general corporate purposes (the "2023 credit facility"). In March 2023, the 2023 credit facility was amended to, among other things, (1) increase the aggregate commitment amount by \$300 million to \$5 billion, (2) extend the maturity date to March 2028 and (3) change the secured overnight financing rate ("SOFR") adjustment to 10 bps per annum for all SOFR-based borrowings. The 2023 credit facility permits the Company to request up to an additional \$1.0 billion of borrowing capacity, subject to lender credit approval, which could increase the overall size of the 2023 credit facility to an aggregate principal amount of up to \$6 billion. The 2023 credit facility requires the Company not to exceed a maximum leverage ratio (ratio of net debt to earnings before interest, taxes, depreciation and amortization, where net debt equals total debt less unrestricted cash) of 3 to 1, which was satisfied with a ratio of less than 1 to 1 at December 31, 2023. At December 31, 2023, the Company had no amount outstanding under the 2023 credit facility.

Commercial Paper Program. The Company can issue unsecured commercial paper notes (the "CP Notes") on a private-placement basis up to a maximum aggregate amount outstanding at any time of \$4 billion. The commercial paper program is currently supported by the 2023 credit facility. At December 31, 2023, BlackRock had no CP Notes outstanding.

Long-Term Borrowings

The carrying value and fair value of long-term borrowings determined using market prices and EUR/USD foreign exchange rate at December 31, 2023 included the following:

| (in millions) | Matur | ity Amount | Disco Debt l | nortized ount and Issuance osts ⁽¹⁾ | Carry | ying Value | F | air Value |
|----------------------------|-------|------------|-----------------|---|-------|------------|----|-----------|
| 3.50% Notes due 2024 | \$ | 1,000 | \$ | _ | \$ | 1,000 | \$ | 995 |
| 1.25% Notes due 2025 | | 772 | | (1) | | 771 | | 752 |
| 3.20% Notes due 2027 | | 700 | | (2) | | 698 | | 677 |
| 3.25% Notes due 2029 | | 1,000 | | (7) | | 993 | | 948 |
| 2.40% Notes due 2030 | | 1,000 | | (4) | | 996 | | 893 |
| 1.90% Notes due 2031 | | 1,250 | | (8) | | 1,242 | | 1,053 |
| 2.10% Notes due 2032 | | 1,000 | | (12) | | 988 | | 834 |
| 4.75% Notes due 2033 | | 1,250 | | (20) | | 1,230 | | 1,261 |
| Total long-term borrowings | \$ | 7,972 | \$ | (54) | \$ | 7,918 | \$ | 7,413 |

(1) The unamortized discount and debt issuance costs are being amortized over the term of the notes.

Long-term borrowings at December 31, 2022 had a carrying value of \$6.7 billion and a fair value of \$5.9 billion determined using market prices at the end of December 2022.

2033 Notes. In May 2023, the Company issued \$1.25 billion in aggregate principal amount of 4.75% senior unsecured notes maturing on May 25, 2033 (the "2033 Notes"). The net proceeds of the 2033 Notes are being used for general corporate purposes, which may include the future repayment of all or a portion of the \$1.0 billion 3.50% Notes due March 2024. Interest of approximately \$59 million per year is payable semi-annually on May 25 and November 25 of each year, commencing on November 25, 2023. The 2033 Notes may be redeemed at the option of the Company, in whole or in part, at any time prior to February 25, 2033 at a "make-whole" redemption price, or thereafter at 100% of the principal amount of the 2033 Notes, in each case plus accrued but unpaid interest.

2032 Notes. In December 2021, the Company issued \$1 billion in aggregate principal amount of 2.10% senior unsecured and unsubordinated notes maturing on February 25, 2032 (the "2032 Notes"). The net proceeds of the 2032 Notes were used for general corporate purposes, which included the repayment of the \$750 million 3.375% Notes in June 2022. Interest of approximately \$21 million per year is payable semi-annually on February 25 and August 25 of each year, which commenced on February 25, 2022. The 2032 Notes may be redeemed prior to November 25, 2031 in whole or in part at any time, at the option of the Company, at a "make-whole" redemption price or at 100% of the principal amount of the 2032 Notes thereafter.

2031 Notes. In April 2020, the Company issued \$1.25 billion in aggregate principal amount of 1.90% senior unsecured and unsubordinated notes maturing on January 28, 2031 (the "2031 Notes"). The net proceeds of the 2031 Notes were used for general corporate purposes. Interest of approximately \$24 million per year is payable semi-annually on January 28 and July 28 of each year, which commenced on July 28, 2020. The 2031 Notes may be redeemed prior to October 28, 2030 in whole or in part at any time, at the option of the Company, at a "make-whole" redemption price or at 100% of the principal amount of the 2031 Notes thereafter.

2030 Notes. In January 2020, the Company issued \$1 billion in aggregate principal amount of 2.40% senior unsecured and unsubordinated notes maturing on April 30, 2030 (the "2030 Notes"). The net proceeds of the 2030 Notes were used for general corporate purposes. Interest of approximately \$24 million per year is payable semi-annually on April 30 and October 30 of each year, which commenced on April 30, 2020. The 2030 Notes may be redeemed prior to January 30, 2030 in whole or in part at any time, at the option of the Company, at a "make-whole" redemption price or at 100% of the principal amount of the 2030 Notes thereafter.

2029 Notes. In April 2019, the Company issued \$1 billion in aggregate principal amount of 3.25% senior unsecured and unsubordinated notes maturing on April 30, 2029 (the "2029 Notes"). The net proceeds of the 2029 Notes were used for general corporate purposes, which included a portion of the purchase price of the eFront Transaction, repayment of a portion of the \$1 billion 5.00% notes in December 2019 and repayment of borrowings under its commercial paper program. Interest is payable semi-annually on April 30 and October 30 of each year, which commenced on October 30, 2019, and is approximately \$33 million per year. The 2029 Notes may be redeemed prior to January 30, 2029 in whole or in part at any time, at the option of the Company, at a "make-whole" redemption price or at par thereafter.

2027 Notes. In March 2017, the Company issued \$700 million in aggregate principal amount of 3.20% senior unsecured and unsubordinated notes maturing on March 15, 2027 (the "2027 Notes"). The net proceeds of the 2027 Notes were used to fully repay \$700 million in aggregate principal amount outstanding of 6.25% notes in April 2017 prior to their maturity in September 2017. Interest is payable semi-annually on March 15 and September 15 of each year, and is approximately \$22 million per year. The 2027 Notes may be redeemed prior to maturity at any time in whole or in part at the option of the Company at a "make-whole" redemption price.

2025 Notes. In May 2015, the Company issued €700 million of 1.25% senior unsecured notes maturing on May 6, 2025 (the "2025 Notes"). The notes are listed on the New York Stock Exchange. The net proceeds of the 2025 Notes were used for general corporate purposes, including refinancing of outstanding indebtedness. Interest of approximately \$11 million per year based on current exchange rates is payable annually on May 6 of each year. The 2025 Notes may be redeemed in whole or in part prior to maturity at any time at the option of the Company at a "makewhole" redemption price.

Upon conversion to US dollars the Company designated the €700 million debt offering as a net investment hedge to offset its currency exposure relating to its net investment in certain euro functional currency operations. A loss of \$20 million (net of tax benefit of \$6 million), gain of \$37 million (net of tax expense of \$12 million), and a gain of \$46 million (net of tax expense of \$14 million) were recognized in other comprehensive income for 2023, 2022 and 2021, respectively. No hedge ineffectiveness was recognized during 2023, 2022 and 2021.

2024 Notes. In March 2014, the Company issued \$1 billion in aggregate principal amount of 3.50% senior unsecured and unsubordinated notes maturing on March 18, 2024 (the "2024 Notes"). The net proceeds of the 2024 Notes were used to refinance certain indebtedness which matured in the fourth quarter of 2014. Interest is payable semi-annually in arrears on March 18 and September 18 of each year, or approximately \$35 million per year. The 2024 Notes may be redeemed prior to maturity at any time in whole or in part at the option of the Company at a "make-whole" redemption price.

15. Commitments and Contingencies

Investment Commitments. At December 31, 2023, the Company had \$738 million of various capital commitments to fund sponsored investment products, including CIPs. These products include private equity funds, real assets funds and opportunistic funds. This amount excludes additional commitments made by consolidated funds of funds to underlying third-party funds as third-party noncontrolling interest holders have the legal obligation to fund the respective commitments of such funds of funds. Generally, the timing of the funding of these commitments is unknown and the commitments are callable on demand at any time prior to the expiration of the commitment. These unfunded commitments are not recorded on the consolidated statements of financial condition. These commitments do not include potential future commitments approved by the Company that are not yet legally binding. The Company intends to make additional capital commitments from time to fund additional investment products for, and with, its clients.

Contingencies

Legal Proceedings. From time to time, BlackRock receives subpoenas or other requests for information from various US federal and state governmental and regulatory authorities and international governmental and regulatory authorities in connection with industry-wide or other investigations or proceedings. It is BlackRock's policy to cooperate fully with such matters. BlackRock has been responding to requests from the SEC in connection with a publicly reported, industry-wide investigation of investment advisers' compliance with record retention requirements relating to certain types of electronic communications. BlackRock is cooperating with the SEC's investigation.

The Company, certain of its subsidiaries and employees have been named as defendants in various legal actions, including arbitrations and other litigation arising in connection with BlackRock's activities. Additionally, BlackRock-advised investment portfolios may be subject to lawsuits, any of which potentially could harm the investment returns of the applicable portfolio or result in the Company being liable to the portfolios for any resulting damages.

Management, after consultation with legal counsel, currently does not anticipate that the aggregate liability arising out of regulatory matters or lawsuits will have a material effect on BlackRock's results of operations, financial position, or cash flows. However, there is no assurance as to whether any such pending or threatened matters will have a material effect on BlackRock's results of operations, financial position or cash flows in any future reporting period. Due to uncertainties surrounding the outcome of these matters, management cannot reasonably estimate the possible loss or range of loss that may arise from these matters.

Indemnifications. In the ordinary course of business or in connection with certain acquisition agreements, BlackRock enters into contracts pursuant to which it may agree to indemnify third parties in certain circumstances. The terms of these indemnities vary from contract to contract and the amount of indemnification liability, if any, cannot be determined or the likelihood of any liability is considered remote. Consequently, no liability has been recorded on the consolidated statements of financial condition.

In connection with securities lending transactions, BlackRock has agreed to indemnify certain securities lending clients against potential loss resulting from a borrower's failure to fulfill its obligations under the securities lending agreement should the value of the collateral pledged by the borrower at the time of default be insufficient to cover the borrower's obligation under the securities lending agreement. The amount of securities on loan as of December 31, 2023 and subject to this type of indemnification was approximately \$259 billion. In the Company's capacity as lending agent, cash and securities totaling approximately \$276 billion were held as collateral for indemnified securities on loan at December 31, 2023. The fair value of these indemnifications was not material at December 31, 2023.

16. Revenue

The table below presents detail of revenue for 2023, 2022 and 2021 and includes the product mix of investment advisory, administration fees and securities lending revenue and performance fees.

| (in millions) | 2023 | 2022 | 2021 |
|---|--------------|--------------|--------------|
| Revenue: | | | |
| Investment advisory, administration fees and securities lending revenue: | | | |
| Equity: | | | |
| Active | \$ 2,000 | \$ 2,147 | \$ 2,571 |
| ETFs | 4,418 | 4,345 | 4,658 |
| Non-ETF Index | 743 | 711 | 771 |
| Equity subtotal | 7,161 | 7,203 | 8,000 |
| Fixed income: | | | |
| Active | 1,897 | 1,977 | 2,191 |
| ETFs | 1,230 | 1,122 | 1,201 |
| Non-ETF Index | 353 | 396 | 471 |
| Fixed income subtotal | 3,480 | 3,495 | 3,863 |
| Multi-asset | 1,203 | 1,299 | 1,414 |
| Alternatives: | | | |
| Illiquid alternatives | 889 | 741 | 668 |
| Liquid alternatives | 572 | 633 | 629 |
| Currency and commodities ⁽¹⁾ | 185 | 216 | 216 |
| Alternatives subtotal | 1,646 | 1,590 | 1,513 |
| Long-term | 13,490 | 13,587 | 14,790 |
| Cash management | 909 | 864 | 470 |
| Total investment advisory, administration fees and securities lending revenue | 14,399 | 14,451 | 15,260 |
| Investment advisory performance fees: | | | |
| Equity | 99 | 49 | 153 |
| Fixed income | 4 | 25 | 48 |
| Multi-asset | 28 | 25 | 32 |
| Alternatives: | | | |
| Illiquid alternatives | 273 | 296 | 208 |
| Liquid alternatives | 150 | 119 | 702 |
| Alternatives subtotal | 423 | 415 | 910 |
| Total investment advisory performance fees | 554 | 514 | 1,143 |
| Technology services revenue | 1,485 | 1,364 | 1,281 |
| Distribution fees | 1,262 | 1,381 | 1,521 |
| Advisory and other revenue: | | | |
| Advisory | 81 | 56 | 68 |
| Other | 78 | 107 | 101 |
| Total advisory and other revenue | 159 | 163 | 169 |
| Total revenue | \$ 17,859 | \$ 17,873 | \$ 19,374 |
| (1) Amounts include commodity ETFs. | | | |

⁽¹⁾ Amounts include commodity ETFs.

The tables below present the investment advisory, administration fees and securities lending revenue by client type and investment style:

| (in millions) | 2023 | 2022 | 2021 |
|----------------------|--------------|--------------|--------------|
| By client type: | | | |
| Retail | \$ 4,115 | \$ 4,442 | \$ 4,957 |
| ETFs | 5,834 | 5,671 | 6,074 |
| Institutional: | | | |
| Active | 2,623 | 2,535 | 2,675 |
| Index | 918 | 939 | 1,084 |
| Total institutional | 3,541 | 3,474 | 3,759 |
| Long-term | 13,490 | 13,587 | 14,790 |
| Cash management | 909 | 864 | 470 |
| Total | \$ 14,399 | \$ 14,451 | \$ 15,260 |
| By investment style: | | | |
| Active | \$ 6,534 | \$ 6,789 | \$ 7,455 |
| Index and ETFs | 6,956 | 6,798 | 7,335 |
| Long-term | 13,490 | 13,587 | 14,790 |
| Cash management | 909 | 864 | 470 |
| Total | \$ 14,399 | \$ 14,451 | \$ 15,260 |

Investment Advisory and Administration Fees - Remaining Performance Obligation

The tables below present estimated investment advisory and administration fees expected to be recognized in the future related to the unsatisfied portion of the performance obligations at December 31, 2023 and 2022:

December 31, 2023

| (in millions) | 2024 | | 2025 | 2026 | Thereafter | Total | |
|---|----------|-----|-----------|-----------|------------|-------|-----|
| Investment advisory and administration fees: Alternatives ⁽¹⁾⁽²⁾ | \$ | 204 | \$ 174 | \$ 152 | \$ 164 | \$ | 694 |
| December 31, 2022 | | | | | | | |
| (in millions) | 2023 | | 2024 | 2025 | Thereafter | Total | |
| Investment advisory and administration fees: Alternatives ⁽¹⁾⁽²⁾ | \$ | 157 | \$ 111 | \$ 78 | \$ 102 | \$ | 448 |

⁽¹⁾ Investment advisory and administration fees include management fees related to certain alternative products, which are based on contractual committed capital outstanding at December 31, 2023 and 2022. Actual management fees could be higher to the extent additional committed capital is raised. These fees are generally billed on a quarterly basis in arrears.

Change in Deferred Carried Interest Liability

The table below presents changes in the deferred carried interest liability, which is included in other liabilities on the consolidated statements of financial condition, for the year ended December 31, 2023 and 2022:

| (in millions) | 2023 | 2022 |
|---|-------------|-------------|
| Beginning balance | \$ 1,420 | \$ 1,508 |
| Net increase (decrease) in unrealized allocations | 577 | 175 |
| Performance fee revenue recognized | (214) | (263) |
| Ending balance | \$ 1,783 | \$ 1,420 |

Technology Services Revenue - Remaining Performance Obligation

The tables below present estimated technology services revenue expected to be recognized in the future related to the unsatisfied portion of the performance obligations at December 31, 2023 and 2022:

December 31, 2023

| (in millions) | 2024 | 2025 | 2026 | Thereafter | Total | |
|-----------------------------------|-----------|----------|----------|------------|-------|-----|
| Technology services revenue(1)(2) | \$ 131 | \$ 73 | \$ 56 | \$ 59 | \$ | 319 |
| December 31, 2022 | | | | | | |
| (in millions) | 2023 | 2024 | 2025 | Thereafter | Total | |
| Technology services revenue(1)(2) | \$ 112 | \$ 51 | \$ 35 | \$ 40 | \$ | 238 |

(1) Technology services revenue primarily includes upfront payments from customers, which the Company generally recognizes as services are performed.

In addition to amounts disclosed in the tables above, certain technology services contracts require fixed minimum fees, which are billed on a monthly or quarterly basis in arrears. The Company recognizes such revenue as services are performed. As of December 31, 2023, the estimated annual fixed minimum fees for 2024 for outstanding contracts approximated \$1.1 billion. The term for these contracts, which are either in their initial or renewal period, ranges from one to five years.

The table below presents changes in the technology services deferred revenue liability for the year ended December 31, 2023 and 2022, which is included in other liabilities on the consolidated statements of financial condition:

| (in millions) | 202 | 3 | 2022 |
|---|-----|------|-----------|
| Beginning balance | \$ | 125 | \$ 122 |
| Additions ⁽¹⁾ | | 92 | 99 |
| Revenue recognized that was included in the beginning balance | | (84) | (96) |
| Ending balance | \$ | 133 | \$ 125 |

(1) Amounts are net of revenue recognized.

⁽²⁾ The Company elected the following practical expedients and therefore does not include amounts related to (a) performance obligations with an original duration of one year or less, and (b) variable consideration related to future service periods.

⁽²⁾ The Company elected the following practical expedients and therefore does not include amounts related to (a) performance obligations with an original duration of one year or less, and (b) variable consideration related to future service periods.

17. Stock-Based Compensation

The components of stock-based compensation expense are as follows:

| (in millions) | _ | 2023 | | 2022 | 2021 |
|---|----|------|-----|-----------|-----------|
| Stock-based compensation: | | | | | |
| RSUs | \$ | \$ | 596 | \$ 686 | \$ 709 |
| Stock options | | | 34 | 22 | 25 |
| Total stock-based compensation ⁽¹⁾ | , | \$ | 630 | \$ 708 | \$ 734 |

⁽¹⁾ Amount for 2023 and 2022 includes \$14 million and \$33 million of compensation expense for accelerated vesting of previously granted stock-based compensation awards, respectively, recognized as part of the restructuring charge disclosed in Note 23, Restructuring Charge.

Stock Award and Incentive Plan. Pursuant to the BlackRock, Inc. Second Amended and Restated 1999 Stock Award and Incentive Plan (the "Award Plan"), options to purchase shares of the Company's common stock at an exercise price not less than the market value of BlackRock's common stock on the date of grant in the form of stock options, restricted stock or RSUs may be granted to employees and nonemployee directors. A maximum of 41,500,000 shares of common stock were authorized for issuance under the Award Plan. Of this amount, 2,248,287 shares remain available for future awards at December 31, 2023. Upon exercise of employee stock options, the issuance of restricted stock or the vesting of RSUs, the Company issues shares out of treasury to the extent available.

RSUs. Pursuant to the Award Plan, RSUs may be granted to certain employees. Substantially all RSUs vest over periods ranging from one to three years and are expensed using the straight-line method over the requisite service period for each separately vesting portion of the award as if the award was, in-substance, multiple awards. RSUs are not considered participating securities for purposes of calculating EPS as the dividend equivalents are subject to forfeiture prior to vesting of the award.

RSU activity for 2023 is summarized below.

| Outstanding at | RSUs | Weighted- Average Grant Date Fair Value |
|-------------------|--------------|--|
| December 31, 2022 | 2,009,207 \$ | 710.67 |
| Granted | 771,935 \$ | 731.40 |
| Converted | (934,099) \$ | 634.10 |
| Forfeited | (74,404) \$ | 771.59 |
| December 31, 2023 | 1,772,639 \$ | 757.49 |

The Company values RSUs at their grant-date fair value as measured by BlackRock's common stock price. The total fair market value of RSUs granted to employees during 2023, 2022 and 2021 was \$565 million, \$662 million and \$664 million, respectively. The total grant-date fair market value of RSUs converted to common stock during 2023, 2022 and 2021 was \$592 million, \$461 million and \$391 million, respectively.

RSUs granted in connection with annual incentive compensation under the Award Plan primarily related to the following:

| | 2023 | 2022 | 2021 |
|--|---------|---------|---------|
| Awards granted that vest ratably over three years from the date of grant | 342,706 | 498,633 | 470,253 |
| Awards granted that vest with varying vesting periods | 169,764 | 117,169 | 168,504 |
| Awards granted that cliff vest 100% on: | | | |
| January 31, 2024 | _ | _ | 247,621 |
| January 31, 2025 | _ | 197,817 | _ |
| January 31, 2026 | 259,465 | _ | _ |
| | 771,935 | 813,619 | 886,378 |

At December 31, 2023, the intrinsic value of outstanding RSUs was \$1.4 billion, reflecting a closing stock price of \$811.80.

At December 31, 2023, total unrecognized stock-based compensation expense related to unvested RSUs was \$421 million. The unrecognized compensation cost is expected to be recognized over the remaining weighted-average period of 1.1 years.

In January 2024, pursuant to the Award Plan, the Company granted approximately:

- 347,000 RSUs to employees as part of annual incentive compensation that vest ratably over three years from the date of grant;
- 344,000 RSUs to employees that cliff vest 100% on January 31, 2027; and
- 6,000 RSUs to employees with various vesting schedules.

Performance-Based RSUs. Pursuant to the Award Plan, performance-based RSUs may be granted to certain employees. Each performance-based award consists of a "base" number of RSUs granted to the employee. The number of shares that an employee ultimately receives at vesting will be equal to the base number of performance-based RSUs granted, multiplied by a predetermined percentage determined in accordance with the level of attainment of Company performance measures during the performance period and could be higher or lower than the original RSU grant. Performance-based RSUs are not considered participating securities as the dividend equivalents are subject to forfeiture prior to vesting of the award.

In the first quarter of 2023, 2022 and 2021, the Company granted 169,938, 143,846 and 162,029, respectively, performance-based RSUs to certain employees that cliff vest 100% on January 31, 2026, 2025 and 2024, respectively. These awards are amortized over a service period of three years. In January 2023, the Company distributed 29,194 additional RSUs based on the attainment of Company performance measures during the performance period.

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Performance-based RSU activity for 2023 is summarized below.

| Outstanding at | Performance- Based RSUs | Average Grant Date Fair Value |
|---|----------------------------|-------------------------------------|
| December 31, 2022 | 531,054 | \$ 672.47 |
| Granted | 169,938 | \$ 743.60 |
| Additional shares due to attainment of performance measures | 29,194 | \$ 532.15 |
| Converted | (262,797) | \$ 534.00 |
| Forfeited | (11,005) | \$ 756.51 |
| December 31, 2023 | 456,384 | \$ 767.69 |

The Company values performance-based RSUs at their grant-date fair value as measured by BlackRock's common stock price. The total grant-date fair market value of performance-based RSUs granted to employees during 2023, 2022 and 2021 was \$142 million, \$164 million and \$122 million, respectively.

At December 31, 2023, the intrinsic value of outstanding performance-based RSUs was \$370 million reflecting a closing stock price of \$811.80.

At December 31, 2023, total unrecognized stock-based compensation expense related to unvested performance-based awards was \$82 million. The unrecognized compensation cost is expected to be recognized over the remaining weighted-average period of 1.1 years.

In January 2024, the Company granted approximately 166,000 performance-based RSUs to certain employees that cliff vest 100% on January 31, 2027. These awards are amortized over a service period of three years. The number of shares distributed at vesting could be higher or lower than the original grant based on the level of attainment of predetermined Company performance measures.

Stock Options

Stock option activity and ending balance for year-end December 31, 2023 is summarized below.

| | 2017 Performai Option | | based | 2023 Performar Option | | based | 2023 Time Optio | | ed |
|-------------------|---------------------------|---|--------|---|----|--------|--------------------|----|--------|
| Outstanding at | Shares Under Option | Weighted Average Shares Exercise Under Price Option | | Weighted Average Shares Exercise Under Price Option | | Under | nder Exe | | |
| December 31, 2022 | 1,735,898 | \$ | 513.50 | _ | \$ | | _ | \$ | |
| Granted | - | \$ | _ | 814,482 | \$ | 673.58 | 326,391 | \$ | 673.58 |
| Exercised | (183,704) | \$ | 513.50 | _ | \$ | _ | _ | \$ | _ |
| Forfeited | (3,114) | \$ | 513.50 | (6,787) | \$ | 673.58 | _ | \$ | _ |
| December 31, 2023 | 1,549,080 | \$ | 513.50 | 807,695 | \$ | 673.58 | 326,391 | \$ | 673.58 |

| | Options Outstanding | | | | | | Options Exercisable | | | | |
|------------------------|---------------------|---------------------------------------|--|----------|--|--------------------|------------------------|--|----------|--|--|
| Option Type | Exercise Prices | Options Outstanding ⁽¹⁾ | Weighted Average Remaining Life (years) | Int V | regate rinsic /alue nillions) | Exercise Prices | Options Exercisable | Weighted Average Remaining Life (years) | Int V | regate rinsic ⁄alue nillions) | |
| 2017 Performance-based | \$ 513.50 | 1,549,080 | 2.9 | \$ | 462 | \$ 513.50 | 991,156 | 2.9 | \$ | 296 | |
| 2023 Performance-based | \$ 673.58 | 807,695 | 8.4 | | 112 | \$ 673.58 | _ | _ | | _ | |
| 2023 Time-based | \$ 673.58 | 326,391 | 8.4 | | 45 | \$ 673.58 | _ | _ | | _ | |
| Total | | 2,683,166 | 5.2 | \$ | 619 | | 991,156 | 2.9 | \$ | 296 | |

⁽¹⁾ At December 31, 2023, 0.6 million 2017 performance-based options, 0.8 million 2023 performance-based options and 0.3 million 2023 time-based options were expected to vest.

At December 31, 2023, total unrecognized stock-based compensation expense related to unvested performance-based stock options was \$160 million. The unrecognized compensation cost is expected to be recognized over the remaining weighted-average period of 3.4 years.

Performance-Based Stock Options

In 2017, pursuant to the Award Plan, the Company awarded performance-based stock option grants to certain employees ("2017 Performancebased Options"). Vesting of 2017 Performance-based Options was contingent upon the achievement of obtaining 125% of BlackRock's grantdate stock price within five years from the grant date and the attainment of Company performance measures during the four-year performance period. Both hurdles have been achieved, and the first two tranches of the awards vested at the end of 2022 and 2023, respectively, with the final equal installment vesting at the end of 2024. Vested options are exercisable for up to nine years following the grant date. The awards are generally forfeited if the employee leaves the Company before the respective vesting date. The expense for each tranche is amortized over the respective requisite service period. The total fair value of options vested during 2023 was \$56 million. The aggregate intrinsic value of options exercised during 2023 was \$44 million.

The options have a strike price of \$513.50, which was the closing price of the shares on the grant date. The grant-date fair value of the awards issued in 2017 was \$208 million and was estimated using a Monte Carlo simulation with an embedded lattice model using the assumptions included in the following table:

| Grant Year | Expected Term (Years) ⁽¹⁾ | Expected Stock Volatility ⁽²⁾ | Expected Dividend Yield ⁽³⁾ | Risk-Free Interest Rate ⁽⁴⁾ |
|------------|---|---|--|---|
| 2017 | 6.56 | 22.23 % | 2.16 % | 2.33 % |

- (1) The expected term was derived using a Monte Carlo simulation with the embedded lattice model and represents the period of time that options granted are expected to be
- The expected stock volatility was based upon an average of historical stock price fluctuations of BlackRock's common stock and an implied volatility at the grant date.
- (3) The expected dividend yield was calculated as the most recent quarterly dividend divided by the average three-month stock price as of the grant date.
 (4) The risk-free interest rate is based on the US Treasury Constant Maturities yield curve at grant date.

On May 30, 2023, pursuant to the Award Plan, the Company awarded performance-based options to purchase 814,482 shares of BlackRock common stock to certain employees as long-term incentive compensation ("2023 Performance-based Options"). Vesting of 2023 Performancebased Options is contingent upon the achievement of obtaining 130% of grant-date stock price over 60 calendar days within four years from the grant date and attainment of Company performance measures during the three-year performance period. If both hurdles are achieved, the award will vest in three tranches of 25%, 25% and 50% in May of 2027, 2028 and 2029, respectively. Vested options are exercisable for up to nine years following the grant date, and the awards are forfeited if the employee resigns before the respective vesting date. The expense for each tranche is amortized over the respective requisite service period.

The 2023 Performance-based Options have a strike price of \$673.58 which was the closing price of the shares on the grant date. The grant-date fair value of the 2023 Performance-based Options was \$120 million and was estimated using a Monte Carlo simulation with an embedded lattice model using the assumptions included in the following table:

| Grant Year | Expected Term (Years) ⁽¹⁾ | Expected Stock Volatility ⁽²⁾ | Expected Dividend Yield ⁽³⁾ | Risk-Free Interest Rate ⁽⁴⁾ |
|------------|---|---|--|---|
| 2023 | 6.02 | 27.73 % | 3.02 % | 3.61 % |

- (1) The expected term was derived using a Monte Carlo simulation with the embedded lattice model and represents the period of time that options granted are expected to be outstanding.
- The expected stock volatility was based upon an average of historical stock price fluctuations of BlackRock's common stock and an implied volatility at the grant date.
- (3) The expected dividend yield was calculated as the most recent quarterly dividend divided by the average three-month stock price as of the grant date.(4) The risk-free interest rate is based on the US Treasury Constant Maturities yield curve at grant date.

On May 30, 2023, pursuant to the Award Plan, the Company awarded time-based stock options to purchase 326,391 shares of BlackRock common stock to certain employees as long-term incentive compensation ("2023 Time-based Options"). These awards will vest in three tranches of 25%, 25% and 50% in May 2027, 2028 and 2029, respectively. Vested options can be exercised up to nine years following the grant date, and the awards are forfeited if the employee resigns before the respective vesting date.

The 2023 Time-based Options have a strike price of \$673.58 which was the closing price of the shares on the grant date. The grant-date fair value of the 2023 Time-based Options was \$55 million and was estimated using a Black-Scholes-Merton model using the assumptions included in the following table:

| Grant Year | Expected Term (Years) ⁽¹⁾ | Expected Stock Volatility ⁽²⁾ | Expected Dividend Yield ⁽³⁾ | Risk-Free Interest Rate ⁽⁴⁾ |
|--|---|---|--|---|
| 2023 | 7.13 | 28.29 % | 3.02 % | 3.65 % |
| (1) The expected term represents the period of time that options granted are | expected to be outstandir | ng, and was calculated as | the midpoint between | en the weighted average |

- The expected stock volatility was based upon an average of historical stock price fluctuations of BlackRock's common stock and an implied volatility at the grant date. (3) The expected dividend yield was calculated as the most recent quarterly dividend divided by the average three-month stock price as of the grant date.
 (4) The risk-free interest rate is based on the US Treasury Constant Maturities yield curve at grant date.

Employee Stock Purchase Plan ("ESPP"). The ESPP allows eligible employees to purchase the Company's common stock at 95% of the fair market value on the last day of each three-month offering period; therefore, the Company does not record compensation expense related to employees purchasing shares under the ESPP.

18. Deferred Cash Compensation and Employee Benefit Plans

Deferred Cash Compensation Plans

The components of deferred cash compensation expense are as follows:

| (in millions) | 2023 | : | 2022 | 2021 |
|--|-----------|----|------|-----------|
| Deferred cash compensation expense: | | | | _ |
| IPDCP | \$ 195 | \$ | 228 | \$ 304 |
| VDCP | 17 | | (18) | 12 |
| Other ⁽¹⁾ | 14 | | 14 | 74 |
| Total deferred cash compensation expense | \$ 226 | \$ | 224 | \$ 390 |

⁽¹⁾ Amounts primarily relate to deferred cash compensation in connection with certain acquisitions.

Investment Professional Deferred Compensation Program ("IPDCP"). The Company adopted IPDCP for the purpose of providing deferred compensation and retention incentives to certain employees. For this plan, the final value of the deferred amount to be distributed in cash upon vesting is associated with investment returns of certain investment funds. In January 2023, 2022 and 2021, the Company granted approximately \$90 million, \$257 million, and \$321 million of deferred compensation that will fluctuate with investment returns and will vest ratably over three years from the date of grant. The liabilities for this plan were \$313 million and \$358 million at December 31, 2023 and 2022, respectively, and are reflected in the consolidated statements of financial condition as accrued compensation and benefits. In January 2024, the Company granted approximately \$114 million of additional deferred compensation that will fluctuate with investment returns and will vest ratably over three years from the date of grant.

Voluntary Deferred Compensation Plan. The Company adopted a Voluntary Deferred Compensation Plan ("VDCP") that allows eligible employees in the US to elect to defer between 1% and 100% of their annual cash incentive compensation. The participants must specify a deferral period of up to 10 years from the year of deferral and additionally elect to receive distributions in the form of a lump sum or in up to 10 annual installments. VDCP deferred cash compensation expense includes the mark-to-market impact of investment returns. The liability balance of \$144 million and \$108 million at December 31, 2023 and 2022, respectively, is reflected on the consolidated statements of financial condition as accrued compensation and benefits.

Other Deferred Cash Plans. The liabilities related to other deferred cash plans granted in connection with certain acquisitions were approximately \$82 million and \$71 million at December 31, 2023 and 2022, respectively.

In 2019, the Company adopted a carried interest retention incentive program referred to as the BlackRock Leadership Retention Carry Plan, pursuant to which senior-level employees (but not including the Chief Executive Officer), as may be determined by the Company from time to time, will be eligible to receive a portion of the cash payments, based on their percentage points, in the total carried interest distributions paid to the Company from participating carry funds. Cash payments, if any, with respect to these percentage points will be made over time following the recipient's termination of employment due to qualified retirement, death or disability, subject to his or her execution of a release of claims and continued compliance with his or her restrictive covenant obligations following termination. There was no material impact to the consolidated financial statements.

Defined Contribution Plans

The Company has several defined contribution plans primarily in the US and UK.

Certain of the Company's US employees participate in a defined contribution plan. Employee contributions of up to 8% of eligible compensation, as defined by the plan and subject to Internal Revenue Code limitations, are matched by the Company at 50% up to a maximum of \$5,000 annually. In addition, the Company makes an annual retirement contribution to eligible participants equal to 3-5% of eligible compensation. The Company's contribution expense related to this plan was \$86 million in 2023, \$83 million in 2022, and \$101 million in 2021.

Certain UK wholly owned subsidiaries of the Company contribute to defined contribution plans for their employees. The contributions range between 6% and 15% of each employee's eligible compensation. The Company's contribution expense related to these plans was \$64 million in 2023, \$60 million in 2022, and \$57 million in 2021.

In addition, the contribution expense related to defined contribution plans in other regions was \$42 million in 2023, \$41 million in 2022 and \$36 million in 2021.

Defined Benefit Plans. The Company has several defined benefit pension plans with plan assets of approximately \$28 million and \$29 million at December 31, 2023 and 2022, respectively. The underfunded obligations at December 31, 2023 and 2022 were not material. Benefit payments for the next five years and in aggregate for the five years thereafter are not expected to be material.

19. Related Party Transactions

Determination of Related Parties

Registered Investment Companies and Equity Method Investments. The Company considers the registered investment companies that it manages, which include mutual funds and exchange-traded funds, to be related parties as a result of the Company's advisory relationship. In addition, equity method investments are considered related parties, due to the Company's influence over the financial and operating policies of the investee.

Revenue from Related Parties

Revenue for services provided by the Company to these and other related parties are as follows:

| (in millions) | 2023 | 2022 | 2021 |
|--|--------------|--------------|--------------|
| Investment advisory, administration fees and securities lending revenue ⁽¹⁾ | \$ 10,757 | \$ 10,848 | \$ 11,474 |
| Investment advisory performance fees ⁽¹⁾ | 286 | 244 | 555 |
| Advisory and other revenue ⁽²⁾ | (31) | (31) | (16) |
| Total revenue from related parties | \$ 11,012 | \$ 11,061 | \$ 12,013 |

(1) Amounts primarily include revenue from registered investment companies and equity method investees.

(2) Amounts primarily include the Company's share of the investee's underlying net income or (loss) from equity method investees.

The Company provides investment advisory and administration services to its open- and closed-end funds and other commingled or pooled funds and separate accounts in which related parties invest.

Receivables and Payables with Related Parties. Due from related parties, which is included within other assets on the consolidated statements of financial condition, was \$203 million and \$396 million at December 31, 2023 and 2022, respectively, and primarily represented receivables from certain investment products managed by BlackRock. Accounts receivable at December 31, 2023 and 2022 included \$1.1 billion and \$1.0 billion, respectively, related to receivables from BlackRock mutual funds and ETFs, for investment advisory and administration services.

Due to related parties, which is included within other liabilities on the consolidated statements of financial condition, was \$21 million and \$15 million at December 31, 2023 and 2022, respectively, and primarily represented payables to certain investment products managed by BlackRock.

20. Net Capital Requirements

The Company is required to maintain net capital in certain regulated subsidiaries within a number of jurisdictions, which is partially maintained by retaining cash and cash equivalent investments in those subsidiaries or jurisdictions. As a result, such subsidiaries of the Company may be restricted in their ability to transfer cash between different jurisdictions and to their parents. Additionally, transfers of cash between international jurisdictions may have adverse tax consequences that could discourage such transfers.

Banking Regulatory Requirements. BlackRock Institutional Trust Company, N.A. ("BTC"), a wholly owned subsidiary of the Company, is chartered as a national bank whose powers are limited to trust and other fiduciary activities and which is subject to regulatory capital requirements administered by the US Office of the Comptroller of the Currency. Federal banking regulators would be required to take certain actions and permitted to take other actions in the event of BTC's failure to meet minimum capital requirements that, if undertaken, could have a direct material effect on the Company's consolidated financial statements.

Quantitative measures established by regulators to ensure capital adequacy require BTC to maintain a minimum Common Equity Tier 1 capital and Tier 1 leverage ratio, as well as Tier 1 and total risk-based capital ratios. Based on BTC's calculations as of December 31, 2023 and 2022, it exceeded the applicable capital adequacy requirements.

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|--|----|-------|---------|----|-----------------------------|-------|-----|---|-----------------------|
| (in millions) | An | nount | Ratio | Am | ount | Ratio | Amo | unt | Ratio |
| December 31, 2023 | | | | | | | | | |
| Total capital (to risk weighted assets) | \$ | 775 | 145.8 % | \$ | 43 | 8.0 % | \$ | 53 | 10.0 % |
| Common Equity Tier 1 capital (to risk weighted assets) | \$ | 771 | 145.1 % | \$ | 24 | 4.5 % | \$ | 35 | 6.5 % |
| Tier 1 capital (to risk weighted assets) | \$ | 771 | 145.1 % | \$ | 32 | 6.0 % | \$ | 43 | 8.0 % |
| Tier 1 capital (to average assets) | \$ | 771 | 65.9 % | \$ | 47 | 4.0 % | \$ | 59 | 5.0 % |
| December 31, 2022 | | | | | | | | | |
| Total capital (to risk weighted assets) | \$ | 691 | 126.1 % | \$ | 44 | 8.0 % | \$ | 55 | 10.0 % |
| Common Equity Tier 1 capital (to risk weighted assets) | \$ | 684 | 124.8 % | \$ | 25 | 4.5 % | \$ | 36 | 6.5 % |
| Tier 1 capital (to risk weighted assets) | \$ | 684 | 124.8 % | \$ | 33 | 6.0 % | \$ | 44 | 8.0 % |
| Tier 1 capital (to average assets) | \$ | 684 | 62.8 % | \$ | 44 | 4.0 % | \$ | 54 | 5.0 % |

Broker-dealers. BlackRock Investments, LLC and BlackRock Execution Services are registered broker-dealers and wholly owned subsidiaries of BlackRock that are subject to the Uniform Net Capital requirements under the Securities Exchange Act of 1934, which requires maintenance of certain minimum net capital levels.

Capital Requirements. At December 31, 2023 and 2022, the Company was required to maintain approximately \$1.8 billion and \$2.2 billion, respectively, in net capital in certain regulated subsidiaries, including BTC, entities regulated by the Financial Conduct Authority and Prudential Regulation Authority in the UK, and the Company's broker-dealers. The Company was in compliance with all applicable regulatory net capital requirements.

21. Accumulated Other Comprehensive Income (Loss)

The following table presents changes in AOCI for 2023, 2022 and 2021:

| (in millions) | 2023 | 2022 | 2021 |
|---|---------------|---------------|-------------|
| Beginning balance | \$ (1,101) | \$ (550) | \$ (337) |
| Foreign currency translation adjustments ⁽¹⁾ | 261 | (551) | (213) |
| Ending balance | \$ (840) | \$ (1,101) | \$ (550) |

⁽¹⁾ Amount for 2023 includes a loss from a net investment hedge of \$20 million (net of tax benefit of \$6 million). Amount for 2022 includes a gain from a net investment hedge of \$37 million (net of tax expense of \$12 million). Amount for 2021 includes a gain from a net investment hedge of \$46 million (net of tax expense of \$14 million).

22. Capital Stock

Cash Dividends for Common Shares / RSUs. During 2023, 2022 and 2021, the Company paid cash dividends of \$20.00 per share (or \$3.0 billion), \$19.52 per share (or \$3.0 billion) and \$16.52 per share (or \$2.5 billion), respectively.

Share Repurchases. In January 2023, the Company announced that the Board of Directors authorized the repurchase of an additional seven million shares under the Company's existing share repurchase program for a total of up to approximately 7.9 million shares of BlackRock common stock. The timing and actual number of shares repurchased will depend on a variety of factors, including legal limitations, price and market conditions.

During 2023, the Company repurchased 2.2 million common shares under the Company's existing share repurchase program for approximately \$1.5 billion. At December 31, 2023, there were approximately 5.7 million shares still authorized to be repurchased under the program.

The Company's common shares issued and outstanding and related activity consist of the following:

| | Shares Issue | Shares Issued | | |
|--|------------------|------------------------------|------------------|--|
| | Common Shares | Treasury Common Shares | Common Shares | |
| December 31, 2020 | 172,075,373 | (19,542,488) | 152,532,885 | |
| Shares repurchased | - | (1,421,994) | (1,421,994) | |
| Net issuance of common shares related to employee stock transactions | _ | 573,600 | 573,600 | |
| December 31, 2021 | 172,075,373 | (20,390,882) | 151,684,491 | |
| Shares repurchased | _ | (2,710,821) | (2,710,821) | |
| Net issuance of common shares related to employee stock transactions | | 782,822 | 782,822 | |
| December 31, 2022 | 172,075,373 | (22,318,881) | 149,756,492 | |
| Shares repurchased | - | (2,176,538) | (2,176,538) | |
| Net issuance of common shares related to employee stock transactions | _ | 920,120 | 920,120 | |
| December 31, 2023 | 172,075,373 | (23,575,299) | 148,500,074 | |

23. Restructuring Charge

In the fourth quarter of 2023, a restructuring charge of \$61 million (\$46 million after-tax), comprised of \$47 million of severance and \$14 million of compensation expense for accelerated vesting of previously granted deferred compensation awards, was recorded in connection with initiatives to reorganize specific platforms, primarily Aladdin and illiquid alternative investments.

In the fourth quarter of 2022, a restructuring charge of \$91 million (\$69 million after-tax), comprised of \$58 million of severance and \$33 million of expense related to the accelerated amortization of previously granted stock-based compensation awards, was recorded in connection with an initiative to modify the size and shape of the workforce to align more closely with strategic priorities.

The table below presents a rollforward of the Company's restructuring liability for 2023 and 2022, which is included in other liabilities on the consolidated statements of financial condition:

| (in millions) | |
|---|----------|
| Liability as of December 31, 2021 | \$ _ |
| Additions | 91 |
| Accelerated vesting expense of deferred compensation awards | (33) |
| Liability as of December 31, 2022 | 58 |
| Cash payments | (58) |
| Additions | 61 |
| Accelerated vesting expense of deferred compensation awards | (14) |
| Liability as of December 31, 2023 | \$ 47 |

24. Income Taxes

The components of income tax expense for 2023, 2022 and 2021, are as follows:

| (in millions) | 2023 | 2022 | 2021 |
|---|----------------|----------|-------|
| Current income tax expense: | | | |
| Federal | \$ 641 \$ | 255 \$ | 2,031 |
| State and local | 176 | (9) | 226 |
| Foreign | 538 | 448 | 576 |
| Total net current income tax expense | 1,355 | 694 | 2,833 |
| Deferred income tax expense (benefit): | | | · |
| Federal | 101 | 562 | (935) |
| State and local | 11 | 64 | (150) |
| Foreign | 12 | (24) | 220 |
| Total net deferred income tax expense (benefit) | 124 | 602 | (865) |
| Total income tax expense | \$ 1,479 \$ | 1,296 \$ | 1,968 |

Income tax expense has been based on the following components of income before taxes, less net income (loss) attributable to NCI:

| (in millions) | : | 2023 | 2022 | 2021 |
|---------------|----|-------|-------------|-------------|
| Domestic | \$ | 4,565 | \$ 4,604 | \$ 5,030 |
| Foreign | | 2,416 | 1,870 | 2,839 |
| Total | \$ | 6,981 | \$ 6,474 | \$ 7,869 |

The foreign income before taxes includes countries that have statutory tax rates that are different than the US federal statutory tax rate of 21%, such as the UK, Canada, Germany and Ireland.

A reconciliation of income tax expense with expected federal income tax expense computed at the applicable federal income tax rate of 21% for 2023, 2022 and 2021 is as follows:

| (in millions) | 2023 | | 2022 | | 2021 | |
|---|-------------|---------|-------|---------|-------|------|
| Statutory income tax expense | \$ 1,466 | 21 % \$ | 1,360 | 21 % \$ | 1,653 | 21 % |
| Increase (decrease) in income taxes resulting from: | | | | | | |
| State and local taxes (net of federal benefit) | 110 | 2 | 115 | 2 | 121 | 2 |
| Impact of federal, foreign, state, and local tax rate changes on deferred taxes | _ | _ | (25) | _ | 125 | 2 |
| Stock-based compensation awards | (41) | (1) | (87) | (1) | (43) | (1) |
| Resolution of outstanding tax matters | (204) | (3) | (143) | (2) | _ | _ |
| Effect of foreign tax rates | 112 | 2 | 23 | _ | 32 | |
| Other | 36 | _ | 53 | _ | 80 | 1 |
| Income tax expense | \$ 1,479 | 21 % \$ | 1,296 | 20 % \$ | 1,968 | 25 % |

Deferred income taxes are provided for the effects of temporary differences between the tax basis of an asset or liability and its reported amount in the consolidated financial statements. These temporary differences result in taxable or deductible amounts in future years.

The components of deferred income tax assets and liabilities are shown below:

| | | December 31, | | | | |
|--|----|--------------|---------|--|--|--|
| (in millions) | 2 | 023 | 2022 | | | |
| Deferred income tax assets: | | | | | | |
| Compensation and benefits | \$ | 375 \$ | 568 | | | |
| Loss carryforwards | | 95 | 100 | | | |
| Capitalized costs | | 216 | 103 | | | |
| Other | | 825 | 903 | | | |
| Gross deferred tax assets | | 1,511 | 1,674 | | | |
| Less: deferred tax valuation allowances | | (59) | (39) | | | |
| Deferred tax assets net of valuation allowances | | 1,452 | 1,635 | | | |
| Deferred income tax liabilities: | | | | | | |
| Goodwill and acquired indefinite-lived intangibles | | 4,299 | 4,244 | | | |
| Acquired finite-lived intangibles | | 86 | 114 | | | |
| Unrealized investment gains | | 25 | 72 | | | |
| Other | | 340 | 349 | | | |
| Gross deferred tax liabilities | | 4,750 | 4,779 | | | |
| Net deferred tax (liabilities) | \$ | (3,298) \$ | (3,144) | | | |

Deferred income tax assets and liabilities are recorded net when related to the same tax jurisdiction. At December 31, 2023, the Company recorded on the consolidated statement of financial condition deferred income tax assets, within other assets, and deferred income tax liabilities of \$208 million and \$3.5 billion, respectively. At December 31, 2022, the Company recorded on the consolidated statement of financial condition deferred income tax assets, within other assets, and deferred income tax liabilities of \$237 million and \$3.4 billion, respectively.

Income tax expense for 2023 included \$242 million discrete tax net benefits related to the resolution of certain outstanding tax matters and stock-based compensation awards that vested in 2023. Income tax expense for 2022 included \$235 million of net discrete tax benefits primarily related to stock-based compensation awards that vested in 2022 and the resolution of certain outstanding tax matters, and \$35 million of net noncash tax benefits related to the revaluation of certain deferred income tax liabilities.

At December 31, 2023 and 2022, the Company had available state net operating loss carryforwards of \$2.7 billion and \$2.5 billion, respectively, which will begin to expire in 2024. At December 31, 2023 and 2022, the Company had foreign net operating loss carryforwards of \$164 million

and \$179 million, respectively, of which \$5 million will begin to expire in 2024.

At December 31, 2023 and 2022, the Company had \$59 million and \$39 million of valuation allowances for deferred income tax assets, respectively, recorded on the consolidated statements of financial condition.

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Current income taxes are recorded net on the consolidated statements of financial condition when related to the same tax jurisdiction. At December 31, 2023, the Company had current income taxes receivable and payable of \$252 million and \$85 million, respectively, recorded in other assets and accounts payable and accrued liabilities, respectively. At December 31, 2022, the Company had current income taxes receivable and payable of \$354 million and \$92 million, respectively, recorded in other assets and accounts payable and accrued liabilities, respectively.

The following tabular reconciliation presents the total amounts of gross unrecognized tax benefits:

| (in millions) | 2 | 023 | 2022 | 2021 |
|--|----|-------|-------------|-------------|
| Balance at January 1 | \$ | 912 | \$ 1,022 | \$ 940 |
| Additions for tax positions of prior years | | 25 | 13 | 18 |
| Reductions for tax positions of prior years | | (22) | (75) | (4) |
| Additions based on tax positions related to current year | | 49 | 55 | 69 |
| Additions related to business combinations | | 16 | _ | _ |
| Settlements | | (231) | (103) | (1) |
| Balance at December 31 | \$ | 749 | \$ 912 | \$ 1,022 |

Included in the balance of unrecognized tax benefits at December 31, 2023, 2022 and 2021, respectively, are \$505 million, \$497 million and \$616 million of tax benefits that, if recognized, would affect the effective tax rate.

The Company recognizes interest and penalties related to income tax matters as a component of income tax expense. Related to the unrecognized tax benefits noted above, the Company accrued interest and penalties of \$(20) million during 2023 and in total, as of December 31, 2023, had recognized a liability for interest and penalties of \$140 million. The Company accrued interest and penalties of \$(40) million during 2022 and in total, as of December 31, 2022, had recognized a liability for interest and penalties of \$160 million. The Company accrued interest and penalties of \$36 million during 2021 and in total, as of December 31, 2021, had recognized a liability for interest and penalties of \$200 million.

BlackRock is subject to US federal income tax, state and local income tax, and foreign income tax in multiple jurisdictions. Tax years after 2015 remain open to US federal income tax examination.

During 2014 and 2019, the Internal Revenue Service commenced its examination of BlackRock's 2012 through 2015 tax years, for which the examination was concluded in 2023. During 2020 and 2021, the Internal Revenue Service commenced its examination of BlackRock's 2017 through 2018 tax years and 2019 tax year, respectively. During 2023, the Internal Revenue Service commenced its examination of BlackRock's 2016 tax year.

The Company is currently under audit in several state and local jurisdictions. The significant state and local income tax examinations are in New York State for tax years 2012 through 2020, for which 2012 through 2014 examination was concluded during 2023, and New York City for tax years 2012 through 2014. No open state and local tax examinations cover years earlier than 2012.

Upon conclusion of its examination, Her Majesty's Revenue and Customs ("HMRC") issued a closure notice during 2017 for various UK BlackRock subsidiaries for tax years 2009 and years after. At that time, the Company decided to pursue litigation for the tax matters included on such notice. During 2020, the Company received a favorable decision from the First Tier Tribunal ("FTT"), however, HMRC appealed to the Upper Tribunal ("UT") and the UT ruled in HMRC's favor, overturning the FTT's decision in July 2022. BlackRock appealed UT's decision to the UK Court of Appeal ("CoA") and the appeal hearing is scheduled for March 2024. BlackRock does not expect the ultimate resolution to result in a material impact to the consolidated financial statements.

From time to time, BlackRock may receive or be subject to tax authorities' assessments and challenges related to income taxes. BlackRock does not currently expect the ultimate resolution of any other existing matters to be material to the consolidated financial statements.

At December 31, 2023, it is reasonably possible the total amounts of unrecognized tax benefits will change within the next twelve months due to completion of tax authorities' exams or the expiration of statues of limitations. Management estimates that the existing liability for uncertain tax positions could decrease by approximately \$65 million to \$280 million within the next twelve months.

25. Earnings Per Share

The following table sets forth the computation of basic and diluted EPS for 2023, 2022 and 2021:

| (in millions, except shares and per share data) | 2023 | | | 2021 | |
|---|-------------|----|-------------|------|-------------|
| Net income attributable to BlackRock, Inc. | \$ 5,502 | \$ | 5,178 | \$ | 5,901 |
| Basic weighted-average shares outstanding | 149,327,558 | | 150,921,161 | | 152,236,047 |
| Dilutive effect of: | | | | | |
| Nonparticipating RSUs | 969,089 | | 1,119,829 | | 1,507,859 |
| Stock options | 409,804 | | 399,481 | | 660,451 |
| Total diluted weighted-average shares outstanding | 150,706,451 | | 152,440,471 | | 154,404,357 |
| Basic earnings per share | \$ 36.85 | \$ | 34.31 | \$ | 38.76 |
| Diluted earnings per share | \$ 36.51 | \$ | 33.97 | \$ | 38.22 |

For 2023, 194,240 shares primarily related to stock options were excluded from the calculation of EPS because to include them would have an anti-dilutive effect. The amount of anti-dilutive RSUs and stock options were immaterial for 2022 and 2021. Certain performance-based RSUs and options were excluded from diluted EPS calculation because the designated contingencies were not met for 2023, 2022 and 2021, respectively.

26. Segment Information

The Company's management directs BlackRock's operations as one business, the asset management business. The Company utilizes a consolidated approach to assess performance and allocate resources. As such, the Company operates in one business segment.

The following table illustrates total revenue for 2023, 2022 and 2021 by geographic region. These amounts are aggregated on a legal entity basis and do not necessarily reflect where the customer resides or affiliated services are provided.

| (in millions) | 2023 | 2022 | 2021 | |
|---------------|--------------|--------------|-------------|---|
| Revenue | | | | |
| Americas | \$ 11,899 | \$ 11,931 | \$ 12,39 | 9 |
| Europe | 5,209 | 5,164 | 6,10 | 5 |
| Asia-Pacific | 751 | 778 | 87 | 0 |
| Total revenue | \$ 17,859 | \$ 17,873 | \$ 19,37 | 4 |

See Note 16, Revenue, for further information on the Company's sources of revenue.

The following table illustrates long-lived assets that consist of goodwill and property and equipment at December 31, 2023 and 2022 by geographic region. These amounts are aggregated on a legal entity basis and do not necessarily reflect where the asset is physically located.

| (in millions) | 2023 | 2022 |
|-------------------------|--------------|--------------|
| Long-lived Assets | | · |
| Americas | \$ 15,017 | \$ 14,945 |
| Europe | 1,521 | 1,329 |
| Asia-Pacific | 98 | 98 |
| Total long-lived assets | \$ 16,636 | \$ 16,372 |

Americas is primarily comprised of the US, Latin America and Canada. Europe is primarily comprised of the UK, the Netherlands, Switzerland, France, Ireland and Luxembourg. Asia-Pacific is primarily comprised of Hong Kong, Australia, Japan and Singapore.

27. Subsequent Events

In January 2024, BlackRock announced that it had entered into a definitive agreement to acquire 100% of the business and assets of Global Infrastructure Management LLC (referred to herein as Global Infrastructure Partners ("GIP")), a leading independent infrastructure fund manager, for \$3 billion in cash and approximately 12 million shares of BlackRock common stock. Approximately 30% of the total consideration, all in stock, will be deferred and will be issued subject to the satisfaction of certain post-closing events. The Company intends to fund the cash consideration through \$3 billion of additional debt. The Company believes the combination of GIP with BlackRock's complementary infrastructure offerings will create a broad global infrastructure franchise with differentiated origination and asset management capabilities. The GIP Transaction is expected to close in the third quarter of 2024 subject to customary regulatory approvals and other closing conditions.

On January 12, 2024, the Company announced that the Board of Directors approved BlackRock's quarterly dividend of \$5.10 per share to be paid on March 22, 2024 to stockholders of record at the close of business on March 7, 2024.

The Company conducted a review for additional subsequent events and determined that no subsequent events had occurred that would require accrual or additional disclosures.

FORM ADV

UNIFORM APPLICATION FOR INVESTMENT ADVISER REGISTRATION AND REPORT BY EXEMPT REPORTING ADVISERS

| Prin | nary Business Name: \ | ANGUARD GROUP INC | | CRD Number: 105958 | | | | | | |
|------|---|---|--|---|--|--|--|--|--|--|
| Ann | ual Amendment - All S | ections | | Rev. 10/2021 | | | | | | |
| 3/2 | 7/2024 11:02:11 AM | | | | | | | | | |
| | | | | | | | | | | |
| WA | · | _ | ts or omissions may result in denial o | of your application, revocation of your registration, or criminal Form ADV General Instruction 4. | | | | | | |
| Iter | n 1 Identifying Inform | ation | | | | | | | | |
| | • | | - | entact you. If you are filing an <i>umbrella registration</i> , the les information to assist you with filing an <i>umbrella registration</i> . | | | | | | |
| A. | Your full legal name (i | f you are a sole proprietor, your DUP, INC. | last, first, and middle names): | | | | | | | |
| B. | (1) Name under which VANGUARD GROUP I | | isory business, if different from Item | 1.A. | | | | | | |
| | List on Section 1.B. of | ist on Section 1.B. of Schedule D any additional names under which you conduct your advisory business. | | | | | | | | |
| | (2) If you are using th | iis Form ADV to register more th | an one investment adviser under an | umbrella registration, check this box □ | | | | | | |
| | If you check this box, o | complete a Schedule R for each re | lying adviser. | | | | | | | |
| C. | name change is of | g a change in your legal name (I | tem 1.A.) or primary business name | (Item 1.B.(1)), enter the new name and specify whether the | | | | | | |
| D. | (1) If you are register | ed with the SEC as an investme | nt adviser, your SEC file number: 80 | 1-11953 | | | | | | |
| | (2) If you report to the SEC as an exempt reporting adviser, your SEC file number: | | | | | | | | | |
| | (3) If you have one or more Central Index Key numbers assigned by the SEC ("CIK Numbers"), all of your CIK numbers: CIK Number | | | | | | | | | |
| | 102909 | | | | | | | | | |
| | 102707 | | | | | | | | | |
| E. | (1) If you have a num | (1) If you have a number ("CRD Number") assigned by the FINRA's CRD system or by the IARD system, your CRD number: 105958 | | | | | | | | |
| | If your firm does not have a CRD number, skip this Item 1.E. Do not provide the CRD number of one of your officers, employees, or affiliates. | | | | | | | | | |
| | (2) If you have addition | onal <i>CRD</i> Numbers, your addition | al <i>CRD</i> numbers: | | | | | | | |
| | | | No Information Filed | | | | | | | |
| _ | Drive in al Office and Dia | as of Dualman | | | | | | | | |
| F. | Principal Office and Place (1) Address (do not u | | | | | | | | | |
| | Number and Stree | • | Number and Street 2: | | | | | | | |
| | 100 VANGUARD BI | | V26 | | | | | | | |
| | City: | State: | Country: | ZIP+4/Postal Code: | | | | | | |
| | MALVERN | Pennsylvania | United States | 19355 | | | | | | |
| | If this address is a | a private residence, check this b | ox: 🗖 | | | | | | | |
| | you are applying fo which you are app | or registration, or are registered, lying for registration or with whom g to the SEC as an exempt reporti | with one or more state securities auth n you are registered. If you are applyin | business, at which you conduct investment advisory business. If norities, you must list all of your offices in the state or states to ng for SEC registration, if you are registered only with the SEC, or experience of formula of the end of your states. | | | | | | |
| | (2) Days of week that | • | at your <i>principal office and place of b</i> | usiness: | | | | | | |
| | Normal business I 8:30AM - 5:30PM | nours at this location: | | | | | | | | |
| | (3) Telephone numbe 610-669-1000 | r at this location: | | | | | | | | |

(4) Facsimile number at this location, if any:

610-669-6600

| | | ber of offices, other than your <i>princip</i> recently completed fiscal year? | pal office and place of business | s, at which you conduct investment advisory business a | as of | , |
|----|--|---|--|--|------------|---------|
| G. | Mailing address if differen | t from your <i>principal office and place</i> of | of husiness address: | | | |
| 0. | Number and Street 1: | t from your principal office and place of | Number and Street 2: | | | |
| | City: | State: | Country: | ZIP+4/Postal Code: | | |
| | City. | State. | Country. | ZII +4/1 Ostal Gode. | | |
| | If this address is a private | e residence, check this box: 🗖 | | | | |
| Н. | If you are a sole proprieto | r, state your full residence address, | if different from your <i>principa</i> | of office and place of business address in Item 1.F.: | | |
| | Number and Street 1: | | Number and Street 2: | | | |
| | City: | State: | Country: | ZIP+4/Postal Code: | | |
| | | | | | Yes | No |
| I. | Do you have one or more LinkedIn)? | websites or accounts on publicly ava | ilable social media platforms | (including, but not limited to, Twitter, Facebook and | • | 0 |
| | If a website address serves addresses for all of the other available social media platfo | s as a portal through which to access c er information. You may need to list m | other information you have pu nore than one portal address. I ntent. Do not provide the indivi | cly available social media platforms on Section 1.1. of Sch blished on the web, you may list the portal without listing Do not provide the addresses of websites or accounts on idual electronic mail (e-mail) addresses of employees or to | g publi | |
| | Chief Compliance Officer | | | | | |
| J. | | contact information of your Chief Cor Compliance Officer, if you have one. | • | n <i>exempt reporting adviser</i> , you must provide the conta em 1.K. below. | ct | |
| | Name: | • | Other titles, if any: | | | |
| | Telephone number: | | Facsimile number, if any: | | | |
| | Number and Street 1: | | Number and Street 2: | | | |
| | City: | State: | Country: | ZIP+4/Postal Code: | | |
| | Electronic mail (e-mail) ad | ddress, if Chief Compliance Officer ha | is one: | | | |
| | | npany Act of 1940 that you advise formber (if any): | | you, a <i>related person</i> or an investment company regist officer services to you, provide the <i>person's</i> name and | | |
| K. | • • | tact Person: If a person other than t may provide that information here. | he Chief Compliance Officer | is authorized to receive information and respond to qu | ıestic | ons |
| | Name: | | Titles: | | | |
| | Telephone number: | | Facsimile number, if any: | | | |
| | Number and Street 1: | | Number and Street 2: | | | |
| | City: | State: | Country: | ZIP+4/Postal Code: | | |
| | Electronic mail (e-mail) a | ddress, if contact person has one: | | | | |
| L. | • | all of the books and records you are ur <i>principal office and place of busines</i> | · · | ion 204 of the Advisers Act, or similar state law, | Yes © | No O |
| | If "yes," complete Section | 1.L. of Schedule D. | | | ., | |
| M. | Are you registered with a | foreign financial regulatory authority? | | | Yes O | No ⊙ |
| | • | registered with a foreign financial regu s," complete Section 1.M. of Schedule . | | nave an affiliate that is registered with a foreign financial | | |
| | | | | | Yes | No |
| N. | Are you a public reporting | company under Sections 12 or 15(d) |) of the Securities Exchange | Act of 1934? | 0 | • |
| | | | | | Yes | No |
| Ο. | • | more in assets on the last day of you imate amount of your assets: \$10 billion | ur most recent fiscal year? | | | 0 |

J.

| | y, "assets" refers to your total asse balance sheet for your most recent | | manage on behalf of clients. Determine your total as. | ssets using |
|---|---|---------------------------------|---|----------------|
| P. Provide your <i>Legal Entity Iden</i> 5493002789CX3L0CJP65 | • | 3 | | |
| A legal entity identifier is a uni identifier. | que number that companies use t | o identify each other in the fi | nancial marketplace. You may not have a <i>legal entit</i> | ^t y |
| SECTION 1.B. Other Business Na | mes | | | |
| | | No Information Filed | | |
| | | | | |
| SECTION 1.F. Other Offices | | | | |
| You must complete a separate Sc | | ation. If you are applying for | usiness, at which you conduct investment advisory be SEC registration, if you are registered only with the ers of employees). | |
| Number and Street 1: 14321 N. NORTHSIGHT BLVD | | Number and Street 2: | | |
| City: SCOTTSDALE | State: Arizona | Country: United States | ZIP+4/Postal Code: 85260 | |
| If this address is a private reside | nce, check this box: \Box | | | |
| Telephone Number: 480-713-8456 | Facsimile Num | ber, if any: | | |
| | red to be registered with FINRA office Registration Form (Form BR), | | s a branch office location for a broker-dealer or inve h Number here: | estment |
| How many <i>employees</i> perform inv | vestment advisory functions from | this office location? | | |
| Are other business activities cond | | ck all that apply) | | |
| ✓ (1) Broker-dealer (registered of (2) Bank (including a separate | | on of a hank) | | |
| (3) Insurance broker or agent | · · | on or a barney | | |
| ☐ (4) Commodity pool operator of | | ether registered or exempt fro | om registration) | |
| ☑ (5) Registered municipal advise | or | · | | |
| lacksquare (6) Accountant or accounting fi | rm | | | |
| ☐ (7) Lawyer or law firm | | | | |
| Describe any other investment-re | elated business activities conducted | d from this office location: | | |
| SECTION 1.1. Website Addresses | • | | | |
| | | • | platforms where you control the content (including n 1.I. for each website or account on a publicly ava | |
| Address of Website/Account on Po | ublicly Available Social Media Platf | form: HTTPS://INSTAGRAM.(| COM/VANGUARDGROUP | |
| Address of Website/Account on Po | ublicly Available Social Media Platf | form: HTTPS://WWW.INSTAG | GRAM.COM/LIFEATVANGUARD | |

 $_{\hbox{\scriptsize C}}$ \$10 billion to less than \$50 billion

C \$50 billion or more

Address of Website/Account on Publicly Available Social Media Platform: HTTPS://WWW.YOUTUBE.COM/VANGUARD Address of Website/Account on Publicly Available Social Media Platform: HTTPS://TWITTER.COM/VANGUARD_INSTL Address of Website/Account on Publicly Available Social Media Platform: HTTPS://WWW.LINKEDIN.COM/COMPANY/VANGUARD-INSTITUTIONAL-INVESTING HTTPS://WWW.LINKEDIN.COM/IN/MORTIMERJBUCKLEY Address of Website/Account on Publicly Available Social Media Platform: Address of Website/Account on Publicly Available Social Media Platform: HTTPS://WWW.LINKEDIN.COM/COMPANY/VANGUARD Address of Website/Account on Publicly Available Social Media Platform: HTTPS://PRESSROOM.VANGUARD.COM/#/ Address of Website/Account on Publicly Available Social Media Platform: HTTPS://WWW.VANGUARDJOBS.COM Address of Website/Account on Publicly Available Social Media Platform: HTTPS://WWW.LINKEDIN.COM/COMPANY/VANGUARD-ADVISOR-SERVICES Address of Website/Account on Publicly Available Social Media Platform: HTTPS://WWW.VANGUARD.COM Address of Website/Account on Publicly Available Social Media Platform: HTTPS://WWW.FACEBOOK.COM/VANGUARD Address of Website/Account on Publicly Available Social Media Platform: HTTPS://TWITTER.COM/VANGUARD_GROUP Address of Website/Account on Publicly Available Social Media Platform: HTTPS://TWITTER.COM/VANGUARD_FA Address of Website/Account on Publicly Available Social Media Platform: https://www.pinterest.com/Vanguard_Group/ Address of Website/Account on Publicly Available Social Media Platform: https://www.reddit.com/user/VanguardGroup/ Address of Website/Account on Publicly Available Social Media Platform: https://marketing.vanguard.com SECTION 1.L. Location of Books and Records

Complete the following information for each location at which you keep your books and records, other than your principal office and place of business. You must complete a separate Schedule D, Section 1.L. for each location.

Name of entity where books and records are kept:

IRON MOUNTAIN INC

Number and Street 1: Number and Street 2:

2500 HENDERSON DRIVE

City: Country: ZIP+4/Postal Code: State: 19079

SHARON HILL **United States** Pennsylvania

| If this address is a private residence | e, check this box: | | | |
|--|----------------------|-----------------------------------|-------------------------------------|-------|
| Telephone Number: 610-725-0200 X3008 | Facsimile number, | if any: | | |
| This is (check one): O one of your branch offices or affile | liates. | | | |
| a third-party unaffiliated records | eeper. | | | |
| O other. | | | | |
| Briefly describe the books and recor STORAGE OF CLIENT AND OTHER FIL PROGRAMMING CODE. | | ORRESPONDENCE, RECOMMENDA | ATIONS AND TRANSACTIONS, IN ADDITIC | ON TO |
| Name of entity where books and red AMAZON.COM, INC. | cords are kept: | | | |
| Number and Street 1: 410 TERRY AVENUE NORTH | | Number and Street 2: | | |
| City: SEATTLE | State: Washington | Country: United States | ZIP+4/Postal Code: 98109 | |
| If this address is a private residence | e, check this box: | | | |
| Telephone Number: 206-266-1000 | Facsimile number, | if any: | | |
| This is (check one): O one of your branch offices or affile | liates. | | | |
| o a third-party unaffiliated recordk | eeper. | | | |
| other. | | | | |
| Briefly describe the books and recor STORAGE OF CLIENT AND OTHER FIL PROGRAMMING CODE. | | ORRESPONDENCE, RECOMMENDA | ATIONS AND TRANSACTIONS, IN ADDITIO | ON TO |
| Name of entity where books and red SMARSH, INC. | cords are kept: | | | |
| Number and Street 1: 851 SW 6TH AVE | | Number and Street 2: SUITE 800 | | |
| City: PORTLAND | State: Oregon | Country: United States | ZIP+4/Postal Code: 97204 | |
| If this address is a private residence | e, check this box: | | | |
| Telephone Number: 866-762-7741 | Facsimile numl | oer, if any: | | |
| This is (check one): O one of your branch offices or affile | liates. | | | |
| o a third-party unaffiliated recordk | eeper. | | | |
| other. | | | | |
| Briefly describe the books and recor RETENTION OF ELECTRONIC MESSAGE | | | | |

| | No Information Filed | | | | | | | | | | |
|-------------|--------------------------------------|---|--|--|---|---|--|--|--|--|--|
| | | | | | | | | | | | |
| | | | egistration/Reporting | | | | | | | | |
| SEC r | egi | strati | | dating amendment to your SEC registr | register with the SEC. Complete this It ration. If you are filing an <i>umbrella regi</i> | | | | | | |
| ć | ann | ual u _l | odating amendment to your SE | | e of the Items 2.A.(1) through 2.A.(12) eligible to register with the SEC, check espond to each of these items. | | | | | | |
|) | You | (the | adviser): | | | | | | | | |
| | ~ | (1) | are a large advisory firm the | at either: | | | | | | | |
| | | | (a) has regulatory assets und | der management of \$100 million (in U | .S. dollars) or more; or | | | | | | |
| | | | (b) has regulatory assets und amendment and is registed | | 5. dollars) or more at the time of filing | its most recent <i>annual updating</i> | | | | | |
| | | (2) | are a mid-sized advisory fir million (in U.S. dollars) and y | | nanagement of \$25 million (in U.S. dol | lars) or more but less than \$100 | | | | | |
| | | | (a) not required to be registed of business; or | ered as an adviser with the <i>state secu</i> | urities authority of the state where you | maintain your principal office and place | | | | | |
| | | | (b) not subject to examination | on by the state securities authority of t | the state where you maintain your <i>prin</i> | ncipal office and place of business; | | | | | |
| | | | Click HERE for a list of sta authority. | tes in which an investment adviser, if r | egistered, would not be subject to exam | nination by the state securities | | | | | |
| | | (3) | Reserved | | | | | | | | |
| | | (4) | have your principal office and | place of business outside the United S | States; | | | | | | |
| | V | (5) | are an investment adviser (| or subadviser) to an investment cor | mpany registered under the Investmer | nt Company Act of 1940; | | | | | |
| | | (6) | | | e a business development company particles, and you have at least \$25 million | | | | | | |
| | | (7) | are a pension consultant with in rule 203A-2(a); | th respect to assets of plans having a | in aggregate value of at least \$200,00 | 0,000 that qualifies for the exemption | | | | | |
| | | (8) | | • • | <i>lled</i> by, or is under common <i>control</i> witl <i>ess</i> is the same as the registered advi | | | | | | |
| | | | If you check this box, complet | e Section 2.A.(8) of Schedule D. | | | | | | | |
| | | (9) | are an adviser relying on rul | e 203A-2(c) because you expect to b e | e eligible for SEC registration within | 120 days; | | | | | |
| | | | If you check this box, complete | e Section 2.A.(9) of Schedule D. | | | | | | | |
| | | (10) | are a multi-state adviser that | at is required to register in 15 or more | e states and is relying on rule 203A-2(| d); | | | | | |
| | | | If you check this box, complet | e Section 2.A.(10) of Schedule D. | | | | | | | |
| | | (11) | are an Internet adviser rely | ing on rule 203A-2(e); | | | | | | | |
| | | (12) | have received an SEC order | exempting you from the prohibition a | against registration with the SEC; | | | | | | |
| | | | If you check this box, complet | e Section 2.A.(12) of Schedule D. | | | | | | | |
| | | (13) | are no longer eligible to rem | nain registered with the SEC. | | | | | | | |
| | | | | | | | | | | | |
| | | | | and State Reporting by Exempt Rep | orting Advisers ate securities authorities a copy of the | Form ADV and any amondments they | | | | | |
| f (1 | file of re ike add to tl | with eport to re itiona he SE | the SEC. These are called <i>noti</i> s and any amendments they feceive notice of this and all subal state(s), check the box(es) | ce filings. In addition, exempt reporting ile with the SEC. If this is an initial apposequent filings or reports you submit next to the state(s) that you would like | g advisers may be required to provide suplication or report, check the box(es) to the SEC. If this is an amendment to the to receive notice of this and all substitutings or reports from going to state(s) | state securities authorities with a copy next to the state(s) that you would be direct your notice filings or reports to sequent filings or reports you submit | | | | | |
| · | , | • (| , | | | | | | | | |
| | Jur | isdict | tions | | | | | | | | |
| | | AL | | □ IL | □ NE | □ sc | | | | | |
| | | AK | | □ IN | □ NV | □ SD | | | | | |
| | | ΑZ | | □ IA | □ NH | □ TN | | | | | |

| □ AR □ CA | L KS □ KY | I NM | I TX □ UT | | | | | |
|--|---|--|--|--|--|--|--|--|
| □ со | □ LA | □ _{NY} | □ VT | | | | | |
| □ ст | □ ME | □ NC | □ VI | | | | | |
| □ DE | □ MD | □ _{ND} | □ VA | | | | | |
| □ DC | □ MA | □ он | □ WA | | | | | |
| □ FL | □ MI | □ ок | □ wv | | | | | |
| □ GA | □ MN | □ OR | □ wi | | | | | |
| □ GU | □ MS | □ PA | □ wy | | | | | |
| □нг | □ мо | □ PR | | | | | | |
| □ ID | □ MT | □ RI | | | | | | |
| | | om going to a state that currently receives must be filed before the end of the year (D | | | | | | |
| SECTION 2.A.(8) Related Adviser | | | | | | | | |
| If you are relying on the exemption in rule with an investment adviser that is register provide the following information: | • | · · | • | | | | | |
| Name of Registered Investment Adviser | | | | | | | | |
| CRD Number of Registered Investment Adv | riser riser | | | | | | | |
| SEC Number of Registered Investment Adv | riser | | | | | | | |
| SECTION 2.A.(9) Investment Adviser Exp | pecting to be Fligible for Commissi | on Registration within 120 Days | | | | | | |
| If you are relying on rule 203A-2(c), the exwithin 120 days, you are required to make deemed to have made the required representation. I am not registered or required to be represented in the second of the secon | e certain representations about your sentations. You must make both of the egistered with the SEC or a state seafter the date my registration with the stration if, on the 120th day after my | eligibility for SEC registration. By checki these representations: curities authority and I have a reasonable he SEC becomes effective. | ng the appropriate boxes, you will be expectation that I will be eligible to | | | | | |
| SECTION 2.A.(10) Multi-State Adviser | | | | | | | | |
| If you are relying on rule 203A-2(d), the mabout your eligibility for SEC registration. | · | | · | | | | | |
| If you are applying for registration as an in | | • | | | | | | |
| I have reviewed the applicable state ar investment adviser with the state secur | | that I am required by the laws of 15 or | more states to register as an | | | | | |
| I undertake to withdraw from SEC regis states to register as an investment adv | | | required by the laws of fewer than 15 | | | | | |
| If you are submitting your <i>annual updating amendment</i> , you must make this representation: Within 90 days prior to the date of filing this amendment, I have reviewed the applicable state and federal laws and have concluded that I am required by the laws of at least 15 states to register as an investment adviser with the <i>state securities authorities</i> in those states. | | | | | | | | |
| | | | | | | | | |
| SECTION 2.A. (12) SEC Exemptive Order | | | 4 | | | | | |
| If you are relying upon an SEC order exem | pting you from the prohibition on re | gistration, provide the following informat | ion: | | | | | |
| Application Number: 803- | | | | | | | | |
| Date of <i>order</i> : | | | | | | | | |
| | | | | | | | | |

| If y | ou are | filing an umbrella registration, the information in Item 3 should be provided for the filing adviser only. |
|------|-------------|--|
| A. | How | are you organized? |
| | \odot | Corporation |
| | 0 | Sole Proprietorship |
| | 0 | Limited Liability Partnership (LLP) |
| | 0 | Partnership |
| | 0 | Limited Liability Company (LLC) |
| | _ | Limited Partnership (LP) |
| | _ | Other (specify): |
| | ~ | |
| | If yo | u are changing your response to this Item, see Part 1A Instruction 4. |
| B. | | hat month does your fiscal year end each year? EMBER |
| C. | Unde | er the laws of what state or country are you organized? |
| | Sta | te Country |
| | Pen | nsylvania United States |
| | | u are a partnership, provide the name of the state or country under whose laws your partnership was formed. If you are a sole proprietor, provide the e of the state or country where you reside. |
| | If yo | u are changing your response to this Item, see Part 1A Instruction 4. |
| | | |
| Ite | ท 4 Sเ | uccessions |
| | | Yes No |
| A. | - | you, at the time of this filing, succeeding to the business of a registered investment adviser, including, for example, a change of your ture or legal status (e.g., form of organization or state of incorporation)? |
| | If "ye | es", complete Item 4.B. and Section 4 of Schedule D. |
| B. | Date | of Succession: (MM/DD/YYYY) |
| | If vo | u have already reported this succession on a previous Form ADV filing, do not report the succession again. Instead, check "No." See Part 1A Instruction 4. |
| | 11 yo | a have all eady reported this succession on a previous rount 100 ming, do not report the succession again. Instead, check inc. See hart in mist detion 4. |
| SEC | TLON | 4 Successions |
| SEC | TION | 4 Successions |
| | | No Information Filed |
| | | |
| | | Iformation About Your Advisory Business - Employees, Clients, and Compensation |
| | • | es to this Item help us understand your business, assist us in preparing for on-site examinations, and provide us with data we use when making y policy. Part 1A Instruction 5.a. provides additional guidance to newly formed advisers for completing this Item 5. |
| En | nploye | ees |
| | | |
| _ | | e organized as a sole proprietorship, include yourself as an employee in your responses to Item 5.A. and Items 5.B.(1), (2), (3), (4), and (5). If an eperforms more than one function, you should count that employee in each of your responses to Items 5.B.(1), (2), (3), (4), and (5). |
| Α. | Appr 980 | oximately how many employees do you have? Include full- and part-time employees but do not include any clerical workers. |
| B. | (1) | Approximately how many of the <i>employees</i> reported in 5.A. perform investment advisory functions (including research)? 445 |
| | (2) | Approximately how many of the <i>employees</i> reported in 5.A. are registered representatives of a broker-dealer? |
| | (3) | Approximately how many of the <i>employees</i> reported in 5.A. are registered with one or more <i>state securities authorities</i> as <i>investment adviser representatives</i> ? |
| | | |

Item 3 Form of Organization

- (4) Approximately how many of the *employees* reported in 5.A. are registered with one or more *state securities authorities* as *investment adviser representatives* for an investment adviser other than you?0
 - (5) Approximately how many of the *employees* reported in 5.A. are licensed agents of an insurance company or agency?
 - (6) Approximately how many firms or other *persons* solicit advisory *clients* on your behalf?

In your response to Item 5.B.(6), do not count any of your employees and count a firm only once – do not count each of the firm's employees that solicit on your behalf.

Clients

In your responses to Items 5.C. and 5.D. do not include as "clients" the investors in a private fund you advise, unless you have a separate advisory relationship with those investors.

- C. (1) To approximately how many *clients* for whom you do not have regulatory assets under management did you provide investment advisory services during your most recently completed fiscal year?
 - (2) Approximately what percentage of your *clients* are non-*United States persons*? 0%
- D. For purposes of this Item 5.D., the category "individuals" includes trusts, estates, and 401(k) plans and IRAs of individuals and their family members, but does not include businesses organized as sole proprietorships.

The category "business development companies" consists of companies that have made an election pursuant to section 54 of the Investment Company Act of 1940. Unless you provide advisory services pursuant to an investment advisory contract to an investment company registered under the Investment Company Act of 1940, do not answer (1)(d) or (3)(d) below.

Indicate the approximate number of your *clients* and amount of your total regulatory assets under management (reported in Item 5.F. below) attributable to each of the following type of *client*. If you have fewer than 5 *clients* in a particular category (other than (d), (e), and (f)) you may check Item 5.D.(2) rather than respond to Item 5.D.(1).

The aggregate amount of regulatory assets under management reported in Item 5.D.(3) should equal the total amount of regulatory assets under management reported in Item 5.F.(2)(c) below.

If a *client* fits into more than one category, select one category that most accurately represents the *client* to avoid double counting *clients* and assets. If you advise a registered investment company, business development company, or pooled investment vehicle, report those assets in categories (d), (e), and (f) as applicable.

| Type of <i>Client</i> | (1) Number of Client(s) | (2) Fewer than 5 Clients | (3) Amount of Regulatory Assets under Management |
|---|----------------------------|--------------------------|--|
| (a) Individuals (other than high net worth individuals) | 0 | | \$ 0 |
| (b) High net worth individuals | 0 | | \$ 0 |
| (c) Banking or thrift institutions | 0 | | \$ 0 |
| (d) Investment companies | 208 | | \$ 7,909,484,282,194 |
| (e) Business development companies | 0 | | \$ 0 |
| (f) Pooled investment vehicles (other than investment companies and business development companies) | 1 | | \$ 276,012,482 |
| (g) Pension and profit sharing plans (but not the plan participants or government pension plans) | 0 | | \$ O |
| (h) Charitable organizations | 0 | | \$ 0 |
| (i) State or municipal <i>government entities</i> (including government pension plans) | 0 | | \$ O |
| (j) Other investment advisers | 0 | | \$ 0 |
| (k) Insurance companies | 0 | | \$ 0 |
| (I) Sovereign wealth funds and foreign official institutions | 0 | | \$ 0 |
| (m) Corporations or other businesses not listed above | 0 | | \$ 0 |
| (n) Other: | 0 | | \$ 0 |

Compensation Arrangements

| F | You are comp | pensated for | vour inve | estment a | advisorv | services h | v (| check a | II that | apply). |
|----|--------------|--------------|-----------|-----------|------------|-------------|-----|----------|---------|---------|
| ∟. | Tou are comp | Jensalea ioi | your mive | Julionic | ad visoi y | JUL VICUS K | , y | CITCON a | n that | арргу). |

- ☑ (1) A percentage of assets under your management
- (2) Hourly charges
- \square (3) Subscription fees (for a newsletter or periodical)

| | (4) (5) | Fixed fees (other than s Commissions | ubscription rees) | | | | |
|------------|-------------|--|----------------------------|--------------------------------|-------------------------|---|---------------------------|
| | (6) | Performance-based fees | | | | | |
| V | (7) | Other (specify): ALLOCA | TED SHARE OF VA | NGUARD'S TOTAL COS | T OF OPERATIONS | | |
| | | | | | | | |
| | | | | | | | |
| | | nation About Your Adviso | | gulatory Assets Unde | r Management | | |
| Regula | tory A | ssets Under Managemen | nt | | | | |
| - (1) | _ | | | | | | Yes No |
| F. (1) | 3 | ou provide continuous and | | 3 | • | | ⊙ ○ |
| (2) | If yes | s, what is the amount of y | your regulatory as | _ | ent and total number | | |
| | | | | U.S. Dollar Amount | | Total Number of Accounts | |
| | Discr | retionary: | (a) | \$ 7,909,760,294,676 | Ó | (d) 209 | |
| | | Discretionary: | (b) | \$ 0 | | (e) 0 | |
| | Tota | l: | (c) | \$ 7,909,760,294,676 | Ś | (f) 209 | |
| | | 1A Instruction 5.b. explain pleting this Item. | ns how to calculate | your regulatory assets | under management. | You must follow these instructions caref | ully when |
| (3) | What | is the approximate amou | unt of your total re | gulatory assets under | management (repor | ted in Item 5.F.(2)(c) above) attributak | ole to <i>clients</i> who |
| | | on- <i>United States persons</i> | ? | | | | |
| | \$ 276 | 5,012,482 | | | | | |
| Itom E I | Inform | nation About Your Adviso | ory Pusinoss Ad | visory Activities | | | |
| Advisor | | | ory business - Au | visory Activities | | | |
| | - | e(s) of advisory services | do vou provide? (| hack all that annly | | | |
| O. WI | • • | Financial planning services | | nicek ali that appry. | | | |
| | (2) | Portfolio management for | | or small businesses | | | |
| V | | _ | | | usiness development | companies" that have made an electio | n pursuant to |
| C 7 | | section 54 of the Invest | | • | | | |
| ₽ V | (4) | Portfolio management for | · | | · | nies) <i>clients</i> (other than registered investmer | at companies and |
| | (5) | other pooled investmen | | iei tiiaii siiiaii busiiles | ses) or institutional (| chents (other than registered investmen | it companies and |
| | (6) | Pension consulting serv | • | | | | |
| ₽ | (7) | Selection of other advise | ers (including <i>priv</i> | ate fund managers) | | | |
| V | (8) | Publication of periodical | | | | | |
| | (9) (10) | Security ratings or pricir Market timing services | ng services | | | | |
| | | Educational seminars/w | orkshops | | | | |
| | | Other(specify): | | | | | |
| Inv | /estme | · · · | including as a suba | dviser. If you check Ite | em 5.G.(3), report the | ry contract to an investment company re 811 or 814 number of the investment co | - |
| H. If y | you pro | ovide financial planning se | ervices, to how ma | any <i>clients</i> did you pro | vide these services d | uring your last fiscal year? | |
| 0 | 0 | | | | | | |
| 0 | 1 - 1 | 0 | | | | | |
| O | 11 - | 25 | | | | | |
| 0 | 26 - | 50 | | | | | |
| 0 | 51 - | 100 | | | | | |
| 0 | 101 | - 250 | | | | | |
| 0 | 251 | - 500 | | | | | |
| 0 | More | e than 500 | | | | | |
| | | ore than 500, how many? | | | | | |
| | (rou | nd to the nearest 500) | | | | | |
| | | | | | | | |
| • | _ | esponses to this Item 5.H. e investors. | , do not include as | "clients" the investors | in a private fund you | advise, unless you have a separate advis | , |
| | | | | | | | Yes No |
| | 3 | ou participate in a <i>wrap fe</i> | , 3 | | | | 0 0 |
| (2) | If you | ı participate in a <i>wrap fee</i> | program, what is | the amount of your re | gulatory assets unde | r management attributable to acting as | 3: |
| | | onsor to a wrap fee progra | am | | | | |
| | \$ | | | | | | |

| | (b) portfolio manager for a <i>wrap fee program</i> ? | | | |
|----|--|----------|-----------|---|
| | \$ (c) <i>sponsor</i> to and portfolio manager for the same <i>wrap fee program</i> ? \$ | | | |
| | If you report an amount in Item 5.1.(2)(c), do not report that amount in Item 5.1.(2)(a) or Item 5.1.(2)(b). | | | |
| | If you are a portfolio manager for a wrap fee program, list the names of the programs, their sponsors and related information in Section 5.1.(2) of Sch | nedule | D. | |
| | If your involvement in a wrap fee program is limited to recommending wrap fee programs to your clients, or you advise a mutual fund that is offered wrap fee program, do not check Item 5.I.(1) or enter any amounts in response to Item 5.I.(2). | J | | |
| ١. | (1) In response to Item 4.B. of Part 2A of Form ADV, do you indicate that you provide investment advice only with respect to limited types of investments? | Yes Ö | . No ⊙ | |
| | (2) Do you report <i>client</i> assets in Item 4.E. of Part 2A that are computed using a different method than the method used to compute your regulatory assets under management? | 0 | • | |
| ζ. | Separately Managed Account Clients | | | |
| | (1) Do you have regulatory assets under management attributable to <i>clients</i> other than those listed in Item 5.D.(3)(d)-(f) (separately managed account <i>clients</i>)? | Yes O | o No O | |
| | If yes, complete Section 5.K.(1) of Schedule D. | | | |
| | (2) Do you engage in borrowing transactions on behalf of any of the separately managed account <i>clients</i> that you advise? If yes, complete Section 5.K.(2) of Schedule D. | 0 | 0 | |
| | (3) Do you engage in derivative transactions on behalf of any of the separately managed account clients that you advise? | 0 | 0 | |
| | If yes, complete Section 5.K.(2) of Schedule D. | | | |
| | (4) After subtracting the amounts in Item 5.D.(3)(d)-(f) above from your total regulatory assets under management, does any custodian hold ten percent or more of this remaining amount of regulatory assets under management? If yes, complete Section 5.K.(3) of Schedule D for each custodian. | 0 | 0 | |
| | Marketing Activities | | | |
| | | Yes | No | , |
| | (1) Do any of your advertisements include: | | | |
| | (a) Performance results? | 0 | • | |
| | (b) A reference to specific investment advice provided by you (as that phrase is used in rule 206(4)-1(a)(5))? | 0 | • | |
| | (c) Testimonials (other than those that satisfy rule 206(4)-1(b)(4)(ii))? | 0 | • | |
| | (d) Endorsements (other than those that satisfy rule 206(4)-1(b)(4)(ii))? | 0 | • | |
| | (e) Third-party ratings? | 0 | • | |
| | (2) If you answer "yes" to L(1)(c), (d), or (e) above, do you pay or otherwise provide cash or non-cash compensation, directly or indirectly, in connection with the use of <i>testimonials</i> , <i>endorsements</i> , or <i>third-party ratings</i> ? | 0 | 0 | |
| | (3) Do any of your advertisements include hypothetical performance? | 0 | • | |
| | (4) Do any of your advertisements include predecessor performance? | 0 | • | |
| | | | | _ |
| FC | CTION 5.G.(3) Advisers to Registered Investment Companies and Business Development Companies | | | |

SECTION 5.G.(3) Advisers to Registered Investment Companies and Business Development Companie

If you check Item 5.G.(3), what is the SEC file number (811 or 814 number) of each of the registered investment companies and business development companies to which you act as an adviser pursuant to an advisory contract? You must complete a separate Schedule D Section 5.G.(3) for each registered investment company and business development company to which you act as an adviser.

SEC File Number

811 - 00121 Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or business development company that you advise. No Information Filed SEC File Number 811 - 00834 Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or business development company that you advise. No Information Filed SEC File Number 811 - 01027 Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or business development company that you advise. No Information Filed SEC File Number 811 - 01530 Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or business development company that you advise. No Information Filed SEC File Number 811 - 01766 Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or business development company that you advise. No Information Filed

SEC File Number 811 - 02368

Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or

| business development company that you advise. |
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| No Information Filed |
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| CEC Ella Mumah an |
| SEC File Number 811 - 02554 |
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| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. |
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| SEC File Number 811 - 02652 |
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| Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or |
| business development company that you advise. |
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| SEC File Number |
| 811 - 02687 |
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| Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or |
| business development company that you advise. |
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| SEC File Number |
| 811 - 02968 |
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| Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or |
| business development company that you advise. |
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| SEC File Number |
| 811 - 0296899 |
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| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or |

No Information Filed

| SEC File Number |
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| 811 - 03916 |
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| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. |
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| No Information Filed |
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| SEC File Number |
| 811 - 03919 |
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| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or |
| business development company that you advise. |
| No Information Filed |
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| SEC File Number 811 - 04098 |
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| Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or |
| business development company that you advise. |
| No Information Filed |
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| SEC File Number 811 - 04474 |
| 811 - 04474 |
| Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or |
| business development company that you advise. |
| No Information Filed |
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| SEC File Number |
| 811 - 04526 |
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| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. |
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| No Information Filed |
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| SEC File Number 811 - 04570 |
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| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. |
| No Information Filed |
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| SEC File Number 811 - 04571 |
| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. |
| No Information Filed |
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| SEC File Number 811 - 04681 |
| Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or |
| business development company that you advise. |
| No Information Filed |
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| SEC File Number |
| 811 - 05340 |
| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. |
| No Information Filed |
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| SEC File Number 811 - 05445 |
| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. |
| No Information Filed |
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| SEC File Number |

811 - 05628

| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. | | | | | | |
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| No Information Filed | | | | | | |
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| SEC File Number 811 - 05962 | | | | | | |
| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. | | | | | | |
| No Information Filed | | | | | | |
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| SEC File Number 811 - 05972 | | | | | | |
| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. | | | | | | |
| No Information Filed | | | | | | |
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| SEC File Number 811 - 06083 | | | | | | |
| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. | | | | | | |
| No Information Filed | | | | | | |
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| SEC File Number 811 - 06093 | | | | | | |
| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. | | | | | | |
| No Information Filed | | | | | | |
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| SEC File Number 811 - 07043 | | | | | | |
| Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or | | | | | | |

business development company that you advise.

| No Information Filed |
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| SEC File Number |
| 811 - 07175 |
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| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. |
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| No Information Filed |
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| SEC File Number |
| 811 - 07239 |
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| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. |
| business development company that you advise. |
| No Information Filed |
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| SEC File Number |
| 811 - 07443 |
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| Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or |
| business development company that you advise. |
| No Information Filed |
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| SEC File Number 811 - 07803 |
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| Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or |
| business development company that you advise. |
| No Information Filed |
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| SEC File Number |
| 811 - 09005 |
| Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or |
| business development company that you advise. |
| No Information Filed |
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| SEC File Number 811 - 21478 |
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| Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or business development company that you advise. |
| No Information Filed |
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| SEC File Number 811 - 22114 |
| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. |
| No Information Filed |
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| SEC File Number 811 - 22619 |
| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. |
| No Information Filed |
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| SEC File Number 811 - 58431 |
| Provide the regulatory assets under management of all <i>parallel managed accounts</i> related to a registered investment company (or series thereof) or business development company that you advise. |
| No Information Filed |
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| |
| SECTION 5.I.(2) Wrap Fee Programs |
| No Information Filed |
| SECTION 5.K.(1) Separately Managed Accounts |
| After subtracting the amounts reported in Item 5.D.(3)(d)-(f) from your total regulatory assets under management, indicate the approximate percentage of |

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

If you are a subadviser to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise.

End of year refers to the date used to calculate your regulatory assets under management for purposes of your annual updating amendment. Mid-year is the

this remaining amount attributable to each of the following categories of assets. If the remaining amount is at least \$10 billion in regulatory assets under management, complete Question (a). If the remaining amount is less than \$10 billion in regulatory assets under management, complete Question (b).

date six months before the end of year date. Each column should add up to 100% and numbers should be rounded to the nearest percent.

Investments in derivatives, registered investment companies, business development companies, and pooled investment vehicles should be reported in those categories. Do not report those investments based on related or underlying portfolio assets. Cash equivalents include bank deposits, certificates of deposit, bankers' acceptances and similar bank instruments.

Some assets could be classified into more than one category or require discretion about which category applies. You may use your own internal methodologies and the conventions of your service providers in determining how to categorize assets, so long as the methodologies or conventions are consistently applied and consistent with information you report internally and to current and prospective clients. However, you should not double count assets, and your responses must be consistent with any instructions or other guidance relating to this Section.

| Asse | et Type | Mid-year | End of year |
|--------|--|----------|-------------|
| (i) | Exchange-Traded Equity Securities | % | % |
| (ii) | Non Exchange-Traded Equity Securities | % | % |
| (iii) | U.S. Government/Agency Bonds | % | % |
| (iv) | U.S. State and Local Bonds | % | % |
| (v) | Sovereign Bonds | % | % |
| (vi) | Investment Grade Corporate Bonds | % | % |
| (vii) | Non-Investment Grade Corporate Bonds | % | % |
| (viii) | Derivatives | % | % |
| (ix) | x) Securities Issued by Registered Investment Companies or Business Development Companies | | % |
| (x) | Securities Issued by Pooled Investment Vehicles (other than Registered Investment Companies or Business Development Companies) | % | % |
| (xi) | Cash and Cash Equivalents | % | % |
| (xii) | Other | % | % |

Generally describe any assets included in "Other"

|) Ass | et Type | End of year | | | | | | | |
|--------|--|-------------|--|--|--|--|--|--|--|
| (i) | (i) Exchange-Traded Equity Securities | | | | | | | | |
| (ii) | (ii) Non Exchange-Traded Equity Securities | | | | | | | | |
| (iii) | U.S. Government/Agency Bonds | % | | | | | | | |
| (iv) | U.S. State and Local Bonds | % | | | | | | | |
| (v) | Sovereign Bonds | % | | | | | | | |
| (vi) | Investment Grade Corporate Bonds | % | | | | | | | |
| (vii) | Non-Investment Grade Corporate Bonds | % | | | | | | | |
| (viii) | Derivatives | % | | | | | | | |
| (ix) | Securities Issued by Registered Investment Companies or Business Development Companies | % | | | | | | | |
| (x) | Securities Issued by Pooled Investment Vehicles (other than Registered Investment Companies or Business Development Companies) | % | | | | | | | |
| (xi) | Cash and Cash Equivalents | % | | | | | | | |
| (xii) | (xii) Other | | | | | | | | |

Generally describe any assets included in "Other"

SECTION 5.K.(2) Separately Managed Accounts - Use of Borrowingsand Derivatives

☑ No information is required to be reported in this Section 5.K.(2) per the instructions of this Section 5.K.(2)

If your regulatory assets under management attributable to separately managed accounts are at least \$10 billion, you should complete Question (a). If your regulatory assets under management attributable to separately managed accounts are at least \$500 million but less than \$10 billion, you should complete Question (b).

(a) In the table below, provide the following information regarding the separately managed accounts you advise. If you are a subadviser to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise. End of year refers to the date used to calculate your regulatory assets under management for purposes of your *annual updating amendment*. Mid-year is the date six months before the end of year date.

In column 1, indicate the regulatory assets under management attributable to separately managed accounts associated with each level of gross notional exposure. For purposes of this table, the gross notional exposure of an account is the percentage obtained by dividing (i) the sum of (a) the dollar amount of any *borrowings* and (b) the *gross notional value* of all derivatives, by (ii) the regulatory assets under management of the account.

In column 2, provide the dollar amount of borrowings for the accounts included in column 1.

In column 3, provide aggregate *gross notional value* of derivatives divided by the aggregate regulatory assets under management of the accounts included in column 1 with respect to each category of derivatives specified in 3(a) through (f).

You may, but are not required to, complete the table with respect to any separately managed account with regulatory assets under management of less than \$10,000,000.

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

(i) Mid-Year

| Gross Notional Exposure | (1) Regulatory Assets Under Management | (2) Borrowings | (3) Derivative Exposures | | | | | |
|-------------------------|---|-------------------|------------------------------------|---------------------------------------|--------------------------|--------------------------|-----------------------------|-------------------------|
| | | | (a) Interest Rate Derivative | (b) Foreign Exchange Derivative | (c) Credit Derivative | (d) Equity Derivative | (e) Commodity Derivative | (f) Other Derivative |
| Less than 10% | \$ | \$ | 0 % | 0 % | 0 % | 0 % | 0 % | 0 % |
| 10-149% | \$ | \$ 0 | 0 % | 0 % | 0 % | 0 % | 0 % | 0 % |
| 150% or more | \$ O | \$ 0 | 0 % | 0 % | 0 % | 0 % | 0 % | 0 % |

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

(ii) End of Year

| Gross Notional Exposure | (1) Regulatory Assets Under Management | (2) Borrowings | (3) Derivative Exposures | | | | | |
|-------------------------|---|-------------------|------------------------------------|---------------------------------------|--------------------------|--------------------------|-----------------------------|-------------------------|
| | | | (a) Interest Rate Derivative | (b) Foreign Exchange Derivative | (c) Credit Derivative | (d) Equity Derivative | (e) Commodity Derivative | (f) Other Derivative |
| Less than 10% | \$ O | \$ 0 | 0 % | 0 % | 0 % | 0 % | 0 % | 0 % |
| 10-149% | \$ O | \$ 0 | 0 % | 0 % | 0 % | 0 % | 0 % | 0 % |
| 150% or more | \$ O | \$ 0 | 0 % | 0 % | 0 % | 0 % | 0 % | 0 % |

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

(b) In the table below, provide the following information regarding the separately managed accounts you advise as of the date used to calculate your regulatory assets under management for purposes of your *annual updating amendment*. If you are a subadviser to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise.

In column 1, indicate the regulatory assets under management attributable to separately managed accounts associated with each level of gross notional exposure. For purposes of this table, the gross notional exposure of an account is the percentage obtained by dividing (i) the sum of (a) the dollar amount of any *borrowings* and (b) the *gross notional value* of all derivatives, by (ii) the regulatory assets under management of the account.

In column 2, provide the dollar amount of *borrowings* for the accounts included in column 1.

You may, but are not required to, complete the table with respect to any separately managed accounts with regulatory assets under management of less than \$10,000,000.

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

| Gross Notional Exposure | (1) Regulatory Assets Under Management | (2) Borrowings |
|-------------------------|--|----------------|
| Less than 10% | \$ 0 | \$ 0 |
| 10-149% | \$ 0 | \$ 0 |
| 150% or more | \$ 0 | \$ 0 |

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

| ter | em 6 Other Business Activities | |
|------|---|------------------------|
| n 1 | this Item, we request information about your firm's other business activities. | |
| Δ. | You are actively engaged in business as a (check all that apply): (1) broker-dealer (registered or unregistered) (2) registered representative of a broker-dealer (3) commodity pool operator or commodity trading advisor (whether registered or exempt from registration) (4) futures commission merchant (5) real estate broker, dealer, or agent (6) insurance broker or agent (7) bank (including a separately identifiable department or division of a bank) (8) trust company (9) registered municipal advisor (10) registered security-based swap dealer | |
| | (11) major security-based swap participant (12) accountant or accounting firm (13) lawyer or law firm (14) other financial product salesperson (specify): | |
| | If you engage in other business using a name that is different from the names reported in Items 1.A. or 1.B.(1), complete Section 6.A. of S | ichodulo D |
| | If you engage in other business using a name that is different from the names reported in frems. 1.A. of 1.B.(1), complete Section 6.A. of 3 | Yes No |
| В. | (1) Are you actively engaged in any other business not listed in Item 6.A. (other than giving investment advice)? | ⊙ ○ |
| | (2) If yes, is this other business your primary business? | ⊙ ○ |
| | If "yes," describe this other business on Section 6.B.(2) of Schedule D, and if you engage in this business under a different name, pro | vide that name. Yes No |
| | (3) Do you sell products or provide services other than investment advice to your advisory clients? | ⊙ ○ |
| | If "yes," describe this other business on Section 6.B.(3) of Schedule D, and if you engage in this business under a different name, pro | vide that name. |
| EC | CTION 6.A. Names of Your Other Businesses | |
| | No Information Filed | |
| EC | CTION 6.B.(2) Description of Primary Business | |
| ۷G | escribe your primary business (not your investment advisory business): BI PROVIDES ITS FUND CLIENTS WITH CORPORATE, MANAGEMENT & ADMINISTRATIVE MUTUAL FUND SERVICES, INCLUDING LEGAL, ACCOU GENCY & DISTRIBUTION SERVICES. | JNTING, TRANSFER |
| lf y | you engage in that business under a different name, provide that name: | |
| EC | CTION 6.B.(3) Description of Other Products and Services | |
| SAI | escribe other products or services you sell to your <i>client</i> . You may omit products and services that you listed in Section 6.B.(2) above. MME AS 6.B.(2). You engage in that business under a different name, provide that name: | |
| | | |
| tor | m 7 Financial Industry Affiliations | |
| | this Item, we request information about your financial industry affiliations and activities. This information identifies areas in which conflic | ets of interest may |
| | cur between you and your <i>clients</i> . | its of interest may |
| Д. | This part of Item 7 requires you to provide information about you and your <i>related persons</i> , including foreign affiliates. Your <i>related per advisory affiliates</i> and any <i>person</i> that is under common <i>control</i> with you. You have a <i>related person</i> that is a (check all that apply): | sons are all of your |
| | (1) broker-dealer, municipal securities dealer, or government securities broker or dealer (registered or unregistered) (2) other investment adviser (including financial planners) | |

| | (8) banking or thrift institution | |
|-----|---|--------|
| | (9) trust company | |
| | (10) accountant or accounting firm | |
| | (11) lawyer or law firm | |
| | (12) insurance company or agency | |
| | (13) pension consultant | |
| | (14) real estate broker or dealer (15) sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles | |
| | (10) openiod of dynamical of minited partition importantly, excitating position in terminal | |
| | | |
| | Note that Item 7.A. should not be used to disclose that some of your employees perform investment advisory functions or are registered representatives of broker-dealer. The number of your firm's employees who perform investment advisory functions should be disclosed under Item 5.B.(1). The number of your firm's employees who are registered representatives of a broker-dealer should be disclosed under Item 5.B.(2). | |
| | Note that if you are filing an umbrella registration, you should not check Item 7.A.(2) with respect to your relying advisers, and you do not have to complete Section 7.A. in Schedule D for your relying advisers. You should complete a Schedule R for each relying adviser. | ý |
| | For each related person, including foreign affiliates that may not be registered or required to be registered in the United States, complete Section 7.A. of Schedule D. | |
| | You do not need to complete Section 7.A. of Schedule D for any related person if: (1) you have no business dealings with the related person in connection was advisory services you provide to your clients; (2) you do not conduct shared operations with the related person; (3) you do not refer clients or business to the | |
| | related person, and the related person does not refer prospective clients or business to you; (4) you do not share supervised persons or premises with the related person; and (5) you have no reason to believe that your relationship with the related person otherwise creates a conflict of interest with your clients | ;. |
| | You must complete Section 7.A. of Schedule D for each related person acting as qualified custodian in connection with advisory services you provide to your clients (other than any mutual fund transfer agent pursuant to rule $206(4)-2(b)(1)$), regardless of whether you have determined the related person to be operationally independent under rule $206(4)-2$ of the Advisers Act. | |
| | | |
| SEC | ION 7.A. Financial Industry Affiliations | |
| | | |
| Cor | plete a separate Schedule D Section 7.A. for each <i>related person</i> listed in Item 7.A. | |
| 1 | and Name of Delated Demon | |
| 1. | Legal Name of <i>Related Person</i> : | |
| | VANGUARD FIDUCIARY TRUST COMPANY | |
| | | |
| 2. | Primary Business Name of Related Person: | |
| | VANGUARD FIDUCIARY TRUST COMPANY | |
| | | |
| 3. | Related Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) | |
| | | |
| | or . | |
| | Other Control of the | |
| | 028-11554 | |
| | | |
| 4. | Related Person's | |
| | (a) CRD Number (if any): | |
| | | |
| | (b) CIK Number(s) (if any): | |
| | CIK Number | |
| | 933478 | |
| | | 1 |
| | | |
| 5. | Related Person is: (check all that apply) | |
| | (a) 🗖 broker-dealer, municipal securities dealer, or government securities broker or dealer | |
| | (b) 🗖 other investment adviser (including financial planners) | |
| | (c) \square registered municipal advisor | |
| | (d) \square registered security-based swap dealer | |
| | (e) 🗖 major security-based swap participant | |
| | (f) \square commodity pool operator or commodity trading advisor (whether registered or exempt from registration) | |
| | (g) \square futures commission merchant | |
| | (h) \square banking or thrift institution | |
| | (i) 🗹 trust company | |
| | (j) \square accountant or accounting firm | |
| | (k) \square lawyer or law firm | |
| | (1) | |
| | (m) \square pension consultant | |
| | | |
| | (n) real estate broker or dealer | |
| | (o) sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles (p) sponsor, general partner, managing member (or equivalent) of pooled investment vehicles | |
| 1 | | |

| | | | Yes | No |
|-----|------------|--|------------|---------|
| 6. | Do y | ou control or are you controlled by the related person? | • | 0 |
| 7. | Are | you and the related person under common control? | 0 | • |
| 8. | (a) | Does the <i>related person</i> act as a qualified custodian for your <i>clients</i> in connection with advisory services you provide to <i>clients</i> ? | 0 | • |
| | (b) | If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not required to obtain a surprise examination for your <i>clients'</i> funds or securities that are maintained at the <i>related person</i> ? | Ö | Ö |
| | (c) | If you have answered "yes" to question 8.(a) above, provide the location of the <i>related person's</i> office responsible for <i>custody</i> of your <i>clients</i> Number and Street 1: Number 2: | ;'ass | ets: |
| | | City: State: Country: ZIP+4/Postal Code: If this address is a private residence, check this box: | | |
| | | | Yes | No |
| 9. | (a) (b) | If the <i>related person</i> is an investment adviser, is it exempt from registration? If the answer is yes, under what exemption? | 0 | 0 |
| | (D) | in the answer is yes, under what exemption: | | |
| 10. | (a) (b) | Is the <i>related person</i> registered with a <i>foreign financial regulatory authority</i> ? If the answer is yes, list the name and country, in English of each <i>foreign financial regulatory authority</i> with which the <i>related person</i> is registed. No Information Filed | C ered. | • |
| 11. | Do y | you and the related person share any supervised persons? | • | 0 |
| | | | | |
| 12. | Do y | you and the related person share the same physical location? | • | 0 |
| 1. | Lega | al Name of <i>Related Person</i> : | | |
| | VAN | GUARD PERSONALIZED INDEXING MANAGEMENT | | |
| 2. | Prim | ary Business Name of <i>Related Person</i> : | | |
| | VAN | GUARD PERSONALIZED INDEXING MANAGEMENT | | |
| 3. | 801 | ted Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) - 114487 | | |
| | or Othe | | | |
| | D / | | | |
| 4. | | ted Person's CRD Number (if any): | | |
| | | 285366 | | |
| | (b) | CIK Number(s) (if any): No Information Filed | | |
| | | | | |
| 5. | Rela | ted Person is: (check all that apply) | | |
| | (a) | broker-dealer, municipal securities dealer, or government securities broker or dealer | | |
| | (b) | other investment adviser (including financial planners) registered municipal advisor | | |
| | (d) | registered security-based swap dealer | | |
| | (e) (f) | major security-based swap participant commodity pool operator or commodity trading advisor (whether registered or exempt from registration) | | |
| | (g) | futures commission merchant | | |
| | (h) | banking or thrift institution | | |
| | (i) (j) | trust company accountant or accounting firm | | |
| | (k) | □ lawyer or law firm | | |
| | (l) | insurance company or agency | | |
| | (m) (n) | pension consultant real estate broker or dealer | | |
| | (o) | sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles | | |
| | (p) | sponsor, general partner, managing member (or equivalent) of pooled investment vehicles | | |
| 6. | Do v | you control or are you controlled by the related person? | Yes © | No O |
| | , | | ٠ | |
| 7. | Are | you and the <i>related person</i> under common <i>control</i> ? | 0 | • |
| 8. | (a) | Does the related person act as a qualified custodian for your clients in connection with advisory services you provide to clients? | 0 | • |

| | (b) | If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not required to obtain a surprise examination for your <i>clients'</i> funds or securities that are maintained at the <i>related person</i> ? | 0 | 0 |
|------------|---------------------|--|---------|------|
| | (c) | If you have answered "yes" to question 8.(a) above, provide the location of the related person's office responsible for custody of your clients' | asse | ets: |
| | | Number and Street 1: Number and Street 2: | | |
| | | City: State: Country: ZIP+4/Postal Code: If this address is a private residence, check this box: | | |
| | | · | Yes | Nc |
| 9. | (a) | If the related person is an investment adviser, is it exempt from registration? | 0 | |
| | (b) | If the answer is yes, under what exemption? | | • |
| | (0) | if the answer is yes, under what exemption: | | |
| 10 | (a) | Is the related person registered with a foreign financial regulatory authority? | 0 | _ |
| | | If the answer is yes, list the name and country, in English of each foreign financial regulatory authority with which the related person is register | | ٠ |
| | (6) | No Information Filed | cu. | |
| 11. | Do v | you and the <i>related person</i> share any <i>supervised persons</i> ? | • | _ |
| | , | | • | • |
| 12. | Do v | you and the <i>related person</i> share the same physical location? | _ | • |
| | 20) | you and the related person end of the came projected resultent | 0 | ٠ |
| | | | | |
| | | | | |
| 1. | Lega | al Name of <i>Related Person</i> : | | |
| | VAN | IGUARD NATIONAL TRUST COMPANY, N.A. | | |
| | | | | |
| 2. | Prim | nary Business Name of <i>Related Person</i> : | | |
| | VAN | IGUARD NATIONAL TRUST COMPANY | | |
| | | | | |
| 3. | Rela | ated Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) | | |
| | - | | | |
| | or | | | |
| | Othe | | | |
| 1 | Dolo | ated Person's | | |
| +. | | CRD Number (if any): | | |
| | (a) | CAD Number (ii arry). | | |
| | (b) | CIK Number(s) (if any): | | |
| | , | No Information Filed | | |
| | | | | |
| | | | | |
| 5. | Rela | ated Person is: (check all that apply) | | |
| | (a) | broker-dealer, municipal securities dealer, or government securities broker or dealer | | |
| | (b) | other investment adviser (including financial planners) | | |
| | (c) | registered municipal advisor | | |
| | (d) | registered security-based swap dealer | | |
| | (e) | major security-based swap participant | | |
| | (f) | commodity pool operator or commodity trading advisor (whether registered or exempt from registration) | | |
| | (g) | futures commission merchant | | |
| | (h) | banking or thrift institution | | |
| | (i) | trust company | | |
| | (j) | □ accountant or accounting firm □ lawyer or law firm | | |
| | (k) | | | |
| | (l) | ☐ insurance company or agency ☐ pension consultant | | |
| | | pension consultant real estate broker or dealer | | |
| | (n) (o) | sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles | | |
| | (b) | sponsor, general partner, managing member (or equivalent) of pooled investment vehicles | | |
| | (ρ) | | Yes | Nc |
| á | Do v | you control or are you controlled by the related person? | | |
| ٠. | <i>D</i> 0 <i>y</i> | you don't or all o you don't oned by the related person. | ⊙ | 0 |
| 7 | ۸ro | you and the related person under common control? | _ | _ |
| <i>'</i> . | AIE. | you and the related person under common controls | 0 | • |
|) | (0) | Door the related percent act as a qualified sustadian for your elients in connection with a hidrony condition. | _ | _ |
| 3. | (a) | Does the <i>related person</i> act as a qualified custodian for your <i>clients</i> in connection with advisory services you provide to <i>clients</i> ? | 0 | • |
| | (b) | If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the | \circ | 0 |
| | | presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not required to obtain a surprise examination for your <i>clients'</i> funds or securities that are maintained at the <i>related person</i> ? | | |
| | (0) | | 007 | a+- |
| | (C) | If you have answered "yes" to question 8.(a) above, provide the location of the <i>related person's</i> office responsible for <i>custody</i> of your <i>clients'</i> Number and Street 1: Number 2: | asse | #1S: |
| | | City: State: Country: ZIP+4/Postal Code: | | |
| | | | | |

| | | Ti this address is a private residence, check this box. | Yes | Nic |
|-------|---|---|---------|------|
| 9. | (a) | If the related person is an investment adviser, is it exempt from registration? | © | |
| | (b) | If the answer is yes, under what exemption? | | ~ |
| | | | | |
| 10. | (a) | Is the related person registered with a foreign financial regulatory authority? | 0 | 0 |
| | (b) | If the answer is yes, list the name and country, in English of each <i>foreign financial regulatory authority</i> with which the <i>related person</i> is register No Information Filed | ed. | |
| 11. | Do y | you and the related person share any supervised persons? | • | 0 |
| | | | | |
| 12. | Do 7 | you and the <i>related person</i> share the same physical location? | • | O |
| | | | | |
| | | | | |
| 1. | _ | al Name of <i>Related Person</i> : INSURANCE INC | | |
| | | | | |
| 2. | | ary Business Name of <i>Related Person</i> : INSURANCE INC | | |
| | VGI | INSURANCE INC | | |
| 3. | Rela | ted Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) | | |
| | - or | | | |
| | Othe | er e | | |
| | 5 / | | | |
| 4. | <i>кеіа</i> (а) | ted Person's CRD Number (if any): | | |
| | ` ' | | | |
| | (b) | CIK Number(s) (if any): No Information Filed | | |
| | | | | |
| | (a) (b) (c) (d) (e) (f) (g) (h) (i) (j) (k) (l) (m) (o) (p) | broker-dealer, municipal securities dealer, or government securities broker or dealer other investment adviser (including financial planners) registered municipal advisor registered security-based swap dealer major security-based swap participant commodity pool operator or commodity trading advisor (whether registered or exempt from registration) futures commission merchant banking or thrift institution trust company accountant or accounting firm lawyer or law firm insurance company or agency pension consultant real estate broker or dealer sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles sponsor, general partner, managing member (or equivalent) of pooled investment vehicles | Yes | Nc |
| 6. | Do y | ou control or are you controlled by the related person? | • | |
| | _ | | | |
| 7. | Are | you and the <i>related person</i> under common <i>control</i> ? | 0 | • |
| 8. | (a) | Does the <i>related person</i> act as a qualified custodian for your <i>clients</i> in connection with advisory services you provide to <i>clients</i> ? | 0 | e |
| | (b) | If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the | 0 | |
| | | presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not required to obtain a surprise examination for your <i>clients'</i> funds or securities that are maintained at the <i>related person</i> ? | | |
| | (c) | If you have answered "yes" to question 8.(a) above, provide the location of the <i>related person's</i> office responsible for <i>custody</i> of your <i>clients'</i> | ass∈ | ets: |
| | | Number and Street 1: Number and Street 2: | | |
| | | City: State: Country: ZIP+4/Postal Code: If this address is a private residence, check this box: | | |
| | | | Yes | No |
| 9. | (a) | If the related person is an investment adviser, is it exempt from registration? | 0 | 0 |
| | (b) | If the answer is yes, under what exemption? | | |
| 10 | (2) | Is the related person registered with a foreign financial regulatory authority? | _ | |
| ∏ 10. | (a) | is the related person registered with a rereign inanian regulatory authority : | \circ | (*) |

| | (b) | If the answer is yes, list the name and country, in English of each <i>foreign financial regulatory authority</i> with which the <i>related person</i> is registe. No Information Filed | ea. | |
|-----|---|---|------------------|---|
| 11. | Do y | ou and the related person share any supervised persons? | 0 | • |
| 12. | Do y | rou and the <i>related person</i> share the same physical location? | • | 0 |
| 2. | VANO Prim VANO Relai | IN Name of Related Person: GUARD ASSET MANAGEMENT, LIMITED ary Business Name of Related Person: GUARD ASSET MANAGEMENT, LIMITED ted Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) - 107653 | | |
| 4. | (a) | ted Person's CRD Number (if any): 282598 CIK Number(s) (if any): CIK Number 1680208 | | |
| 5. | (a) (b) (c) (d) (e) (f) (g) (h) (i) (k) (l) (m) (n) (o) | ▼ other investment adviser (including financial planners) □ registered municipal advisor □ registered security-based swap dealer □ major security-based swap participant □ commodity pool operator or commodity trading advisor (whether registered or exempt from registration) □ futures commission merchant □ banking or thrift institution □ trust company □ accountant or accounting firm □ lawyer or law firm □ insurance company or agency □ pension consultant □ real estate broker or dealer sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles □ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles | | |
| 6. | Do y | ou control or are you controlled by the related person? | Yes © | 0 |
| 7. | Are y | you and the related person under common control? | 0 | • |
| 8. | | Does the <i>related person</i> act as a qualified custodian for your <i>clients</i> in connection with advisory services you provide to <i>clients</i> ? If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not required to obtain a surprise examination for your <i>clients</i> ' funds or securities that are maintained at the <i>related person</i> ? If you have answered "yes" to question 8.(a) above, provide the location of the <i>related person</i> 's office responsible for <i>custody</i> of your <i>clients</i> ' Number and Street 1: City: State: Country: ZIP+4/Postal Code: If this address is a private residence, check this box: | | |
| 9. | | If the <i>related person</i> is an investment adviser, is it exempt from registration? If the answer is yes, under what exemption? | 0 | • |
| 10. | (a) | Is the <i>related person</i> registered with a <i>foreign financial regulatory authority</i> ? If the answer is yes, list the name and country, in English of each <i>foreign financial regulatory authority</i> with which the <i>related person</i> is registe Name of Country/English Name of <i>Foreign Financial Regulatory Authority</i> United Kingdom - Financial Conduct Authority | ⊙ red. | 0 |
| 11 | Do v | ou and the related person share any supervised persons? | • | _ |
| 1 | - 3 | | 3 | |

| 12. | . Do you and the <i>related person</i> share the same physical location? | 0 | • |
|-----|--|---|------|
| 1. | Legal Name of <i>Related Person</i> : VANGUARD MARKETING CORPORATION | | |
| 2. | Primary Business Name of <i>Related Person</i> : VANGUARD MARKETING CORPORATION | | |
| 3. | Related Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 8 - 21570 | | |
| | or Other | | |
| 4. | Related Person's (a) CRD Number (if any): 7452 (b) CIK Number(s) (if any): CIK Number | | |
| | 1114858 | | |
| | Related Person is: (check all that apply) (a) broker-dealer, municipal securities dealer, or government securities broker or dealer (b) other investment adviser (including financial planners) (c) registered municipal advisor (d) registered security-based swap dealer (major security-based swap participant (f) commodity pool operator or commodity trading advisor (whether registered or exempt from registration) (g) futures commission merchant (h) banking or thrift institution (i) trust company (j) accountant or accounting firm (k) lawyer or law firm (l) insurance company or agency (m) pension consultant (n) real estate broker or dealer (o) sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles Do you control or are you controlled by the related person? | | s No |
| | Are you and the <i>related person</i> under common <i>control</i> ? | | |
| | | | • |
| 8. | (a) Does the related person act as a qualified custodian for your clients in connection with advisory services you provide to clients? (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the related person and thus are not required to obtain a surprise examination for your clients' funds or securities that are maintained at the related person? (c) If you have answered "yes" to question 8.(a) above, provide the location of the related person's office responsible for custody of your clients. | 0 | ets: |
| | Number and Street 1: Number and Street 2: City: State: Country: ZIP+4/Postal Code: If this address is a private residence, check this box: | | |
| 0 | (a) If the related person is an investment advisor, is it exempt from registration? | | No. |
| 9. | (a) If the related person is an investment adviser, is it exempt from registration?(b) If the answer is yes, under what exemption? | 0 | 0 |
| 10. | (a) Is the related person registered with a foreign financial regulatory authority? (b) If the answer is yes, list the name and country, in English of each foreign financial regulatory authority with which the related person is regist No Information Filed | _ | • |
| 11. | . Do you and the related person share any supervised persons? | • | 0 |
| 12. | . Do you and the <i>related person</i> share the same physical location? | • | 0 |

| • | _ | al Name of <i>Related Person</i> : GUARD GROUP (IRELAND) LIMITED | | |
|------------|------------|--|----------|--------|
| <u>.</u> | Prim | nary Business Name of <i>Related Person</i> : | | |
| | VANO | GUARD GROUP (IRELAND) LIMITED | | |
| 3 . | Rela | nted Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) | | |
| | - or | | | |
| | or Othe | er | | |
| | 5. | | | |
| ١. | | nted Person's CRD Number (if any): | | |
| | () | | | |
| | (b) | CIK Number(s) (if any): CIK Number | | |
| | | 1816678 | | |
| | 5.4 | | | |
|). | | nted Person is: (check all that apply) Description broker-dealer, municipal securities dealer, or government securities broker or dealer | | |
| | ` , | other investment adviser (including financial planners) | | |
| | ` , | registered municipal advisor | | |
| | ` , | registered security-based swap dealer major security-based swap participant | | |
| | ` ' | major security-based swap participantcommodity pool operator or commodity trading advisor (whether registered or exempt from registration) | | |
| | ` ' | futures commission merchant | | |
| | (h) | banking or thrift institution | | |
| | • • | trust company | | |
| | (j) (k) | □ accountant or accounting firm □ lawyer or law firm | | |
| | ` ' | insurance company or agency | | |
| | (m) | | | |
| | (n) | real estate broker or dealer | | |
| | ` ' | sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles | | |
| | (p) | sponsor, general partner, managing member (or equivalent) of pooled investment vehicles | Yes | Νc |
|). | Do y | you control or are you controlled by the related person? | ⊙ | |
| ' . | Are : | you and the <i>related person</i> under common <i>control</i> ? | 0 | • |
| 2 | (a) | Does the <i>related person</i> act as a qualified custodian for your <i>clients</i> in connection with advisory services you provide to <i>clients</i> ? | _ | _ |
|). | | If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the | | ⊙ ≎ |
| | (6) | presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not required to obtain a surprise examination for your <i>clients'</i> funds or securities that are maintained at the <i>related person</i> ? | 0 | • |
| | (c) | If you have answered "yes" to question 8.(a) above, provide the location of the related person's office responsible for custody of your clients | 'asse | ets |
| | | Number and Street 1: Number and Street 2: | | |
| | | City: State: Country: ZIP+4/Postal Code: If this address is a private residence, check this box: | | |
| | | | Yes | No |
|). | (a) | If the related person is an investment adviser, is it exempt from registration? | \odot | С |
| | (b) | If the answer is yes, under what exemption? PRIVATE FUND ADVISER EXEMPTION | | |
| 0. | (a) | Is the related person registered with a foreign financial regulatory authority? | • | С |
| | (b) | If the answer is yes, list the name and country, in English of each <i>foreign financial regulatory authority</i> with which the <i>related person</i> is registed. Name of Country/English Name of <i>Foreign Financial Regulatory Authority</i> | red. | |
| | _ | Ireland - Central Bank of Ireland | | |
| 1. | Do y | you and the <i>related person</i> share any <i>supervised persons</i> ? | • | 0 |
| 2. | Do y | you and the <i>related person</i> share the same physical location? | 0 | • |
| | | | | |
| | 1 002 | al Name of <i>Related Person</i> : | | |

1. Legal Name of *Related Person*: VANGUARD INVESTMENTS UK, LIMITED

| 2. | | ary Business Name of <i>Related Person</i> : GUARD INVESTMENTS UK, LIMITED | | |
|-----|---|---|-------------------|-----|
| 3. | | ted Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) - 108191 | | |
| 4. | | ted Person's CRD Number (if any): 283775 | | |
| | (b) | CIK Number(s) (if any): CIK Number 1816749 | | |
| 5. | (a) (b) (c) (d) (e) (f) (g) (h) (i) (j) (k) (l) (m) (n) (o) | broker-dealer, municipal securities dealer, or government securities broker or dealer other investment adviser (including financial planners) registered municipal advisor registered security-based swap dealer major security-based swap participant commodity pool operator or commodity trading advisor (whether registered or exempt from registration) futures commission merchant banking or thrift institution trust company accountant or accounting firm lawyer or law firm insurance company or agency pension consultant real estate broker or dealer sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles | | |
| 6. | ., . | ou control or are you controlled by the related person? | Yes • | |
| 7. | Are y | you and the <i>related person</i> under common <i>control</i> ? | 0 | • |
| 8. | (a) | Does the <i>related person</i> act as a qualified custodian for your <i>clients</i> in connection with advisory services you provide to <i>clients</i> ? | 0 | • |
| | (b) | If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not required to obtain a surprise examination for your <i>clients'</i> funds or securities that are maintained at the <i>related person</i> ? | Ö | |
| | (c) | If you have answered "yes" to question 8.(a) above, provide the location of the <i>related person's</i> office responsible for <i>custody</i> of your <i>client</i> Number and Street 1: City: State: Country: ZIP+4/Postal Code: | s'asse | ets |
| | | If this address is a private residence, check this box: | | |
| 9. | (a) | If the related person is an investment adviser, is it exempt from registration? | Yes © | |
| | (b) | If the answer is yes, under what exemption? PRIVATE FUND ADVISER EXEMPTION | v | |
| 10. | (a) (b) | Is the related person registered with a foreign financial regulatory authority? If the answer is yes, list the name and country, in English of each foreign financial regulatory authority with which the related person is regist Name of Country/English Name of Foreign Financial Regulatory Authority | ⊙ ered. | С |
| 11. | Do y | United Kingdom - Financial Conduct Authority ou and the related person share any supervised persons? | • | С |
| 12. | Do y | ou and the related person share the same physical location? | 0 | • |
| 1. | _ | al Name of <i>Related Person</i> : GUARD GLOBAL ADVISERS, LLC | | |
| 2. | | ary Business Name of <i>Related Person</i> : GUARD GLOBAL ADVISERS, LLC | | |

| 3. | Related Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 801 - 76825 | |
|------------|---|------------------------|
| | or Other | |
| 4. | Related Person's (a) CRD Number (if any): 164593 (b) CIK Number(s) (if any): CIK Number 1811242 | |
| 5. | Related Person is: (check all that apply) (a) | Yes No |
| ó . | Do you control or are you controlled by the related person? | © 0 |
| 7. | Are you and the related person under common control? | 0 0 |
| 3. | (a) Does the <i>related person</i> act as a qualified custodian for your <i>clients</i> in connection with advisory services you provide to <i>clients</i> ? | 0 0 |
| | (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not required to obtain a surprise examination for your <i>clients'</i> funds or securities that are maintained at the <i>related person</i>? (c) If you have answered "yes" to question 8.(a) above, provide the location of the <i>related person's</i> office responsible for <i>custody</i> of your Number and Street 1: City: State: Country: ZIP+4/Postal Code: If this address is a private residence, check this box: | 0 0 |
| | If this address is a private residence, check this box. | Yes No |
| 9. | (a) If the <i>related person</i> is an investment adviser, is it exempt from registration?(b) If the answer is yes, under what exemption? | 0 0 |
| 10. | (a) Is the related person registered with a foreign financial regulatory authority? (b) If the answer is yes, list the name and country, in English of each foreign financial regulatory authority with which the related person is a No Information Filed | C ⊙ registered. |
| 11. | Do you and the related person share any supervised persons? | ⊙ ○ |
| 12. | Do you and the <i>related person</i> share the same physical location? | ⊙ ○ |
| | Legal Name of <i>Related Person</i> : VGIM, S.A. DE C.V., ASESOR EN INVERSIONES INDEPENDIENTE Primary Business Name of <i>Related Person</i> : | |
| 3. | VANGUARD MÉXICO Related Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) | |
| | or Other | |

| 4. <i>F</i> | Relat | ted Person's | | |
|-------------|--|---|--------|---------|
| (| (a) | CRD Number (if any): | | |
| (| (b) | CIK Number(s) (if any): No Information Filed | | |
| | (a) (b) (c) (d) (e) (f) (g) (h) (i) (i) | ted Person is: (check all that apply) broker-dealer, municipal securities dealer, or government securities broker or dealer other investment adviser (including financial planners) registered municipal advisor registered security-based swap dealer major security-based swap participant commodity pool operator or commodity trading advisor (whether registered or exempt from registration) futures commission merchant banking or thrift institution trust company accountant or accounting firm lawyer or law firm insurance company or agency | | |
| | (m) | | | |
| (| (n) | real estate broker or dealer | | |
| | | sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles sponsor, general partner, managing member (or equivalent) of pooled investment vehicles | | |
| (| (p) | sponsor, general partner, managing member (or equivalent) of pooled investment vehicles | Yes | No |
| 6. [| Оо у | ou <i>control</i> or are you <i>controlled</i> by the <i>related person</i> ? | • | 0 |
| | | | | |
| 7. <i>F</i> | Are y | you and the <i>related person</i> under common <i>control</i> ? | 0 | • |
| 8. (| | Does the related person act as a qualified custodian for your clients in connection with advisory services you provide to clients? | 0 | \odot |
| (| | If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not required to obtain a surprise examination for your <i>clients'</i> funds or securities that are maintained at the <i>related person</i> ? | 0 | 0 |
| (| (c) | If you have answered "yes" to question 8.(a) above, provide the location of the <i>related person's</i> office responsible for <i>custody</i> of your <i>client</i> Number and Street 1: City: State: Country: ZIP+4/Postal Code: If this address is a private residence, check this box: | | |
| 9. (| (a) | If the <i>related person</i> is an investment adviser, is it exempt from registration? | Yes | _ |
| | | If the answer is yes, under what exemption? | • | 0 |
| | | FOREIGN PRIVATE ADVISER EXEMPTION | | |
| 10. (| (a) | Is the related person registered with a foreign financial regulatory authority? | • | 0 |
| (| (b) | If the answer is yes, list the name and country, in English of each <i>foreign financial regulatory authority</i> with which the <i>related person</i> is regis | tered. | |
| | | Name of Country/English Name of Foreign Financial Regulatory Authority Mexico - National Commission for Banking and Securities | | |
| 11. [| Do y | ou and the related person share any supervised persons? | _ | • |
| | , | | ~ | |
| 12. [| Эо у | ou and the <i>related person</i> share the same physical location? | 0 | • |
| | | | | |
| | _ | I Name of <i>Related Person</i> : GUARD SUPER PTY LTD. | | |
| | | ary Business Name of <i>Related Person</i> : GUARD SUPER PTY LTD. | | |
| 3. <i>I</i> | Relat | ted Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) | | |
| (| or | | | |
| (| Othe | | | |
| 4. <i>F</i> | | | | |
| • | Relat | ted Person's | | |
| (| | ted Person's CRD Number (if any): | | |

| 5. | Related Person is: (check all that apply) (a) broker-dealer, municipal securities dealer, or government securities broker or dealer (b) other investment adviser (including financial planners) (c) registered municipal advisor (d) registered security-based swap dealer (e) major security-based swap participant (f) commodity pool operator or commodity trading advisor (whether registered or exempt from registration) (g) futures commission merchant (h) banking or thrift institution (i) trust company (j) accountant or accounting firm (k) lawyer or law firm (l) insurance company or agency (m) pension consultant (n) real estate broker or dealer (o) sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles | | |
|-----|--|-------|-----|
| | (p) \square sponsor, general partner, managing member (or equivalent) of pooled investment vehicles | Yes | No |
| 6. | Do you control or are you controlled by the related person? | • | |
| 7 | Are you and the related narran under common control. | | _ |
| 1. | Are you and the related person under common control? | 0 | ⊙ |
| 8. | (a) Does the related person act as a qualified custodian for your clients in connection with advisory services you provide to clients? | 0 | © |
| | (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not required to obtain a surprise examination for your <i>clients</i> ' funds or securities that are maintained at the <i>related person</i> ? | 0 | |
| | (c) If you have answered "yes" to question 8.(a) above, provide the location of the <i>related person's</i> office responsible for <i>custody</i> of your <i>clients</i> Number and Street 1: City: State: Country: ZIP+4/Postal Code: If this address is a private residence, check this box: | 'asse | ets |
| 9. | (a) If the related person is an investment adviser, is it exempt from registration? | Yes | |
| 7. | (a) If the related person is an investment adviser, is it exempt from registration?(b) If the answer is yes, under what exemption? | 0 | С |
| 10. | . (a) Is the related person registered with a foreign financial regulatory authority? | • | C |
| | (b) If the answer is yes, list the name and country, in English of each foreign financial regulatory authority with which the related person is registed. | red. | |
| | Name of Country/English Name of Foreign Financial Regulatory Authority Australia - Australian Securities and Investments Commission | | |
| | Other - AUSTRALIAN PRUDENTIAL REGULATION AUTHORITY | | |
| 11. | . Do you and the <i>related person</i> share any <i>supervised persons</i> ? | • | C |
| 12. | . Do you and the <i>related person</i> share the same physical location? | 0 | 0 |
| 1. | Legal Name of <i>Related Person</i> : VANGUARD GROUP EUROPE GMBH | | |
| 2. | Primary Business Name of <i>Related Person</i> : VANGUARD GROUP EUROPE GMBH | | |
| 3. | Related Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) | | |
| | or Other | | |
| 4. | Related Person's (a) CRD Number (if any): | | |
| | (b) CIK Number(s) (if any): No Information Filed | | |
| | | | |

5. Related Person is: (check all that apply)

| | (a) | ✓ broker-dealer, municipal securities dealer, or government securities broker or dealer | | |
|----------|------|---|---------|---------|
| | (b) | other investment adviser (including financial planners) | | |
| | (c) | registered municipal advisor | | |
| | (d) | registered security-based swap dealer | | |
| | (e) | major security-based swap participant | | |
| | (f) | commodity pool operator or commodity trading advisor (whether registered or exempt from registration) | | |
| | (g) | futures commission merchant | | |
| | (h) | ✓ banking or thrift institution | | |
| | (i) | trust company | | |
| | (j) | accountant or accounting firm | | |
| | (k) | lawyer or law firm | | |
| | (l) | insurance company or agency | | |
| | (m) | _ ` | | |
| | ` , | real estate broker or dealer | | |
| | | sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles | | |
| | (p) | sponsor, general partner, managing member (or equivalent) of pooled investment vehicles | ., | |
| , | Da. | view control on one view controlled by the violated marcon? | Yes | |
| 6. | ро у | you <i>control</i> or are you <i>controlled</i> by the <i>related person</i> ? | ⊙ | С |
| _ | _ | | | |
| /. | Are | you and the related person under common control? | 0 | \odot |
| | | | | |
| 8. | (a) | Does the related person act as a qualified custodian for your clients in connection with advisory services you provide to clients? | 0 | \odot |
| | (b) | If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not required to obtain a surprise examination for your <i>clients</i> ' funds or securities that are maintained at the <i>related person</i> ? | 0 | О |
| | (c) | If you have answered "yes" to question 8.(a) above, provide the location of the related person's office responsible for custody of your client | ts' ass | ets |
| | | Number and Street 1: Number and Street 2: | | |
| | | City: State: Country: ZIP+4/Postal Code: | | |
| | | If this address is a private residence, check this box: \square | | |
| • | | | Yes | |
| 9. | (a) | If the related person is an investment adviser, is it exempt from registration? | 0 | С |
| | (b) | If the answer is yes, under what exemption? | | |
| 10 | (0) | Is the related percent registered with a fereign financial regulatory authority? | | _ |
| 10. | (a) | Is the related person registered with a foreign financial regulatory authority? | _ | С |
| | (b) | If the answer is yes, list the name and country, in English of each <i>foreign financial regulatory authority</i> with which the <i>related person</i> is registed. | tered. | |
| | | Name of Country/English Name of Foreign Financial Regulatory Authority | | |
| | | Germany - German Federal Financial Supervisory Agency | | |
| 11. | Do y | you and the <i>related person</i> share any <i>supervised persons</i> ? | 0 | • |
| 10 | Do v | you and the <i>related person</i> share the same physical location? | | _ |
| 12. | D0 y | you and the related person share the same physical location? | 0 | • |
| 1. | Lega | al Name of <i>Related Person</i> : | | |
| | VAN | NGUARD INVESTMENTS AUSTRALIA LIMITED | | |
| | | | | |
| 2. | | nary Business Name of <i>Related Person</i> : | | |
| | VAN | NGUARD INVESTMENTS AUSTRALIA LIMITED | | |
| 3. | | ated Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) | | |
| | or | | | |
| | Othe | er e | | |
| 1 | Dala | ated Person's | | |
| 4. | | | | |
| | (a) | CRD Number (if any): 282933 | | |
| | (b) | CIK Number(s) (if any): | | |
| | (~) | CIK Number | | |
| | | 1550100 | | |
| | | | | |
| | | | | |
| 5 | Rela | ated Person is: (check all that apply) | | |
| . | (a) | broker-dealer, municipal securities dealer, or government securities broker or dealer | | |
| | (b) | other investment adviser (including financial planners) | | |
| | (c) | registered municipal advisor | | |
| | | | | |

| | (d) | registered security-based swap dealer | | |
|-----|------------|--|---------|---------|
| | (e) | major security-based swap participant | | |
| | (f) | commodity pool operator or commodity trading advisor (whether registered or exempt from registration) | | |
| | (g) | futures commission merchant | | |
| | (h) | banking or thrift institution | | |
| | (i) | ☐ trust company | | |
| | (j) | accountant or accounting firm | | |
| | (k) | ☐ lawyer or law firm | | |
| | (l) | insurance company or agency | | |
| | (m) | pension consultant | | |
| | (n) | real estate broker or dealer | | |
| | (o) | sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles | | |
| | (p) | sponsor, general partner, managing member (or equivalent) of pooled investment vehicles | | |
| | | | 'es | No |
| 6. | Do y | ou control or are you controlled by the related person? | • | 0 |
| | | | | |
| 7. | Are y | you and the <i>related person</i> under common <i>control</i> ? | 0 | • |
| | , | | | |
| 8. | (a) | Does the related person act as a qualified custodian for your clients in connection with advisory services you provide to clients? | _ | ~ |
| Ο. | | | | • |
| | | If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not required to obtain a surprise examination for your <i>clients'</i> funds or securities that are maintained at the <i>related person</i> ? | 0 | 0 |
| | (c) | If you have answered "yes" to question 8.(a) above, provide the location of the related person's office responsible for custody of your clients' | ısse | ts: |
| | | Number and Street 1: Number and Street 2: | | |
| | | City: State: Country: ZIP+4/Postal Code: | | |
| | | If this address is a private residence, check this box: \square | | |
| | | | 'es | No |
| 9. | (a) | If the related person is an investment adviser, is it exempt from registration? | \circ | \odot |
| | (b) | If the answer is yes, under what exemption? | | |
| 10. | (a) | Is the related person registered with a foreign financial regulatory authority? | • | 0 |
| | (b) | If the answer is yes, list the name and country, in English of each foreign financial regulatory authority with which the related person is register | d. | |
| | | Name of Country/English Name of Foreign Financial Regulatory Authority | | |
| | | Australia - Australian Securities and Investments Commission | | |
| 11. | Do y | you and the related person share any supervised persons? | • | 0 |
| 12. | Do v | you and the <i>related person</i> share the same physical location? | _ | • |
| | | | | _ |
| 1 | Logo | Normal of Dalatad Dargani | | |
| 1. | _ | al Name of <i>Related Person</i> : GUARD INVESTMENTS CANADA INC. | | |
| | | | | |
| 2. | | nary Business Name of <i>Related Person</i> : GUARD INVESTMENTS CANADA INC. | | |
| | V7 (1 V C | CONTROLLED ON WISKING. | | |
| 3. | | ted Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) | | |
| | | - 107926 | | |
| | or Othe | şr | | |
| | | | | |
| 4. | | ted Person's | | |
| | (a) | CRD Number (if any): | | |
| | (1.) | 283519 | | |
| | (b) | CIK Number(s) (if any): | | |
| | | CIK Number | | |
| | | 1816312 | | |
| | | | | |
| 5. | Relat | ted Person is: (check all that apply) | | |
| | (a) | broker-dealer, municipal securities dealer, or government securities broker or dealer | | |
| | (b) | other investment adviser (including financial planners) | | |
| | (c) | registered municipal advisor | | |
| | | registered security-based swap dealer | | |
| | (e) | major security-based swap participant | | |
| | (f) | commodity pool operator or commodity trading advisor (whether registered or exempt from registration) | | |

| (g) |) [| futures commission merchant | | |
|---|--|--|-------|-------|
| (h) | | banking or thrift institution | | |
| (i) | | trust company | | |
| (j) | | accountant or accounting firm | | |
| (k) | | lawyer or law firm | | |
| (l) | | insurance company or agency | | |
| (m | - | pension consultant | | |
| (n) | | real estate broker or dealer | | |
| (o) | | sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles | | |
| (p) | | sponsor, general partner, managing member (or equivalent) of pooled investment vehicles | Va | . NI. |
| Б- | | | | s No |
| DC | you a | control or are you controlled by the related person? | ⊙ | 0 |
| | | | | |
| Ar | e you | and the related person under common control? | 0 | ⊙ |
| , , | | | | |
| (a) | | es the <i>related person</i> act as a qualified custodian for your <i>clients</i> in connection with advisory services you provide to <i>clients</i> ? | 0 | ⊚ |
| (b) | | ou are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the | 0 | 0 |
| | | sumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not | | |
| | | uired to obtain a surprise examination for your <i>clients'</i> funds or securities that are maintained at the <i>related person</i> ? | _ | |
| (c) | _ | ou have answered "yes" to question 8.(a) above, provide the location of the related person's office responsible for custody of your clients | s'ass | ets: |
| | | mber and Street 1: Number and Street 2: | | |
| | Cit; | y: Country: ZIP+4/Postal Code: chis address is a private residence, check this box: | | |
| | 11 (| ins address is a private residence, check this box. \square | Voc | · No |
| (a) |) f + | he <i>related person</i> is an investment adviser, is it exempt from registration? | | s No |
| (a | | | ⊙ | 0 |
| (b) | | he answer is yes, under what exemption? | | |
| | PRI | VATE FUND ADVISER EXEMPTION | | |
| , , | | | | |
| (a | | he related person registered with a foreign financial regulatory authority? | ⊙ | 0 |
| |) If the | he answer is yes, list the name and country, in English of each foreign financial regulatory authority with which the related person is registe | ered. | |
| (b) | | | | |
| (b) | Na | me of Country/English Name of Foreign Financial Regulatory Authority | | |
| (b) | Na | me of Country/English Name of Foreign Financial Regulatory Authority nada - Ontario Securities Commission | | |
| | Na Ca | · · · · · · · · · · · · · · · · · · · | • | 0 |
| | Na Ca | nada - Ontario Securities Commission | • | 0 |
| . Do | Na Ca you a | nada - Ontario Securities Commission | 0 | 0 |
| . Do | Na Ca you a | nada - Ontario Securities Commission and the related person share any supervised persons? | | |
| Do | Na Ca you a | nada - Ontario Securities Commission and the related person share any supervised persons? | | _ |
| Do | Na Ca you a you a | nada - Ontario Securities Commission and the <i>related person</i> share any <i>supervised persons</i> ? and the <i>related person</i> share the same physical location? | | |
| Do | Na Ca you a you a gal Na | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? ame of Related Person: | | _ |
| Do Do | Na Ca you a you a gal Na | nada - Ontario Securities Commission and the <i>related person</i> share any <i>supervised persons</i> ? and the <i>related person</i> share the same physical location? | | _ |
| Do Do | Na Ca you a you a you a | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? The person of Related Person: RD ADVISERS, INC. | | |
| Do Do Le VA | Na Ca D you a D you a Gal Na NGUA | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? Imme of Related Person: RD ADVISERS, INC. Business Name of Related Person: | | |
| Do Do Le VA | Na Ca D you a D you a Gal Na NGUA | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? The person of Related Person: RD ADVISERS, INC. | | |
| Do Do Le VA | Na Ca D you a | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? The person of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. | | |
| Do Do Le VA Pri VA | Na Ca D you a | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? Ime of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) | | |
| Do D | Na Ca D you a | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? Ime of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) | | |
| Do D | Na Ca D you a | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? Ime of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) | | _ |
| Do D | Qal Na gal Na uNGUA imary uNGUA inary uNGUA | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? Ime of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) | | |
| Do D | Qal Na gal Na NGUAl imary NGUAl elated H | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? Ime of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) | | |
| Do D | Qal Na gal Na NGUAL MGUAL MGUA | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? The same of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 Person's | | _ |
| Do D | Na Ca D you a | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? The person of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 | | _ |
| Do D | gal Na www.nGUAl www.nGUAl www.nGUAl www.nGUAl www.nGUAl www.nGUAl www.nGUAl www.nGUAl www.nGUAl | and the related person share any supervised persons? and the related person share the same physical location? and the related person share the same physical location? and the related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 Person's D Number (if any): 5715 | | |
| Do D | Ma Ca D you a | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? ame of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 Person's D Number (if any): | | |
| Do D | gal Na gal Na www.nGUAl imary NGUAl imary | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? Imme of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 Person's D Number (if any): 1715 Number(s) (if any): | | |
| Lee VAA Ree 800 or Ott | gal Na gal Na www.nGUAl imary NGUAl imary | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? Imme of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 Person's D Number (if any): 101 102 103 103 103 103 103 103 103 103 103 103 | | _ |
| Lee VAP Pri VAP Ree 80 or Ott | gal Na Special | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? Imme of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 Person's D Number (if any): 101 102 103 103 103 103 103 103 103 103 103 103 | | |
| Le VA Pri VA Re 80 or Ott Re (a) | gal Na NGUA imary NGUA her clated I 106) CIK CII 94 | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? Imme of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (If any) (e.g., 801-, 8-, 866-, 802-) 601 Person's D Number (If any): KNumber (If any): KNumber(s) (If any): KNumber(s | | _ |
| Do D | gal Na gal Na NGUA imary NGUA her clated H CII 94 | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? Imme of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 Person's D Number (if any): 601 Person's C Number (if any): 602 RO Number (if any): 603 RO Number (if any): 604 RO Number (if any): 605 RO Number (if any): 606 RO Number (if any): 607 RO Number (if any): 608 RO Number (if any): 609 RO Number (if any): | | _ |
| Do D | gal Na gal Na imary NGUA her lated I 106 CIK CII 94 | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? and the related person share the same physical location? and the related person share the same physical location? and the related person share the same physical location? and the related person share the same physical location? Business Name of Related Person: RD ADVISERS, INC. appearson's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) and the related person share the same physical location? appearson share the same physical location? appe | | _ |
| Do D | gal Na gal Na www.nGUAl imary ingual | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? and the related person share the same physical location? and the related person share the same physical location? and the related person share the same physical location? and the related person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 Person's Number (if any): Number (if any): K Number 7529 Person is: (check all that apply) broker-dealer, municipal securities dealer, or government securities broker or dealer other investment adviser (including financial planners) | | _ |
| Le VA Pri VA Re 80 or Ott Re (a) (b) (c) | gal Na Simary NGUA Ca Si you a gal Na NGUA imary NGUA clated I 106 CIK CII 94 | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? and the related person share the same physical location? and the related person share the same physical location? and the related person share the same physical location? and the related person share the same physical location? and the related person share the same physical location? and the related person share the same physical location? Business Name of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 Person's Number (if any): Number (if any): Number (s) | | _ |
| Do D | gal Na gal Na wingUAl imary ingUAl inguA | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? and the related person share the same physical location? and the related person share the same physical location? and the related person share the same physical location? and the related person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 Person's D Number (if any): 715 Number(s) (if any): K Number 7529 Person is: (check all that apply) broker-dealer, municipal securities dealer, or government securities broker or dealer other investment adviser (including financial planners) registered municipal advisor registered security-based swap dealer | | |
| Le VA Re 80 or Ott Re (a) (b) (c) (d) (e) | gal Na gal Na wingUAl imary ingUAl inguA | nada - Ontario Securities Commission and the related person share any supervised persons? and the related person share the same physical location? Ime of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 Person's D Number (if any): 3715 Number(s) (if any): K Number 7529 Person is: (chock all that apply) broker-dealer, municipal securities dealer, or government securities broker or dealer other investment adviser (including financial planners) registered security-based swap dealer major security-based swap participant | | |
| Do D | gal Na So you a gal Na NGUA imary NGUA her clated I 106 CII 94 | and the related person share any supervised persons? and the related person share the same physical location? are of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 Person's D Number (if any): 5715 Number(s) (if any): K Number 7529 Person is: (check all that apply) broker-dealer, municipal securities dealer, or government securities broker or dealer other investment adviser (including financial planners) registered security-based swap dealer major security-based swap dealer major security-based swap participant commodity pool operator or commodity trading advisor (whether registered or exempt from registration) | | |
| Doc | gal Na gal Na imary NGUA her lated H 106 CIK CII 94 | and the related person share any supervised persons? and the related person share the same physical location? and the related person share the same physical location? and the related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 Person's Pumber (if any): A Number (if any): A Number (if any): A Number (if any): Person is: (check all that apply) broker-dealer, municipal securities dealer, or government securities broker or dealer other investment adviser (including financial planners) registered security-based swap dealer major security-based swap participant commodity pool operator or commodity trading advisor (whether registered or exempt from registration) futures commission merchant | | _ |
| Le VA Pri VA Ree 80 or Ot (a) (b) (c) (d) (e) (f) | gal Na gal Na imary NGUA her lated H 106 CIK CII 94 | and the related person share any supervised persons? and the related person share the same physical location? are of Related Person: RD ADVISERS, INC. Business Name of Related Person: RD ADVISERS, INC. Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) 601 Person's D Number (if any): 5715 Number(s) (if any): K Number 7529 Person is: (check all that apply) broker-dealer, municipal securities dealer, or government securities broker or dealer other investment adviser (including financial planners) registered security-based swap dealer major security-based swap dealer major security-based swap participant commodity pool operator or commodity trading advisor (whether registered or exempt from registration) | | |

| (j) | accountant or accounting firm | | |
|-----------------------------|--|----------------|-----|
| (k) | lawyer or law firm | | |
| (l) | insurance company or agency | | |
| (m (n) | | | |
| (o) | | | |
| (p) | sponsor, general partner, managing member (or equivalent) of pooled investment vehicles | | |
| | Y | 'es | No |
| 6. Do | you control or are you controlled by the related person? | ⊙ | 0 |
| 7. Ar | e you and the <i>related person</i> under common <i>control</i> ? | 0 | • |
| 8. (a) | Does the related person act as a qualified custodian for your clients in connection with advisory services you provide to clients? | 0 | • |
| (b) | If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not required to obtain a surprise examination for your <i>clients'</i> funds or securities that are maintained at the <i>related person</i> ? | 0 | 0 |
| (c) | If you have answered "yes" to question 8.(a) above, provide the location of the <i>related person's</i> office responsible for <i>custody</i> of your <i>clients'</i> a Number and Street 1: Number and Street 2: | sse | ts: |
| | City: State: Country: ZIP+4/Postal Code: | | |
| | If this address is a private residence, check this box: \square | , | N.I |
| 9. (a) | | es. | |
| (b) | · · · · · · · · · · · · · · · · · · · | 0 | • |
| (0) | If the answer is yes, under what exemption: | | |
| 10. (a) | Is the related person registered with a foreign financial regulatory authority? | 0 | • |
| (b) | | _ | |
| 11. Do | you and the related person share any supervised persons? | • | 0 |
| 12. Do | you and the related person share the same physical location? | ⊙ | 0 |
| | | | |
| Item 7 | Private Fund Reporting | | |
| | Y | 'es | No |
| B. Are | you an adviser to any <i>private fund</i> ? | • | 0 |
| sen repo 7.B. inst | res," then for each private fund that you advise, you must complete a Section 7.B.(1) of Schedule D, except in certain circumstances described in the new fence and in Instruction 6 of the Instructions to Part 1A. If you are registered or applying for registration with the SEC or reporting as an SEC exempt porting adviser, and another SEC-registered adviser or SEC exempt reporting adviser reports this information with respect to any such private fund in Section 1.B.(1) of Schedule D of its Form ADV (e.g., if you are a subadviser), do not complete Section 7.B.(1) of Schedule D with respect to that private fund. You mead, complete Section 7.B.(2) of Schedule D. Section 7.B.(2) of Schedule D. | ctior nust, | |
| code | e, or similar designation, pursuant to rule 204-2(d), you may identify the private fund in Section 7.B.(1) or 7.B.(2) of Schedule D using the same code of gnation in place of the fund's name. | | |
| SECTIO | DN 7.B.(1) Private Fund Reporting | | |
| | Funds per Page: 15 Total Funds: 1 | | |
| A DD | INATE ELIND | | |
| A. PR | IVATE FUND | | |
| Infor | mation About the <i>Private Fund</i> | | |
| 1. | (a) Name of the <i>private fund</i> : CSF PRIVATE FUND | | |
| | (b) Private fund identification number: | | |
| | (include the "805-" prefix also) | | |
| | 805-1178567505 | | |
| | | | |
| 2. | Under the laws of what state or country is the <i>private fund</i> organized: | | |

| | State: Country: | | |
|-----|---|--------|-------|
| | Cayman Islands | | |
| 3. | (a) Name(s) of General Partner, Manager, Trustee, or Directors (or persons serving in a similar capacity): | | |
| | Name of General Partner, Manager, Trustee, or Director | | |
| | VGMF I (CAYMAN) LIMITED | | |
| | | | |
| | (b) If filing an umbrella registration, identify the filing adviser and/or relying adviser(s) that sponsor(s) or manage(s) this private fund. | | |
| | No Information Filed | | |
| | | | |
| 4. | The private fund (check all that apply; you must check at least one): | | |
| | (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940 | | |
| | (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940 | | |
| | | | |
| 5. | List the name and country, in English, of each foreign financial regulatory authority with which the private fund is registered. | | |
| | Name of Country/English Name of Foreign Financial Regulatory Authority | | |
| | Other - CAYMAN ISLANDS REGISTRAR OF TRUSTS | | |
| | | Yes | s No |
| 6. | (a) Is this a "master fund" in a master-feeder arrangement? | 0 | ⊙ |
| | (b) If yes, what is the name and private fund identification number (if any) of the feeder funds investing in this private fund? | | |
| | No Information Filed | | |
| | | | |
| | | Yes | s No |
| | (c) Is this a "feeder fund" in a master-feeder arrangement? | 0 | ⊙ |
| | (d) If yes, what is the name and <i>private fund</i> identification number (if any) of the master fund in which this <i>private fund</i> invests? Name of <i>private fund</i> : | | |
| | Name of private rund. | | |
| | Private fund identification number: | | |
| | (include the "805-" prefix also) | | |
| 7. | for the master-feeder arrangement or reporting on the funds separately. If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for the feeder funds answer the following questions: | or eac | ch of |
| | | | |
| | No Information Filed | | |
| | | | |
| | NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially al assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund. | | |
| - | | Yes | s No |
| 8. | (a) Is this private fund a "fund of funds"? | _ | ⊙ |
| | NOTE: For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investmen vehicles, regardless of whether they are also <i>private funds</i> or registered investment companies. | t | |
| | (b) If yes, does the <i>private fund</i> invest in funds managed by you or by a <i>related person</i> ? | 0 | 0 |
| | | | |
| | | Yes | s No |
| 9. | During your last fiscal year, did the private fund invest in securities issued by investment companies registered under the Investment | 0 | • |
| | Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)? | | |
| | | | |
| 10. | What type of fund is the <i>private fund</i> ? | | |
| | • hedge fund • liquidity fund • private equity fund • real estate fund • securitized asset fund • venture capital fund • Other private | ate fu | nd: |
| | NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A. | | |
| 11 | Current gross asset value of the <i>private fund</i> : | | |
| 11. | Current gross asset value of the private rand. | | |

| \$ 2 | 76,012,482 | | |
|---------------|--|------------------|-----------------|
| <u>Owners</u> | <u>ship</u> | | |
| 12. Min | nimum investment commitment required of an investor in the private fund: | | |
| | TE: Report the amount routinely required of investors who are not your <i>related persons</i> (even if different from the amount set forth in panizational documents of the fund). | n the | |
| 13. App | proximate number of the <i>private fund's</i> beneficial owners: | | |
| ı | | | |
| 14. Wh | at is the approximate percentage of the <i>private fund</i> beneficially owned by you and your <i>related persons</i> : 0% | | |
| | What is the approximate percentage of the <i>private fund</i> beneficially owned (in the aggregate) by funds of funds: | | |
| 0% | | Yes | No |
| (b) | If the private fund qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to <i>qualified clients</i> ? | 0 | 0 |
| 16. Wh | at is the approximate percentage of the <i>private fund</i> beneficially owned by non- <i>United States persons</i> : | | |
| Your Ad | dvisory Services | | |
| TOUT A | divisory Scrivices | Yes | No |
| 17. (a) | Are you a subadviser to this <i>private fund</i> ? | 0 | \odot |
| (b) | If the answer to question 17.(a) is "yes," provide the name and SEC file number, if any, of the adviser of the <i>private fund</i> . If the ansquestion 17.(a) is "no," leave this question blank. | swer to | |
| | No Information Filed | | |
| 18. (a) | Do any investment advisers (other than the investment advisers listed in Section 7.B.(1).A.3.(b)) advise the <i>private fund</i> ? | Yes | |
| | If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the <i>private fund</i> . If to question 18.(a) is "no," leave this question blank. | the answ | ⊙ ver |
| | No Information Filed | | |
| | | Yes | No |
| | e your <i>clients</i> solicited to invest in the <i>private fund</i> ? | 0 | ⊙ |
| NO | TE: For purposes of this question, do not consider feeder funds of the private fund. | | |
| 20. App | proximately what percentage of your <i>clients</i> has invested in the <i>private fund</i> ? | | |
| . | | | |
| Private | • Offering | Yes | No |
| 21. Has | s the private fund ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933? | 0 | • |
| 22. If y | ves, provide the <i>private fund's</i> Form D file number (if any): | | |
| | No Information Filed | | |
| B. SERVI | CE PROVIDERS | | |
| Auditor | | | |
| 22 () | (1) Are the private fundle financial statements subject to an appurate subject to appurate subject subjec | _ | s No |
| ∠3. (a) | (1) Are the <i>private fund's</i> financial statements subject to an annual audit?(2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U.S. GAAP? | 0 | • |
| | If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the <i>private fund</i> uses more than one aud | Ö Nitina firm | ⊙ |
| | you must complete questions (b) through (f) separately for each auditing firm. | arting min | ., |

No Information Filed

| | | Yes No | | | | | | |
|---------------|--|-----------------------|--|--|--|--|--|--|
| (g) | Are the <i>private fund's</i> audited financial statements for the most recently completed fiscal year distributed to the <i>private fund's</i> investors? | 0 0 | | | | | | |
| (h) | Do all of the reports prepared by the auditing firm for the private fund since your last annual updating amendment contain unqualified opinions? | | | | | | | |
| | O Yes O No O Report Not Yet Received | | | | | | | |
| | If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the repo | ort is available. | | | | | | |
| Prime I | <u>Broker</u> | | | | | | | |
| 24. (a) | Does the <i>private fund</i> use one or more prime brokers? | Yes No | | | | | | |
| | If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the <i>private fund</i> uses. <i>fund</i> uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker. | | | | | | | |
| | No Information Filed | | | | | | | |
| Custod | <u>lian</u> | Yes No | | | | | | |
| 25. (a) | Does the private fund use any custodians (including the prime brokers listed above) to hold some or all of its assets? | • o | | | | | | |
| | If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the <i>private fund</i> uses. If t fund uses more than one custodian, you must complete questions (b) through (g) separately for each custodian. | he <i>private</i> | | | | | | |
| | Additional Custodian Information : 1 Record(s) Filed. | | | | | | | |
| | (b) Legal name of custodian: STATE STREET BANK & TRUST COMPANY (c) Primary business name of custodian: STATE STREET BANK & TRUST COMPANY | | | | | | | |
| | | | | | | | | |
| | (d) The location of the custodian's office responsible for <i>custody</i> of the <i>private fund's</i> assets (city, state and country): | | | | | | | |
| | City: State: Country: BOSTON Massachusetts United States | | | | | | | |
| | | Yes No | | | | | | |
| | (e) Is the custodian a related person of your firm? | 0 0 | | | | | | |
| | (f) If the custodian is a broker-dealer, provide its SEC registration number (if any): | | | | | | | |
| | - CRD Number (if any): | | | | | | | |
| | (g) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its legal identifier (if any) | I entity | | | | | | |
| <u>Admini</u> | istrator_ | | | | | | | |
| 24 /-> | Does the private fundues an administrator other than your firm? | Yes No | | | | | | |
| ∠o. (a) | Does the <i>private fund</i> use an administrator other than your firm? If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the <i>private fund</i> uses more than one administrator. | O ⊙ nistrator, you | | | | | | |
| | No Information Filed | | | | | | | |
| | | | | | | | | |

27. During your last fiscal year, what percentage of the *private fund's* assets (by value) was valued by a *person*, such as an administrator, that is not

| | your related person? | | | | | | | | |
|------|--|----------|---------|--|--|--|--|--|--|
| | 0% | | | | | | | | |
| | Include only those assets where (i) such <i>person</i> carried out the valuation procedure established for that asset, if any, including obtaining relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such <i>person</i> . | • | | | | | | | |
| В. | | | | | | | | | |
| IV | <u>Marketers</u> | Yes | No | | | | | | |
| 2 | 28. (a) Does the <i>private fund</i> use the services of someone other than you or your <i>employees</i> for marketing purposes? | | ··· | | | | | | |
| | You must answer "yes" whether the <i>person</i> acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar <i>person</i> . If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the <i>private fund</i> uses. If the <i>private fund</i> uses more than one marketer you must complete questions (b) through (g) separately for each marketer. | | | | | | | | |
| | No Information Filed | | | | | | | | |
| | | | | | | | | | |
| | Funds per Page: 15 🔻 Total Funds: 1 | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| SEC | CTION 7.B.(2) Private Fund Reporting | | | | | | | | |
| | No Information Filed | | | | | | | | |
| | | | | | | | | | |
| | n 8 Participation or Interest in <i>Client</i> Transactions | | | | | | | | |
| con | this Item, we request information about your participation and interest in your <i>clients</i> ' transactions. This information identifies additional areas afficts of interest may occur between you and your <i>clients</i> . Newly-formed advisers should base responses to these questions on the types of pagons in the support in the fixed of the second of the secon | | | | | | | | |
| _ike | e Item 7, Item 8 requires you to provide information about you and your related persons, including foreign affiliates. | | | | | | | | |
| Pro | oprietary Interest in <i>Client</i> Transactions | | | | | | | | |
| Α. | Do you or any related person: | Yes | s No | | | | | | |
| | (1) buy securities for yourself from advisory clients, or sell securities you own to advisory clients (principal transactions)? | 0 | \odot | | | | | | |
| | (2) buy or sell for yourself securities (other than shares of mutual funds) that you also recommend to advisory clients? | 0 | • | | | | | | |
| | (3) recommend securities (or other investment products) to advisory <i>clients</i> in which you or any <i>related person</i> has some other proprietary (ownership) interest (other than those mentioned in Items 8.A.(1) or (2))? | 0 | • | | | | | | |
| Sal | les Interest in <i>Client</i> Transactions | | | | | | | | |
| В. | Do you or any related person: | Yes | s No | | | | | | |
| | (1) as a broker-dealer or registered representative of a broker-dealer, execute securities trades for brokerage customers in which advisory client securities are sold to or bought from the brokerage customer (agency cross transactions)? | 0 | • | | | | | | |
| | (2) recommend to advisory <i>clients</i> , or act as a purchaser representative for advisory <i>clients</i> with respect to, the purchase of securities for which you or any <i>related person</i> serves as underwriter or general or managing partner? | • | 0 | | | | | | |
| | (3) recommend purchase or sale of securities to advisory <i>clients</i> for which you or any <i>related person</i> has any other sales interest (other that the receipt of sales commissions as a broker or registered representative of a broker-dealer)? | n ⊙ | 0 | | | | | | |
| Inv | vestment or Brokerage Discretion | | | | | | | | |
| C. | Do you or any <i>related person</i> have <i>discretionary authority</i> to determine the: (1) securities to be bought or sold for a <i>client's</i> account? | Yes © | s No | | | | | | |
| | (2) amount of securities to be bought or sold for a client's account? | • | 0 | | | | | | |
| | (3) broker or dealer to be used for a purchase or sale of securities for a client's account? | • | 0 | | | | | | |
| | (4) commission rates to be paid to a broker or dealer for a <i>client's</i> securities transactions? | • | 0 | | | | | | |
| D. | If you answer "yes" to C.(3) above, are any of the brokers or dealers related persons? | 0 | • | | | | | | |
| E. | Do you or any related person recommend brokers or dealers to clients? | • | 0 | | | | | | |
| F. | If you answer "yes" to E. above, are any of the brokers or dealers related persons? | 0 | • | | | | | | |
| G. | (1) Do you or any <i>related person</i> receive research or other products or services other than execution from a broker-dealer or a third party ("soft dollar benefits") in connection with <i>client</i> securities transactions? | • | 0 | | | | | | |
| | (2) If "yes" to G.(1) above, are all the "soft dollar benefits" you or any related persons receive eligible "research or brokerage services" und | er 👩 | 0 | | | | | | |

| Н. | H. (1) Do you or any related person, directly or indirectly, compensate any person that is not an employee for client r | referrals? | 0 | \odot |
|------|---|--|---------|---------|
| | (2) Do you or any <i>related person</i> , directly or indirectly, provide any <i>employee</i> compensation that is specifically relative firm (cash or non-cash compensation in addition to the <i>employee's</i> regular salary)? | ated to obtaining <i>clients</i> for | • | 0 |
| I. | I. Do you or any <i>related person</i> , including any <i>employee</i> , directly or indirectly, receive compensation from any <i>person</i> person) for <i>client</i> referrals? | (other than you or any related | 0 | • |
| | In your response to Item 8.I., do not include the regular salary you pay to an employee. | | | |
| | In responding to Items 8.H. and 8.I., consider all cash and non-cash compensation that you or a related person gave from (in answering Item 8.I.) any person in exchange for client referrals, including any bonus that is based, at least ir referrals. | | | |
| Iter | Item 9 Custody | | | |
| In t | In this Item, we ask you whether you or a <i>related person</i> has <i>custody</i> of <i>client</i> (other than <i>clients</i> that are investment Investment Company Act of 1940) assets and about your custodial practices. | companies registered under the | | |
| Α. | A. (1) Do you have <i>custody</i> of any advisory <i>clients'</i> : | Υ | es/ | No |
| | (a) cash or bank accounts? | | 0 | \odot |
| | (b) securities? | | 0 | • |
| | If you are registering or registered with the SEC, answer "No" to Item 9.A. (1)(a) and (b) if you have custody solely be directly from your clients' accounts, or (ii) a related person has custody of client assets in connection with advisory set have overcome the presumption that you are not operationally independent (pursuant to Advisers Act rule 206(4)-2(advisers Act rule 206(4)). If you checked "yes" to Item 9.A. (1)(a) or (b), what is the approximate amount of client funds and securities | rvices you provide to clients, but you'll (5) from the related person. | ou | |
| | you have <i>custody</i> : | and total number of thems for wi | HICH | |
| | U.S. Dollar Amount Total Number of <i>Clients</i> | | | |
| | (a) \$ (b) | | | |
| | If you are registering or registered with the SEC and you have custody solely because you deduct your advisory fees of include the amount of those assets and the number of those clients in your response to Item 9.A.(2). If your related connection with advisory services you provide to clients, do not include the amount of those assets and number of the Instead, include that information in your response to Item 9.B.(2). | person has custody of client assets | s in | not |
| В. | | ny of your advisory <i>clients'</i> : Y | es/ | No |
| | (a) cash or bank accounts? | | 0 | ⊙ |
| | (b) securities? | | 0 | ⊙ |
| | You are required to answer this item regardless of how you answered Item 9.A.(1)(a) or (b). | | | |
| | (2) If you checked "yes" to Item 9.B.(1)(a) or (b), what is the approximate amount of <i>client</i> funds and securities your <i>related persons</i> have <i>custody</i> : | and total number of <i>clients</i> for w | hich | |
| | U.S. Dollar Amount Total Number of <i>Clients</i> | | | |
| | (a) \$ (b) | | | |
| C. | C. If you or your related persons have custody of client funds or securities in connection with advisory services you p that apply: | rovide to <i>clients</i> , check all the foll | owin | ıg |
| | (1) A qualified custodian(s) sends account statements at least quarterly to the investors in the pooled investment(2) An <i>independent public accountant</i> audits annually the pooled investment vehicle(s) that you manage and the are distributed to the investors in the pools. | _ | | |
| | (3) An independent public accountant conducts an annual surprise examination of client funds and securities.(4) An independent public accountant prepares an internal control report with respect to custodial services when are qualified custodians for client funds and securities. | you or your <i>related persons</i> | | |
| | If you checked Item 9.C.(2), C.(3) or C.(4), list in Section 9.C. of Schedule D the accountants that are engaged to perfu an internal control report. (If you checked Item 9.C.(2), you do not have to list auditor information in Section 9.C. of S information with respect to the private funds you advise in Section 7.B.(1) of Schedule D). | • | • | Э |
| D. | Do you or your <i>related person(s)</i> act as qualified custodians for your <i>clients</i> in connection with advisory services you(1) you act as a qualified custodian | · | es O | |

0 0

section 28(e) of the Securities Exchange Act of 1934?

(2) your *related person(s)* act as qualified custodian(s)

If you checked "yes" to Item 9.D.(2), all related persons that act as qualified custodians (other than any mutual fund transfer agent pursuant to rule 206(4)-2(b)(1)) must be identified in Section 7.A. of Schedule D, regardless of whether you have determined the related person to be operationally independent under rule 206(4)-2 of the Advisers Act.

- E. If you are filing your *annual updating amendment* and you were subject to a surprise examination by an *independent public accountant* during your last fiscal year, provide the date (MM/YYYY) the examination commenced:
- F. If you or your *related persons* have *custody* of *client* funds or securities, how many *persons*, including, but not limited to, you and your *related persons*, act as qualified custodians for your *clients* in connection with advisory services you provide to *clients*?

SECTION 9.C. Independent Public Accountant

No Information Filed

Item 10 Control Persons

In this Item, we ask you to identify every *person* that, directly or indirectly, *controls* you. If you are filing an *umbrella registration*, the information in Item 10 should be provided for the *filing adviser* only.

If you are submitting an initial application or report, you must complete Schedule A and Schedule B. Schedule A asks for information about your direct owners and executive officers. Schedule B asks for information about your indirect owners. If this is an amendment and you are updating information you reported on either Schedule A or Schedule B (or both) that you filed with your initial application or report, you must complete Schedule C.

Yes No

. Does any person not named in Item 1.A. or Schedules A, B, or C, directly or indirectly, control your management or policies?

0 0

If yes, complete Section 10.A. of Schedule D.

B. If any *person* named in Schedules A, B, or C or in Section 10.A. of Schedule D is a public reporting company under Sections 12 or 15(d) of the Securities Exchange Act of 1934, please complete Section 10.B. of Schedule D.

SECTION 10.A. Control Persons

No Information Filed

SECTION 10.B. Control Person Public Reporting Companies

No Information Filed

Item 11 Disclosure Information

In this Item, we ask for information about your disciplinary history and the disciplinary history of all your *advisory affiliates*. We use this information to determine whether to grant your application for registration, to decide whether to revoke your registration or to place limitations on your activities as an investment adviser, and to identify potential problem areas to focus on during our on-site examinations. One event may result in "yes" answers to more than one of the questions below. In accordance with General Instruction 5 to Form ADV, "you" and "your" include the *filing adviser* and all *relying advisers* under an *umbrella registration*.

Your advisory affiliates are: (1) all of your current employees (other than employees performing only clerical, administrative, support or similar functions); (2) all of your officers, partners, or directors (or any person performing similar functions); and (3) all persons directly or indirectly controlling you or controlled by you. If you are a "separately identifiable department or division" (SID) of a bank, see the Glossary of Terms to determine who your advisory affiliates are.

If you are registered or registering with the SEC or if you are an exempt reporting adviser, you may limit your disclosure of any event listed in Item 11 to ten years following the date of the event. If you are registered or registering with a state, you must respond to the questions as posed; you may, therefore, limit your disclosure to ten years following the date of an event only in responding to Items 11.A.(1), 11.A.(2), 11.B.(1), 11.B.(2), 11.D.(4), and 11.H.(1)(a). For purposes of calculating this ten-year period, the date of an event is the date the final order, judgment, or decree was entered, or the date any rights of appeal from preliminary orders, judgments, or decrees lapsed.

You must complete the appropriate Disclosure Reporting Page ("DRP") for "yes" answers to the questions in this Item 11.

Do any of the events below involve you or any of your *supervised persons*?

Yes No

 \odot

For "yes" answers to the following questions, complete a Criminal Action DRP:

 \circ

⊚

A. In the past ten years, have you or any advisory affiliate:

(1) been convicted of or pled guilty or nolo contendere ("no contest") in a domestic, foreign, or military court to any felony?

Yes No

| istered or registering with the SEC, or if you are reporting as an exempt reporting adviser, you may limit your response to Item 11.A.(2) to are currently pending. en years, have you or any advisory affiliate: victed of or pled guilty or nolo contendere ("no contest") in a domestic, foreign, or military court to a misdemeanor involving: ints or an investment-related business, or any fraud, false statements, or omissions, wrongful taking of property, bribery, perjury, counterfeiting, extortion, or a conspiracy to commit any of these offenses? reged with a misdemeanor listed in Item 11.B.(1)? Instered or registering with the SEC, or if you are reporting as an exempt reporting adviser, you may limit your response to Item 11.B.(2) to are currently pending. In to the following questions, complete a Regulatory Action DRP: Our the Commodity Futures Trading Commission (CFTC) ever: Out or any advisory affiliate to have made a false statement or omission? Out or any advisory affiliate to have been involved in a violation of SEC or CFTC regulations or statutes? Out or any advisory affiliate to have been a cause of an investment-related business having its authorization to do business denied, ed, revoked, or restricted? an order against you or any advisory affiliate in connection with investment-related activity? a civil money penalty on you or any advisory affiliate, or ordered you or any advisory affiliate to cease and desist from any activity? | 0 | • |
|--|---|---|
| victed of or pled guilty or nolo contendere ("no contest") in a domestic, foreign, or military court to a <i>misdemeanor</i> involving: into or an <i>investment-related</i> business, or any fraud, false statements, or omissions, wrongful taking of property, bribery, perjury, counterfeiting, extortion, or a conspiracy to commit any of these offenses? **reged* with a misdemeanor* listed in Item 11.B.(1)? **istered or registering with the SEC, or if you are reporting as an exempt reporting adviser, you may limit your response to Item 11.B.(2) to are currently pending. **Set to the following questions, complete a Regulatory Action DRP: **or the Commodity Futures Trading Commission (CFTC) ever: **u or any advisory affiliate* to have made a false statement or omission?** **u or any advisory affiliate* to have been involved in a violation of SEC or CFTC regulations or statutes?** **u or any advisory affiliate* to have been a cause of an investment-related business having its authorization to do business denied, end, revoked, or restricted?** **an order* against you or any advisory affiliate* in connection with investment-related* activity?** | °C Yes | ⊙ |
| victed of or pled guilty or nolo contendere ("no contest") in a domestic, foreign, or military court to a <i>misdemeanor</i> involving: into or an <i>investment-related</i> business, or any fraud, false statements, or omissions, wrongful taking of property, bribery, perjury, counterfeiting, extortion, or a conspiracy to commit any of these offenses? **reged* with a misdemeanor* listed in Item 11.B.(1)? **istered or registering with the SEC, or if you are reporting as an exempt reporting adviser, you may limit your response to Item 11.B.(2) to are currently pending. **Set to the following questions, complete a Regulatory Action DRP: **or the Commodity Futures Trading Commission (CFTC) ever: **u or any advisory affiliate* to have made a false statement or omission?** **u or any advisory affiliate* to have been involved in a violation of SEC or CFTC regulations or statutes?** **u or any advisory affiliate* to have been a cause of an investment-related business having its authorization to do business denied, end, revoked, or restricted?** **an order* against you or any advisory affiliate* in connection with investment-related* activity?** | °C Yes | ⊙ |
| distered or registering with the SEC, or if you are reporting as an exempt reporting adviser, you may limit your response to Item 11.B.(2) to the following questions, complete a Regulatory Action DRP: or the Commodity Futures Trading Commission (CFTC) ever: u or any advisory affiliate to have made a false statement or omission? u or any advisory affiliate to have been involved in a violation of SEC or CFTC regulations or statutes? u or any advisory affiliate to have been a cause of an investment-related business having its authorization to do business denied, ed, revoked, or restricted? an order against you or any advisory affiliate in connection with investment-related activity? | Yes | • |
| are currently pending. Set to the following questions, complete a Regulatory Action DRP: Or the Commodity Futures Trading Commission (CFTC) ever: Ou or any advisory affiliate to have made a false statement or omission? Ou or any advisory affiliate to have been involved in a violation of SEC or CFTC regulations or statutes? Ou or any advisory affiliate to have been a cause of an investment-related business having its authorization to do business denied, revoked, or restricted? Set to the following questions, complete a Regulatory Action DRP: Output | Yes | |
| or the Commodity Futures Trading Commission (CFTC) ever: u or any advisory affiliate to have made a false statement or omission? u or any advisory affiliate to have been involved in a violation of SEC or CFTC regulations or statutes? u or any advisory affiliate to have been a cause of an investment-related business having its authorization to do business denied, revoked, or restricted? an order against you or any advisory affiliate in connection with investment-related activity? | 0 | |
| u or any advisory affiliate to have made a false statement or omission? u or any advisory affiliate to have been involved in a violation of SEC or CFTC regulations or statutes? u or any advisory affiliate to have been a cause of an investment-related business having its authorization to do business denied, revoked, or restricted? an order against you or any advisory affiliate in connection with investment-related activity? | 0 | |
| u or any advisory affiliate to have been involved in a violation of SEC or CFTC regulations or statutes? u or any advisory affiliate to have been a cause of an investment-related business having its authorization to do business denied, ed, revoked, or restricted? an order against you or any advisory affiliate in connection with investment-related activity? | _ | No |
| u or any advisory affiliate to have been a cause of an investment-related business having its authorization to do business denied, ed, revoked, or restricted? an order against you or any advisory affiliate in connection with investment-related activity? | 0 | \odot |
| ed, revoked, or restricted? an <i>order</i> against you or any <i>advisory affiliate</i> in connection with <i>investment-related</i> activity? | | \odot |
| | 0 | • |
| a civil money penalty on you or any advisory affiliate, or ordered you or any advisory affiliate to cease and desist from any activity? | 0 | • |
| | 0 | • |
| er federal regulatory agency, any state regulatory agency, or any foreign financial regulatory authority: | | |
| nd you or any advisory affiliate to have made a false statement or omission, or been dishonest, unfair, or unethical? | 0 | • |
| nd you or any advisory affiliate to have been involved in a violation of investment-related regulations or statutes? | • | 0 |
| nd you or any advisory affiliate to have been a cause of an investment-related business having its authorization to do business suspended, revoked, or restricted? | 0 | • |
| st ten years, entered an order against you or any advisory affiliate in connection with an investment-related activity? | • | 0 |
| ied, suspended, or revoked your or any advisory affiliate's registration or license, or otherwise prevented you or any advisory by order, from associating with an investment-related business or restricted your or any advisory affiliate's activity? | 0 | • |
| regulatory organization or commodities exchange ever: | | |
| u or any <i>advisory affiliate</i> to have made a false statement or omission? | 0 | • |
| u or any <i>advisory affiliate</i> to have been <i>involved</i> in a violation of its rules (other than a violation designated as a " <i>minor rule</i> under a plan approved by the SEC)? | • | 0 |
| u or any advisory affiliate to have been the cause of an investment-related business having its authorization to do business denied, ed, revoked, or restricted? | 0 | • |
| ed you or any advisory affiliate by expelling or suspending you or the advisory affiliate from membership, barring or suspending you divisory affiliate from association with other members, or otherwise restricting your or the advisory affiliate's activities? | 0 | • |
| orization to act as an attorney, accountant, or federal contractor granted to you or any advisory affiliate ever been revoked or | 0 | • |
| ny <i>advisory affiliate</i> now the subject of any regulatory <i>proceeding</i> that could result in a "yes" answer to any part of Item 11.C., E.? | 0 | • |
| | | |
| s to the following questions, complete a Civil Judicial Action DRP: | Yes | No |
| | 0 | \odot |
| | 0 | \odot |
| domestic or foreign court: | 0 | • |
| domestic or foreign court: e past ten years, <i>enjoined</i> you or any <i>advisory affiliate</i> in connection with any <i>investment-related</i> activity? | • | 0 |
| | mestic or foreign court: past ten years, enjoined you or any advisory affiliate in connection with any investment-related activity? pand that you or any advisory affiliate were involved in a violation of investment-related statutes or regulations? smissed, pursuant to a settlement agreement, an investment-related civil action brought against you or any advisory affiliate by | restic or foreign court: Pass ten years, enjoined you or any advisory affiliate in connection with any investment-related activity? Paund that you or any advisory affiliate were involved in a violation of investment-related statutes or regulations? Smissed, pursuant to a settlement agreement, an investment-related civil action brought against you or any advisory affiliate by or foreign financial regulatory authority? |

The SEC is required by the Regulatory Flexibility Act to consider the effect of its regulations on small entities. In order to do this, we need to determine whether you meet the definition of "small business" or "small organization" under rule 0-7.

Answer this Item 12 only if you are registered or registering with the SEC **and** you indicated in response to Item 5.F.(2)(c) that you have regulatory assets under management of less than \$25 million. You are not required to answer this Item 12 if you are filing for initial registration as a state adviser, amending a

current state registration, or switching from SEC to state registration.

For purposes of this Item 12 only:

- Total Assets refers to the total assets of a firm, rather than the assets managed on behalf of *clients*. In determining your or another *person's* total assets, you may use the total assets shown on a current balance sheet (but use total assets reported on a consolidated balance sheet with subsidiaries included, if that amount is larger).
- Control means the power to direct or cause the direction of the management or policies of a *person*, whether through ownership of securities, by contract, or otherwise. Any *person* that directly or indirectly has the right to vote 25 percent or more of the voting securities, or is entitled to 25 percent or more of the profits, of another *person* is presumed to *control* the other *person*.

| | | Yes | No |
|------|--|-----|----|
| ۹. | Did you have total assets of \$5 million or more on the last day of your most recent fiscal year? | 0 | 0 |
| If " | "yes," you do not need to answer Items 12.B. and 12.C. | | |
| В. | Do you: | | |
| | (1) control another investment adviser that had regulatory assets under management (calculated in response to Item 5.F.(2)(c) of Form ADV) of \$25 million or more on the last day of its most recent fiscal year? | 0 | 0 |
| | (2) control another person (other than a natural person) that had total assets of \$5 million or more on the last day of its most recent fiscal year? | 0 | 0 |
| С. | Are you: (1) controlled by or under common control with another investment adviser that had regulatory assets under management (calculated in | _ | _ |

Schedule A

Direct Owners and Executive Officers

1. Complete Schedule A only if you are submitting an initial application or report. Schedule A asks for information about your direct owners and executive officers. Use Schedule C to amend this information.

(2) controlled by or under common control with another person (other than a natural person) that had total assets of \$5 million or more on the

response to Item 5.F.(2)(c) of Form ADV) of \$25 million or more on the last day of its most recent fiscal year?

2. Direct Owners and Executive Officers. List below the names of:

last day of its most recent fiscal year?

- (a) each Chief Executive Officer, Chief Financial Officer, Chief Operations Officer, Chief Legal Officer, Chief Compliance Officer (Chief Compliance Officer is required if you are registered or applying for registration and cannot be more than one individual), director, and any other individuals with similar status or functions:
- (b) if you are organized as a corporation, each shareholder that is a direct owner of 5% or more of a class of your voting securities, unless you are a public reporting company (a company subject to Section 12 or 15(d) of the Exchange Act);

 Direct owners include any *person* that owns, beneficially owns, has the right to vote, or has the power to sell or direct the sale of, 5% or more of a class of your voting securities. For purposes of this Schedule, a *person* beneficially owns any securities: (i) owned by his/her child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, sharing the same residence; or (ii) that he/she has the right to acquire, within 60 days, through the exercise of any option, warrant, or right to purchase the security.
- (c) if you are organized as a partnership, <u>all</u> general partners and those limited and special partners that have the right to receive upon dissolution, or have contributed, 5% or more of your capital;
- (d) in the case of a trust that directly owns 5% or more of a class of your voting securities, or that has the right to receive upon dissolution, or has contributed, 5% or more of your capital, the trust and each trustee; and
- (e) if you are organized as a limited liability company ("LLC"), (i) those members that have the right to receive upon dissolution, or have contributed, 5% or more of your capital, and (ii) if managed by elected managers, all elected managers.
- 3. Do you have any indirect owners to be reported on Schedule B? $\,\,_{\hbox{\scriptsize C}}\,$ Yes $\,\,_{\hbox{\scriptsize \odot}}\,$ No
- 4. In the DE/FE/I column below, enter "DE" if the owner is a domestic entity, "FE" if the owner is an entity incorporated or domiciled in a foreign country, or "I" if the owner or executive officer is an individual.
- 5. Complete the Title or Status column by entering board/management titles; status as partner, trustee, sole proprietor, elected manager, shareholder, or member; and for shareholders or members, the class of securities owned (if more than one is issued).
- 6. Ownership codes are: NA less than 5% B 10% but less than 25% D 50% but less than 75%

DE/FE/I Title or Status

- A 5% but less than 10% C 25% but less than 50% E 75% or more

 7. (a) In the *Control Person* column, enter "Yes" if the *person* has *control* as defined in the Glossary of Terms to Form ADV, and enter "No" if the *person* does
- not have *control*. Note that under this definition, most executive officers and all 25% owners, general partners, elected managers, and trustees are *control persons*.
 - (b) In the PR column, enter "PR" if the owner is a public reporting company under Sections 12 or 15(d) of the Exchange Act.
- (c) Complete each column.

 FULL LEGAL NAME (Individuals:

| Last Name, First Name, Middle | | | Status Acquired | Code | Person | | Date of Birth, IRS Tax No. or |
|-------------------------------|----|-------------|-----------------|------|--------|---|-------------------------------|
| Name) | | | MM/YYYY | | | | Employer ID No. |
| VANGUARD ADMIRAL FUNDS | DE | STOCKHOLDER | 12/1992 | NA | N | N | |
| VANGUARD OHIO TAX-FREE FUNDS | DE | STOCKHOLDER | 06/1990 | NA | N | N | |
| VANGUARD VALLEY FORGE FUNDS | DE | STOCKHOLDER | 11/1992 | NA | N | N | |
| VANGUARD TAX-MANAGED FUNDS | DE | STOCKHOLDER | 09/1994 | NA | N | N | |
| VANGUARD WHITEHALL FUNDS | DE | STOCKHOLDER | 02/1996 | NA | N | N | |
| VANGUARD HORIZON FUNDS | DE | STOCKHOLDER | 06/1995 | NA | N | N | |
| VANGUARD SCOTTSDALE FUNDS | DE | STOCKHOLDER | 11/2009 | NA | N | N | |

Date Title or

Ownership Control PR CRD No. If None: S.S. No. and

| VANGUARD NEW JERSEY TAX-FREE FUNDS | DE | STOCKHOLDER | 09/1987 | NA | N | N | |
|---|----------|---|---------|----|---|---|---------|
| VANGUARD CALIFORNIA TAX-FREE FUNDS | DE | STOCKHOLDER | 10/1985 | NA | N | N | |
| VANGUARD NEW YORK TAX-FREE FUNDS | DE | STOCKHOLDER | 01/1986 | NA | N | N | |
| VANGUARD PENNSYLVANIA TAX-FREE FUNDS | DE | STOCKHOLDER | 01/1986 | NA | N | N | |
| VANGUARD QUANTITATIVE FUNDS | DE | STOCKHOLDER | 08/1986 | NA | N | N | |
| VANGUARD VARIABLE INSURANCE FUNDS | DE | STOCKHOLDER | 04/1991 | NA | N | N | |
| VANGUARD MASSACHUSETTS TAX- EXEMPT FUNDS | DE | STOCKHOLDER | 07/1992 | NA | N | N | |
| VANGUARD WELLINGTON FUND | DE | STOCKHOLDER | 05/1975 | NA | N | N | |
| VANGUARD WINDSOR FUNDS | DE | STOCKHOLDER | 05/1975 | NA | N | N | |
| VANGUARD WORLD FUND | DE | STOCKHOLDER | 05/1975 | NA | N | N | |
| VANGUARD TRUSTEES' EQUITY FUND | DE | STOCKHOLDER | 02/1980 | NA | N | N | |
| VANGUARD EXPLORER FUND | DE | STOCKHOLDER | 12/1975 | NA | N | N | |
| VANGUARD WELLESLEY INCOME FUND | DE | STOCKHOLDER | 05/1975 | NA | N | N | |
| VANGUARD INDEX FUNDS | DE | STOCKHOLDER | 08/1976 | С | Υ | N | |
| VANGUARD BOND INDEX FUNDS | DE | STOCKHOLDER | 12/1986 | А | N | N | |
| VANGUARD FENWAY FUNDS | DE | STOCKHOLDER | 11/1987 | NA | N | N | |
| VANGUARD MALVERN FUNDS | DE | STOCKHOLDER | 11/1988 | NA | N | N | |
| VANGUARD INTERNATIONAL EQUITY INDEX FUNDS | DE | STOCKHOLDER | 04/1990 | NA | N | N | |
| VANGUARD FIXED INCOME SECURITIES FUNDS | DE | STOCKHOLDER | 05/1975 | NA | N | N | |
| VANGUARD MONEY MARKET RESERVES | DE | STOCKHOLDER | 05/1975 | А | N | N | |
| VANGUARD MUNICIPAL BOND FUNDS | DE | STOCKHOLDER | 09/1977 | NA | N | N | |
| VANGUARD SPECIALIZED FUNDS | DE | STOCKHOLDER | 10/1983 | NA | N | N | |
| VANGUARD CHESTER FUNDS | DE | STOCKHOLDER | 08/1984 | NA | N | N | |
| BUCKLEY, MORTIMER, JOSEPH | I | CHAIRMAN OF THE BOARD AND CHIEF EXECUTIVE OFFICER | 01/2019 | NA | Υ | N | 2167630 |
| PEROLD, ANDRE, FRANCOIS | I | DIRECTOR | 12/2004 | NA | Υ | N | 4660204 |
| VANGUARD MONTGOMERY FUNDS | DE | STOCKHOLDER | 11/2007 | NA | N | N | |
| FULLWOOD, EMERSON, U | I | DIRECTOR | 01/2008 | NA | Υ | N | 5511592 |
| VOLANAKIS, PETER, FREDERICK | 1 | DIRECTOR | 12/2008 | NA | Υ | N | 5648569 |
| LOUGHREY, FRANCIS, JOSEPH | 1 | DIRECTOR | 10/2009 | NA | Υ | N | 5755253 |
| VANGUARD STAR FUNDS | DE | STOCKHOLDER | 03/2009 | Α | N | N | |
| VANGUARD CHARLOTTE FUNDS | DE | STOCKHOLDER | 10/2011 | NA | N | N | |
| MCISAAC, CHRISTOPHER, DAVIS | 1 | MANAGING DIRECTOR | 03/2012 | NA | Υ | | 2928259 |
| MALPASS, SCOTT, CHARLES | 1 | DIRECTOR | 03/2012 | NA | Υ | | 2532347 |
| LOUGHRIDGE, MARK | 1 | DIRECTOR | 03/2012 | NA | Υ | | 6048361 |
| RISI, KARIN, ANN | | MANAGING DIRECTOR | 07/2015 | NA | Υ | | 3209445 |
| ROLLINGS, MICHAEL, THOMAS | | MANAGING DIRECTOR AND CHIEF FINANCIAL OFFICER | 06/2016 | NA | Y | N | |
| ROBINSON, ANNE, ELIZABETH | I | GENERAL COUNSEL, MANAGING DIRECTOR, AND SECRETARY | 09/2016 | NA | Υ | | 6706699 |
| JAMES, JOHN, MARK | 1 | MANAGING DIRECTOR | 12/2016 | NA | Υ | - | 5594356 |
| MULLIGAN, DEANNA, MARIE | 1 | DIRECTOR | 07/2017 | NA | Υ | | 4562715 |
| RASKIN, SARAH, BLOOM | 1 | DIRECTOR | 07/2017 | NA | Υ | - | 6844984 |
| DAVIS, GREGORY | | MANAGING DIRECTOR, PRESIDENT AND CHIEF INVESTMENT OFFICER | 07/2017 | NA | Y | N | 2416369 |
| VANGUARD INSTITUTIONAL INDEX FUNDS | DE | STOCKHOLDER | 02/2018 | А | N | N | |
| BRENNAN, JOSEPH, PATRICK | I | MANAGING DIRECTOR AND CHIEF RISK OFFICER | 09/2018 | NA | Y | N | 2193881 |
| VALENTE, LAUREN, MARIE | I | MANAGING DIRECTOR | 09/2020 | NA | Υ | N | 6119944 |
| BENCHENER, MATTHEW, JOHN | 1 | MANAGING DIRECTOR | 12/2020 | NA | Υ | N | 5569805 |
| Thomas, David, Anthony | I | DIRECTOR | 07/2021 | NA | Υ | N | 7423571 |
| BUNCH, TARA, LYNN | 1 | DIRECTOR | 11/2021 | NA | Υ | N | 7470785 |
| Tandon, Nitin | I | MANAGING DIRECTOR AND CHIEF INFORMATION OFFICER | 11/2021 | NA | Υ | N | 7482798 |

| ANGELL, JACQUELINE | I CH | IEF COMPLIANCE OFFICER | 11/2022 | NA | Υ | N 5606776 | |
|-------------------------------------|------------------------|---|--------------------|-------------------|--------------|---|----|
| Reid, Grant, Fergus | I DI | RECTOR | 07/2023 | NA | Υ | N 7790086 | |
| BOATENG, AMMA, ACHEAMPOMAA | I MA | NAGING DIRECTOR | 01/2024 | NA | Υ | N 4677078 | |
| PASTOR, LUBOS | I DI | RECTOR | 01/2024 | NA | Υ | N 7847932 | |
| | | | | | | | |
| Schedule B | | | | | | | |
| | | | | | | | |
| Indirect Owners | | | | | . , | | |
| complete Schedule A, which ask | | | | | | t your indirect owners; you must firs | ST |
| 2. Indirect Owners. With respect to | | · · | | | iioiiiiatic | 511. | |
| · · | | · | | | alat ta | | |
| | • | on, eacn of its snarenoiders t ting security of that corporati | • | owns, nas the r | gnt to vo | ote, or has the power to sell or direc | CT |
| the sale of, 25% of more of | a class of a vo | ting security of that corporati | OH; | | | | |
| For purposes of this Schedu | le. a <i>person</i> be | neficially owns any securities | : (i) owned by hi | s/her child, ste | pchild. a | randchild, parent, stepparent, | |
| | • | | • | | | er-in-law, sharing the same residence | e; |
| or (ii) that he/she has the ri | ght to acquire, | within 60 days, through the | exercise of any c | ption, warrant, | or right | to purchase the security. | |
| (b) in the case of an owner that | t is a partnersh | nip, <u>all</u> general partners and i | those limited and | l special partne | rs that h | nave the right to receive upon | |
| dissolution, or have contribu | ıted, 25% or m | nore of the partnership's capi | tal; | | | | |
| (c) in the case of an owner that | t is a trust, thε | e trust and each trustee; and | | | | | |
| (d) in the case of an owner that | is a limited lia | bility company ("LLC"), (i) the | ose members tha | t have the righ | t to rece | ive upon dissolution, or have | |
| | | ital, and (ii) if managed by el | | _ | | • | |
| 3. Continue up the chain of owners | ship listing all 2 | 25% owners at each level. Or | nce a public repor | ting company (| a compa | any subject to Sections 12 or 15(d) o | of |
| the Exchange Act) is reached, n | o further owne | rship information need be give | en. | | • | | |
| 4. In the DE/FE/I column below, er | nter "DE" if the | owner is a domestic entity, " | FE" if the owner i | is an entity inco | orporated | d or domiciled in a foreign country, o | or |
| "I" if the owner is an individual. | | | | - | | | |
| 5. Complete the Status column by | entering the o | wner's status as partner, tru | stee, elected ma | nager, shareho | lder, or r | member; and for shareholders or | |
| members, the class of securities | owned (if mor | re than one is issued). | | | | | |
| 6. Ownership codes are: C - 25 | % but less tha | n 50% E - 75% or more | | | | | |
| D - 50 | % but less tha | n 75% F - Other (general p | partner, trustee, | or elected man | ager) | | |
| | | • | | • | | DV, and enter "No" if the <i>person</i> doe | |
| | under this defir | nition, most executive officers | and all 25% ow | ners, general p | artners, | elected managers, and trustees are | е |
| control persons. | | | | | | | |
| (b) In the PR column, enter "PR | " if the owner i | s a public reporting company | under Sections | 12 or 15(d) of t | he Excha | ange Act. | |
| (c) Complete each column. | | | | | | | |
| No Information Filed | | | | | | | |
| no momation med | | | | | | | |
| | | | | | | | |
| Schedule D - Miscellaneous | | | | | | | |
| You may use the space below to ex | nlain a respon | se to an Item or to provide a | ny other informa | tion | | | |
| Tournay use the space selew to ex- | prant a respons | oo to an itom or to provide a | ing other innerma | | | | |
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| Schedule R | | | | | | | |
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| | | | | | | | |
| | | No Inform | ation Filed | | | | |
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| | | | | | | | |
| DRP Pages | | | | | | | |
| | | | | | | | |
| CRIMINAL DISCLOSURE REPORTI | NG PAGE (AD | V) | | | | | |
| No Information Filed | | | | | | | |
| No mormation med | | | | | | | |
| | | | | | | | |
| REGULATORY ACTION DISCLOSU | RE REPORTIN | IG PAGE (ADV) | | | | | |
| | | CENEDAL IN | CTDUCTIONS | | | | |
| This Disclosure Reporting Page (DR | ·P ΔΠV) is an « | GENERAL IN | | renort details f | or affirm: | ative responses to Items 11 C 11 D | |
| | I VDA) IS QII | OR MINITAL OR | sponse useu to l | oport details if | or arriillid | ative responses to Items 11.C., 11.D | · |
| 11.E., 11.F. or 11.G. of Form ADV. | | | | | | | |
| | | Regulato | ry Action | | | | |
| Check item(s) being responded to: | | Regulato | ry Action | | | | |
| | 11.C(2) | □ 11.C(3) | r | 11.C(4) | | □ 11.C(5) | |
| | () | _ 11.0(3) | | • (¬) | | (0) | |

| □ 11.D(1) | ☐ 11.D(2) | □ 11.D(3) | □ 11.D(4) | □ 11.D(5) |
|---|--|--|---|---|
| □ 11.E(1) | ☑ 11.E(2) | □ 11.E(3) | □ 11.E(4) | |
| □ 11.F. | □ 11.G. | | | |
| | | | | |
| | | | | |
| • | DRP for each event or <i>proceeding</i> ed Execution Page. | . The same event or <i>proceeding</i> ma | y be reported for more than c | one <i>person</i> or entity using one DRP. File |
| One event may | result in more than one affirmativ | e answer to Items 11.C., 11.D., 11 | .E., 11.F. or 11.G. Use only o | ne DRP to report details related to the |
| same event. If | an event gives rise to actions by n | nore than one regulator, provide d | etails for each action on a sep | parate DRP. |
| NADT I | | | | |
| PART I | a(a) or antitu(ica) for whom this DE | OD is being filed is (are). | | |
| • | n(s) or entity(ies) for whom this DF | RP is being filed is (are): | | |
| ~ | ne advisory firm) | | | |
| O You an | d one or more of your <i>advisory affi</i> | iliates | | |
| One or | more of your advisory affiliates | | | |
| | - | ate, give the full name of the adviso ovide that number. If not, indicate | | ls, Last name, First name, Middle name). the appropriate box. |
| ADV DRP | - ADVISORY AFFILIATE | | | |
| 000 | 7450 | | _ | |
| CRD Number: | 7452 | This <i>advisory affiliate</i> is © a Firm | C an Individual | |
| Registere | ed: • Yes O No | | | |
| Name: | VANGUARD MARKETING | | | |
| | CORPORATION | | | |
| | (For individuals, Last, First, | | | |
| | Middle) | | | |
| adviser If you are 11.D(4), a event liste This DF circums B. If the advi | registered or registering with a stand only if that event occurred more of in Item 11 that occurred more of the RP should be removed from the AD stances: Sory affiliate is registered through the CRD for the event? If the answer | tate securities authority, you may note than ten years ago. If you are rethan ten years ago. The vector of the content of the | remove a DRP for an event yo egistered or registering with to be some or a clerical of the submitted as the advisory affiliate submitted. | u reported only in response to Item the SEC, you may remove a DRP for any r data-entry mistake. Explain the ted a DRP (with Form ADV, BD or U-4) to |
| NOTE: The | e completion of this form does not | relieve the <i>advisory affiliate</i> of its ol | bligation to update its IARD or | CRD records. |
| PART II | | | | |
| | Action initiated by: | - Foreign | | |
| | Other Federal OState OSRC | o Croreign latory authority, federal, state, or S | SRO) | |
| 2. Principal S | anction: | | | |
| Other | anction. | | | |
| Other San NA | ctions: | | | |
| 3. Date Initia | ted (MM/DD/YYYY): | | | |
| | 5 © Exact C Explanation | | | |
| If not exac | ct, provide explanation: | | | |
| 4. Docket/Ca 20130383 | se Number: 25801 | | | |

| 6. | Principal Product Type: No Product |
|------|---|
| | Other Product Types: NA |
| 7. | Describe the allegations related to this regulatory action (your response must fit within the space provided): |
| | WITHOUT ADMITTING OR DENYING THE FINDINGS, THE FIRM CONSENTED TO THE SANCTIONS AND TO THE ENTRY OF FINDINGS THAT IT FAILED TO ESTABLISH AND MAINTAIN AN ADEQUATE SUPERVISORY SYSTEM, INCLUDING WRITTEN PROCEDURES, TO ENSURE THAT IT DISCLOSE UNSATISFIED JUDGMENTS AND LIENS OF REGISTERED REPRESENTATIVES ON UNIFORM APPLICATIONS FOR SECURITIES INDUSTRY REGISTRATION OR TRANSFER ("FORM U4S"), IN INSTANCES WHERE THE FIRMS' PAYROLL DEPARTMENT HAD NOTICE OF SUCH LIENS AND JUDGMENTS AS A RESULT OF GARNISHMENT ORDERS IT HAD RECEIVED. THE FINDINGS STATED THAT THE FIRM DID NOT HAVE ANY SUPERVISORY PROCEDURES IN PLACE TO ENSURE THAT THE PAYROLL DEPARTMENT NOTIFIED THE COMPLIANCE DEPARTMENT OF GARNISHMENTS, AND THE FIRM DID NOT REVIEW THE GARNISHMENTS TO DETERMINE WHETHER THEY TRIGGERED A REPORTABLE EVENT FOR REGISTERED REPRESENTATIVES. AS A RESULT, THE FIRM FAILED TO DISCLOSE OR TIMELY DISCLOSE UNSATISFIED JUDGMENTS AND LIENS OF WHICH IT HAD NOTICE BY REASON OF THE GARNISHMENT ORDERS. ALSO THE FIRM BECAME AWARE OF THE DEFICIENCY IN ITS SUPERVISORY SYSTEM AND VOLUNTARILY UNDERTOOK STEPS TO AMEND ITS WRITTEN SUPERVISORY PROCEDURES AND PUT A PROCESS IN PLACE FOR ITS PAYROLL DEPARTMENY TO NOTIFY ITS COMPLIANCE DEPARTMENT OF GARNISHMENT ORDERS. HOWEVER, THE FIRM FAILED TO PROPERLY IMPLEMENT THE AMENDED PROCEDURES. AS A RESULT, THE FIRM CONTINUED TO NOT DISCLOSE OR TIMELY DISCLOSE JUDGMENTS AND LIENS OF WHICH IT HAD RECEIVED NOTICE. IN TOTAL THE FIRM RECEIVED 80 GARNISHMENT ORDERS THAT TRIGGERED REPORTABLE EVENTS ON THE FORM U4. IT FAILED TO FILE AMENDMENTS TO ITS REGISTERED REPRESENTATIVES' FORM U4S FOR 60 OF THESE REPORTABLE EVENTS AND FAILED TO TIMELY FILE FORM U4 AMENDMENTS FOR 20 REPORTABLE EVENTS. |
| 8. | Current Status? C Pending C On Appeal Final |
| 9. | If on appeal, regulatory action appealed to (SEC, SRO, Federal or State Court) and Date Appeal Filed: |
| If F | nal or On Appeal, complete all items below. For Pending Actions, complete Item 13 only. |
| 10. | How was matter resolved: |
| | Consent |
| 11. | Resolution Date (MM/DD/YYYY): |
| | 03/06/2015 © Exact C Explanation |
| | If not exact, provide explanation: |
| 12. | Resolution Detail: |
| | A. Were any of the following Sanctions Ordered (check all appropriate items)? |
| | ✓ Monetary/Fine Amount: \$ 350,000.00 |
| | ☐ Revocation/Expulsion/Denial ☐ Disgorgement/Restitution |
| | |
| | ☐ Bar ☐ Suspension |
| | B. Other Sanctions <i>Ordered:</i> UNDERTAKING. Sanction detail: if suspended, <i>enjoined</i> or barred, provide duration including start date and capacities affected (General Securities Principal, Financial Operations Principal, etc.). If requalification by exam/retraining was a condition of the sanction, provide length of time given to requalify/retrain, type of exam required and whether condition has been satisfied. If disposition resulted in a fine, penalty, restitution, disgorgement or monetary compensation, provide total amount, portion levied against you or an <i>advisory affiliate</i> , date paid and if any portion of penalty was waived: THE FIRM WAS CENSURED, FINED \$350,000 AND REQUIRED TO RETAIN AN INDEPENDENT CONSULTANT TO REVIEW AND SUGGEST REVISIONS TO ITS POLICIES, PROCEDURES, AND INTERNAL CONTROLS RELATING TO REPORTING DISCLOSURES ON FORM U4S FOR ITS REGISTERED REPRESENTATIVES. FINE PAID IN FULL ON MARCH 23, 2015. |
| 13. | Provide a brief summary of details related to the action status and (or) disposition and include relevant terms, conditions and dates (your response |
| | must fit within the space provided). WITHOUT ADMITTING OR DENYING THE ALLEGATIONS OR FINDINGS, VMC (AFFILIATE) AGREED TO THE IMPOSITION OF A CENSURE, A FINE IN THE AMOUNT OF \$350,000, THE PRODUCTION OF A VMC RETAINED INDEPENDENT CONSULTANT'S REPORT, AND THE CERTIFICATION OF VMC'S IMPLEMENTATION OF THE IMPROVEMENTS OUTLINED IN THE INDEPENDENT CONSULTANT'S REPORT. VMC'S LETTER OF ACCEPTANCE, WAIVER AND CONSENT WAS ACCEPTED BY FINRA ON MARCH 6, 2015. |
| | |

5. Advisory Affiliate Employing Firm when activity occurred which led to the regulatory action (if applicable):

| | | | Regulatory Acti | on | |
|--------------------|--|---|---|---|--|
| Chec | ck item(s) beir | ng responded to: | | | |
| 1 | 1.C(1) | □ 11.C(2) | □ 11.C(3) | □ 11.C(4) | □ 11.C(5) |
| 1 | 1.D(1) | ☑ 11.D(2) | □ 11.D(3) | ☑ 11.D(4) | □ 11.D(5) |
| 1 1 | 1.E(1) | □ 11.E(2) | □ 11.E(3) | □ 11.E(4) | |
| 1 | 1.F. | □ 11.G. | | | |
| | | | | | |
| with One sam | a completed E event may res e event. If an | Execution Page. | answer to Items 11.C., 11.D., 11. | E., 11.F. or 11.G. Use only one | ne <i>person</i> or entity using one DRP. File e DRP to report details related to the trate DRP. |
| PAR1 | |) th. //) for only one this DDD | is hair a file d is (see) | | |
| Α. | O You (the a | | | | |
| | $oldsymbol{c}$ You and o | ne or more of your advisory affilia | tes | | |
| | | ore of your advisory affiliates | | | |
| | ~ | auvisory arrillates | | | |
| | | being filed for an <i>advisory affiliate,</i> y <i>affiliate</i> has a <i>CRD</i> number, provi | - | | , Last name, First name, Middle name). he appropriate box. |
| | ADV DRP - A | DVISORY AFFILIATE | | | |
| | CRD Number: | 106715 | This <i>advisory affiliate</i> is 🧿 a Firm | O an Individual | |
| | Registered: | • Yes • No | | | |
| | Name: | VANGUARD ADVISERS INC | | | |
| | | (For individuals, Last, First, | | | |
| | | Middle) | | | |
| | This DRP s registered adviser's o | or applying for registration with or advisory affiliate's favor. gistered or registering with a stat | record because: (1) the event or the SEC or reporting as an <i>exemple</i> securities authority, you may re | proceeding occurred more than pt reporting adviser with the SE emove a DRP for an event you | reported only in response to Item e SEC, you may remove a DRP for any |
| | event listed i | n Item 11 that occurred more tha | an ten years ago. | | |
| | ☐ This DRP s | should be removed from the ADV inces: | record because it was filed in erro | or, such as due to a clerical or | data-entry mistake. Explain the |
| B. | - | y affiliate is registered through the CRD for the event? If the answer is | • | - | d a DRP (with Form ADV, BD or U-4) to |
| | • Yes • | No | | | |
| | | impletion of this form does not rel | ieve the <i>advisory affiliate</i> of its ob | ligation to update its IARD or o | CRD records. |
| PAR1 | | | | | |
| 1. | OSEC OO | ction initiated by: ther Federal © State © <i>SRO</i> | | | |
| | • | regulator, <i>foreign financial regulat</i> LTH OF PENNSYLVANIA, DEPARTM | 3 | • | |
| 2. | Principal Sand Other | ction: | | | |
| | Other Sanctic | | | | |
| | ADMINISTRAT | IVE ASSESSMENT | | | |
| 3. | Date Initiated | (MM/DD/YYYY): | | | |
| | 10/10/2017 | 🗅 Exact 🌀 Explanation | | | |
| | | provide explanation: INQUIRY RELATED TO THIS MATTE | ER WAS RECEIVED. | | |

| 4. | Docket/Case Number: 17-0077 | | | |
|----------|--|--|---|---|
| 5. | Advisory Affiliate Employing Firm when activity | occurred which led to the regulato | ory action (if applicable): | |
| 6. | Principal Product Type: No Product | | | |
| | Other Product Types: | | | |
| 7. | Describe the allegations related to this regulat FROM FEBRUARY 2017 UNTIL DECEMBER 2017, REPRESENTATIVE WHO, ALTHOUGH REGISTERE INVESTMENT ADVISER REPRESENTATIVE IN PEN | VANGUARD ADVISERS, INC., DUE D AS AN INVESTMENT ADVISER R | TO ADMINISTRATIVE ERROR, E | |
| 8. | Current Status? C Pending C On App | eal © Final | | |
| 9. | If on appeal, regulatory action appealed to (SE | EC, <i>SRO,</i> Federal or State Court) a | and Date Appeal Filed: | |
| If Fi | inal or On Appeal, complete all items below. For | Pending Actions, complete Item | 13 only. | |
| 10. | How was matter resolved: Consent | | | |
| 11. | Resolution Date (MM/DD/YYYY): | | | |
| | 12/20/2017 🍳 Exact 🔘 Explanation | | | |
| | If not exact, provide explanation: | | | |
| 12. | Resolution Detail: | | | |
| | A. Were any of the following Sanctions Orde | ered (check all appropriate items)? | | |
| | ✓ Monetary/Fine Amount: \$ 23,480.00 | | | |
| | Revocation/Expulsion/Denial | Г | Disgorgement/Restitution | |
| | ☐ Censure | | Cease and Desist/Injunction | |
| | ☐ Bar | | Suspension | |
| | B. Other Sanctions <i>Ordered:</i> | | | |
| | Sanction detail: if suspended, <i>enjoined</i> or Financial Operations Principal, etc.). If recrequalify/retrain, type of exam required a disgorgement or monetary compensation of penalty was waived: AN ADMINISTRATIVE ASSESSMENT OF \$23 | qualification by exam/retraining wand whether condition has been s , provide total amount, portion le | as a condition of the sanction, atisfied. If disposition resulted evied against you or an advisor | provide length of time given to I in a fine, penalty, restitution, by affiliate, date paid and if any portion |
| 13. | Provide a brief summary of details related to the must fit within the space provided). | he action status and (or) disposit | ion and include relevant terms | s, conditions and dates (your response |
| | AN INVESTMENT ADVISER REPRESENTATIVE ("I. ADMINISTRATIVE ERROR, VANGUARD ADVISERS PLACE OF EMPLOYMENT. VANGUARD ADVISERS | S, INC. DID NOT IMMEDIATELY UP | DATE HIS REGISTRATION TO RE | |
| | | | | |
| Thic | Disclosure Reporting Page (DRP ADV) is an $_{ m C}$ I | GENERAL INSTRUC | | firmative responses to Itams 11 C - 11 D |
| | E., 11.F. or 11.G. of Form ADV. | OR OR AWIENDED Tespons | e used to report details for all | imative responses to items 11.C., 11.D. |
| | | Regulatory Acti | on | |
| Chec | ck item(s) being responded to: | Regulatory Acti | | |
| □ 1 | 11.C(1) □ 11.C(2) | □ 11.C(3) | □ 11.C(4) | □ 11.C(5) |
| 1 | 11.D(1) ☑ 11.D(2) | □ 11.D(3) | ☑ 11.D(4) | □ 11.D(5) |
| | 11.E(1) □ 11.E(2) | □ 11.E(3) | □ 11.E(4) | |
| | 11.F. □ 11.G. | | | |
| | | | | |

Use a separate DRP for each event or *proceeding*. The same event or *proceeding* may be reported for more than one *person* or entity using one DRP. File

| with a completed Execution Page. | | | | | | | |
|----------------------------------|---|--|--|--|--|--|--|
| | event may result in more than one affirmative answer to Items 11.C., 11.D., 11.E., 11.F. or 11.G. Use only one DRP to report details related to the event. If an event gives rise to actions by more than one regulator, provide details for each action on a separate DRP. | | | | | | |
| PAR | TI | | | | | | |
| A. | The <i>person(s)</i> or entity(ies) for whom this DRP is being filed is (are): • You (the advisory firm) | | | | | | |
| | O You and one or more of your advisory affiliates | | | | | | |
| | One or more of your advisory affiliates | | | | | | |
| | If this DRP is being filed for an <i>advisory affiliate</i> , give the full name of the <i>advisory affiliate</i> below (for individuals, Last name, First name, Middle name). If the <i>advisory affiliate</i> has a <i>CRD</i> number, provide that number. If not, indicate "non-registered" by checking the appropriate box. | | | | | | |
| | ADV DRP - ADVISORY AFFILIATE | | | | | | |
| | No Information Filed | | | | | | |
| | This DRP should be removed from the ADV record because the <i>advisory affiliate(s)</i> is no longer associated with the adviser. This DRP should be removed from the ADV record because: (1) the event or <i>proceeding</i> occurred more than ten years ago or (2) the adviser is registered or applying for registration with the SEC or reporting as an <i>exempt reporting adviser</i> with the SEC and the event was resolved in the adviser's or <i>advisory affiliate's</i> favor. | | | | | | |
| | If you are registered or registering with a <i>state securities authority</i> , you may remove a DRP for an event you reported only in response to Item 11.D(4), and only if that event occurred more than ten years ago. If you are registered or registering with the SEC, you may remove a DRP for any event listed in Item 11 that occurred more than ten years ago. | | | | | | |
| | ☐ This DRP should be removed from the ADV record because it was filed in error, such as due to a clerical or data-entry mistake. Explain the circumstances: | | | | | | |
| B. | If the advisory affiliate is registered through the IARD system or CRD system, has the advisory affiliate submitted a DRP (with Form ADV, BD or U-4) to the IARD or CRD for the event? If the answer is "Yes," no other information on this DRP must be provided. | | | | | | |
| | C Yes C No | | | | | | |
| | NOTE: The completion of this form does not relieve the advisory affiliate of its obligation to update its IARD or CRD records. | | | | | | |
| PAR | T II | | | | | | |
| 1. | Regulatory Action initiated by: OSEC Other Federal OState OSRO Foreign | | | | | | |
| | (Full name of regulator, <i>foreign financial regulatory authority</i> , federal, state, or <i>SRO</i>) FINANCIAL SUPERVISORY SERVICE ("FSS"), SOUTH KOREA | | | | | | |
| 2. | Principal Sanction: Civil and Administrative Penalt(ies) /Fine(s) Other Sanctions: NONE | | | | | | |
| 3. | Date Initiated (MM/DD/YYYY): 06/18/2020 © Exact © Explanation If not exact, provide explanation: | | | | | | |
| 4. | Docket/Case Number: CAPITAL MARKET INVESTIGATION DEPARTMENT, INVESTIGATION TEAM 3 - 1076 | | | | | | |
| 5. | Advisory Affiliate Employing Firm when activity occurred which led to the regulatory action (if applicable): N/A | | | | | | |
| 6. | Principal Product Type: Equity Listed (Common & Preferred Stock) Other Product Types: | | | | | | |
| 7. | Describe the allegations related to this regulatory action (your response must fit within the space provided): THE SOUTH KOREAN FINANCIAL SUPERVISORY SERVICE CLAIMED THAT ON THREE OCCASIONS FROM 2018 TO 2019 THE VANGUARD GROUP, INC. ("VGI"), ENGAGED IN THE SALE OF TWO KOREAN-LISTED SECURITIES WITHOUT CORRESPONDING OWNERSHIP OF THE POSITIONS, A PRACTICE WHICH IS PROHIBITED UNDER SOUTH KOREAN LAW. | | | | | | |

| 8. | Current Status? | Pending On Appe | eal 🤨 Final | | | | |
|------------------|--|--|--|---|--|--|--|
| 9. | If on appeal, regulatory action appealed to (SEC, SRO, Federal or State Court) and Date Appeal Filed: | | | | | | |
| If F | Final or On Appeal, comple | ete all items below. For | Pending Actions, complete Item | 13 only. | | | |
| 10. | How was matter resolved Decision & Order of Offe | | | | | | |
| 11. | Resolution Date (MM/DD |)/YYYY): | | | | | |
| | 09/24/2020 © Exact | C Explanation | | | | | |
| | If not exact, provide ex | • | | | | | |
| 12. | Resolution Detail: | | | | | | |
| | A. Were any of the fo | ollowing Sanctions <i>Order</i> | red (check all appropriate items) | ? | | | |
| | ▼ Monetary/Fine | Amount: \$ 104,575.00 | | | | | |
| | Revocation/Ex | pulsion/Denial | | Disgorgement/Restitution | | | |
| | Censure | | _ | Cease and Desist/Injunction | 1 | | |
| | ☐ Bar | | | Suspension | | | |
| | B. Other Sanctions O | Ordered: | | | | | |
| 13. | Financial Operation requalify/retrain, to disgorgement or most of penalty was ware ON OCTOBER 12, 2 MILLION) ORIGINA | ns Principal, etc.). If req ype of exam required ar nonetary compensation, ived: 2020, \$83,660 (KRW 96 LLY SOUGHT. | ualification by exam/retraining vand whether condition has been so provide total amount, portion I | vas a condition of the sanction, satisfied. If disposition resulted evied against you or an <i>adviso</i> , and a way well and a way well. Which REFLECTS A D | fected (General Securities Principal, provide length of time given to d in a fine, penalty, restitution, ry affiliate, date paid and if any portion ISCOUNT FROM THE \$104,575 (KRW 120 s, conditions and dates (your response | | |
| | ON SEPTEMBER 24, 2020 (KRW 120 MILLION) ON | O, THE SOUTH KOREAN I | | 2018 AND 2019 IN WHICH VG | TIVE FINE IN THE AMOUNT OF \$104,575 I SOLD TWO KOREAN-LISTED SECURITIES H KOREAN LAW. | | |
| | | | GENERAL INSTRUC | CTIONS | | | |
| This | Disclosure Reporting Pag | ge (DRP ADV) is an 💍 If | NITIAL OR | se used to report details for af | firmative responses to Items 11.C., 11.D | | |
| 11.E | E., 11.F. or 11.G. of Form <i>i</i> | ADV. | | | | | |
| Ol | -l. :h(-) | | Regulatory Act | ion | | | |
| | ck item(s) being respond 11.C(1) | □ 11.C(2) | □ 11.C(3) | □ 11.C(4) | □ 11.C(5) | | |
| | 11.D(1) | ☑ 11.D(2) | □ 11.D(3) | ☑ 11.D(4) | □ 11.D(5) | | |
| | 11.E(1) | □ 11.E(2) | □ 11.E(3) | □ 11.E(4) | E 11.5(3) | | |
| | 11.F. | □ 11.G. | | | | | |
| with One | e event may result in more | Page. e than one affirmative a | | .E., 11.F. or 11.G. Use only on | ne <i>person</i> or entity using one DRP. File e DRP to report details related to the arate DRP. | | |
| PAR ¹ | T I | | | | | | |
| Α. | The <i>person(s)</i> or entity(| ies) for whom this DRP i | s being filed is (are): | | | | |
| | You (the advisory fire | | . , | | | | |
| | O You and one or more | e of your <i>advisory affiliat</i> | es | | | | |
| | One or more of your | | | | | | |
| | If this DRP is being filed | for an <i>advisory affiliate</i> , | give the full name of the adviso. | ry affiliate below (for individuals | s, Last name, First name, Middle name). | | |

If the advisory affiliate has a CRD number, provide that number. If not, indicate "non-registered" by checking the appropriate box.

| | ADV DRP - ADVISORY AFFILIATE | | | | | | |
|-----|---|--|--|--|--|--|--|
| | No Information Filed | | | | | | |
| | This DRP should be removed from the ADV record because the <i>advisory affiliate(s)</i> is no longer associated with the adviser. This DRP should be removed from the ADV record because: (1) the event or <i>proceeding</i> occurred more than ten years ago or (2) the adviser is registered or applying for registration with the SEC or reporting as an <i>exempt reporting adviser</i> with the SEC and the event was resolved in the adviser's or <i>advisory affiliate's</i> favor. | | | | | | |
| | If you are registered or registering with a <i>state securities authority</i> , you may remove a DRP for an event you reported only in response to Item 11.D(4), and only if that event occurred more than ten years ago. If you are registered or registering with the SEC, you may remove a DRP for any event listed in Item 11 that occurred more than ten years ago. | | | | | | |
| | This DRP should be removed from the ADV record because it was filed in error, such as due to a clerical or data-entry mistake. Explain the circumstances: | | | | | | |
| 3. | If the <i>advisory affiliate</i> is registered through the IARD system or <i>CRD</i> system, has the <i>advisory affiliate</i> submitted a DRP (with Form ADV, BD or U-4) to the IARD or <i>CRD</i> for the event? If the answer is "Yes," no other information on this DRP must be provided. | | | | | | |
| | O yes O No | | | | | | |
| | NOTE: The completion of this form does not relieve the advisory affiliate of its obligation to update its IARD or CRD records. | | | | | | |
| 4R7 | ГІІ | | | | | | |
| ۱. | Regulatory Action initiated by: O SEC O Other Federal O State O SRO O Foreign | | | | | | |
| | (Full name of regulator, foreign financial regulatory authority, federal, state, or SRO) FINANCIAL SUPERVISORY SERVICE ("FSS"), SOUTH KOREA | | | | | | |
| 2. | Principal Sanction: Civil and Administrative Penalt(ies) /Fine(s) Other Sanctions: | | | | | | |
| 3. | Date Initiated (MM/DD/YYYY): 02/03/2021 © Exact © Explanation If not exact, provide explanation: | | | | | | |
| 1. | Docket/Case Number: CAPITAL MARKET INVESTIGATION DEPARTMENT, INVESTIGATION TEAM 3 - 116 | | | | | | |
| 5. | Advisory Affiliate Employing Firm when activity occurred which led to the regulatory action (if applicable): | | | | | | |
|). | Principal Product Type: Equity Listed (Common & Preferred Stock) Other Product Types: | | | | | | |
| 7. | Describe the allegations related to this regulatory action (your response must fit within the space provided): THE SOUTH KOREAN FINANCIAL SUPERVISORY SERVICE (FSS) CLAIMED THAT ON SEPTEMBER 27, 2019 THE VANGUARD GROUP, INC. ("VGI"), ENGAGED IN THE SALE OF ONE KOREAN-LISTED SECURITY WITHOUT CORRESPONDING OWNERSHIP OF THE POSITION, A PRACTICE WHICH IS PROHIBITED UNDER SOUTH KOREAN LAW. | | | | | | |
| 3. | Current Status? O Pending O On Appeal o Final | | | | | | |
| 9. | If on appeal, regulatory action appealed to (SEC, SRO, Federal or State Court) and Date Appeal Filed: | | | | | | |
| fF | inal or On Appeal, complete all items below. For Pending Actions, complete Item 13 only. | | | | | | |
| 10. | How was matter resolved: | | | | | | |
| | Decision & Order of Offer of Settlement | | | | | | |
| 1. | Resolution Date (MM/DD/YYYY): | | | | | | |
| | 12/22/2021 © Exact C Explanation | | | | | | |

If not exact, provide explanation:

| 12. | Resolution Detail: | | | | |
|--------------------|---|--|--|--|---|
| | A. Were any of the fo | llowing Sanctions Order | red (check all appropriate items | 5)? | |
| | | Amount: \$ 15,409.00 | | | |
| | Revocation/Exp | oulsion/Denial | | ☐ Disgorgement/Restitution | |
| | Censure | | | Cease and Desist/Injunction | n |
| | Bar | | | Suspension | |
| | B. Other Sanctions On | rdered: | | | |
| | Financial Operation requalify/retrain, ty disgorgement or more of penalty was wai | ns Principal, etc.). If requive of exam required and an another transfer on the properties of the prop | ualification by exam/retraining nd whether condition has been | was a condition of the sanction satisfied. If disposition resulte levied against you or an <i>adviso</i> | ffected (General Securities Principal, n, provide length of time given to d in a fine, penalty, restitution, ory affiliate, date paid and if any portion |
| 13. | Provide a brief summary must fit within the space | | ne action status and (or) dispo | sition and include relevant term | ns, conditions and dates (your response |
| | (KRW 18 MILLION) ON V | GI, IN CONNECTION WI | TH ONE INCIDENT DURING 201 | | TIVE FINE IN THE AMOUNT OF \$15,409 AN-LISTED SECURITY WITHOUT AW. |
| | | | GENERAL INSTRU | ICTIONS | |
| This | Disclosure Reporting Pag | e (DRP ADV) is an 👩 II | | | ffirmative responses to Items 11.C., 11.D |
| | E., 11.F. or 11.G. of Form <i>A</i> | | OK - | | |
| | | | Regulatory A | ation | |
| Chec | ck item(s) being responde | ed to: | Regulatory A | CHOH | |
| | 11.C(1) | □ 11.C(2) | □ 11.C(3) | □ 11.C(4) | □ 11.C(5) |
| | 11.D(1) | ☑ 11.D(2) | □ 11.D(3) | ☑ 11.D(4) | □ 11.D(5) |
| <u> </u> | 11.E(1) | □ 11.E(2) | □ 11.E(3) | □ 11.E(4) | |
| 1 | 11.F. | □ 11.G. | | | |
| with One sam | event may result in more event. If an event gives | Page. | nnswer to Items 11.C., 11.D., 1 | | one <i>person</i> or entity using one DRP. File the person or entity using one DRP. File the person or entity using one DRP. File the person of the |
| PART | | as) for whom this DDD | is being filed is (ans). | | |
| Α. | The <i>person(s)</i> or entity(i You (the advisory firm | | is being filed is (are): | | |
| | C You and one or more | e of your advisory affiliat | tes | | |
| | ${\color{red}\mathrm{C}}$ One or more of your | | | | |
| | • | • | | ory affiliate below (for individual e "non-registered" by checking | s, Last name, First name, Middle name). the appropriate box. |
| | ADV DRP - <i>ADVISORY AI</i> | FFILIATE | | | |
| | | | No Informat | on Filed | |
| | | | No mornat | on i ned | |
| | This DRP should be r | emoved from the ADV r | record because: (1) the event of | | with the adviser. In ten years ago or (2) the adviser is SEC and the event was resolved in the |
| | , , | t event occurred more t | than ten years ago. If you are | 3 | u reported only in response to Item ne SEC, you may remove a DRP for any |
| | ☐ This DRP should be r circumstances: | emoved from the ADV r | record because it was filed in e | rror, such as due to a clerical or | r data-entry mistake. Explain the |

B. If the advisory affiliate is registered through the IARD system or CRD system, has the advisory affiliate submitted a DRP (with Form ADV, BD or U-4) to

| | the IARD or CRD for the event? If the answer is Yes, no other if | nformation on this DRP must be provided. | | | | | | |
|-----|---|--|--|--|--|--|--|--|
| | C Yes C No | C Yes C No | | | | | | |
| | NOTE: The completion of this form does not relieve the advisory a | affiliate of its obligation to update its IARD or CRD records. | | | | | | |
| ١R٦ | T II | | | | | | | |
| | Regulatory Action initiated by: OSEC Other Federal OState OSRO Foreign | | | | | | | |
| | (Full name of regulator, foreign financial regulatory authority, feder GERMAN FEDERAL FINANCIAL SUPERVISORY AUTHORITY ("BAFIN") | · | | | | | | |
| | Principal Sanction: Civil and Administrative Penalt(ies) /Fine(s) Other Sanctions: | | | | | | | |
| | Date Initiated (MM/DD/YYYY): | | | | | | | |
| | 05/11/2021 © Exact © Explanation If not exact, provide explanation: | | | | | | | |
| | Docket/Case Number: WA 17-WP 3120-2021/0030 | | | | | | | |
| | Advisory Affiliate Employing Firm when activity occurred which led | to the regulatory action (if applicable): | | | | | | |
| • | Principal Product Type: Mutual Fund(s) Other Product Types: | | | | | | | |
| | Describe the allegations related to this regulatory action (your rebaffin Claimed That the Vanguard Group, Inc. ("VGI") ERREI UNTIMELY VOTING RIGHTS NOTIFICATIONS FOR THREE POSITION | D IN PERFORMING A TECHNICAL PROCESS FROM 2017 TO 2019, WHICH LED TO | | | | | | |
| | Current Status? C Pending C On Appeal C Final | | | | | | | |
| | If on appeal, regulatory action appealed to (SEC, SRO, Federal or | r State Court) and Date Appeal Filed: | | | | | | |
| F | inal or On Appeal, complete all items below. For Pending Actions, o | complete Item 13 only. | | | | | | |
| Ο. | How was matter resolved: | | | | | | | |
| | Decision & Order of Offer of Settlement | | | | | | | |
| 1. | Resolution Date (MM/DD/YYYY): | | | | | | | |
| | 12/07/2021 ⊙ Exact C Explanation | | | | | | | |
| | If not exact, provide explanation: | | | | | | | |
| 2. | Resolution Detail: | | | | | | | |
| | A. Were any of the following Sanctions Ordered (check all appr | ropriate items)? | | | | | | |
| | ✓ Monetary/Fine Amount: \$ 376,996.00 | | | | | | | |
| | Revocation/Expulsion/Denial | ☐ Disgorgement/Restitution | | | | | | |
| | ☐ Censure | Cease and Desist/Injunction | | | | | | |
| | ☐ Bar | ☐ Suspension | | | | | | |
| | B. Other Sanctions <i>Ordered:</i> | | | | | | | |
| | Financial Operations Principal, etc.). If requalification by exa requalify/retrain, type of exam required and whether condit | luration including start date and capacities affected (General Securities Principal, am/retraining was a condition of the sanction, provide length of time given to tion has been satisfied. If disposition resulted in a fine, penalty, restitution, ount, portion levied against you or an <i>advisory affiliate</i> , date paid and if any portion PTED AS PAYMENT. | | | | | | |
| | | | | | | | | |

13. Provide a brief summary of details related to the action status and (or) disposition and include relevant terms, conditions and dates (your response must fit within the space provided).

| | | | | · | 00) ON VGI, RELATED TO A TECHNICAL HREE POSITIONS FROM 2017 THRU 2019. | | |
|------|---|---|--|----------------------------------|---|--|--|
| | | | | | | | |
| | | | GENERAL INSTRUC | CTIONS | | | |
| This | Disclosure Rep | porting Page (DRP ADV) is an 👝 I | | | ffirmative responses to Items 11.C., 11.D., | | |
| | | G. of Form ADV. | OK - | | | | |
| | | | | | | | |
| 01 | | | Regulatory Ac | tion | | | |
| | ck item(s) beir 1.C(1) | ng responded to: | ■ 11.C(3) | ■ 11.C(4) | □ 11.C(5) | | |
| | 1.D(1) | ☑ 11.D(2) | □ 11.D(3) | | □ 11.D(5) | | |
| | 1.E(1) | □ 11.E(2) | □ 11.E(3) | □ 11.E(4) | L 11.0(3) | | |
| | 1.F. | □ 11.G. | L 11.L(J) | L 11.L(4) | | | |
| | 1.11. | E 11.0. | | | | | |
| | • | P for each event or <i>proceeding</i> . T Execution Page. | he same event or <i>proceeding</i> ma | ay be reported for more than c | one <i>person</i> or entity using one DRP. File | | |
| | • | sult in more than one affirmative a event gives rise to actions by mo | | | ne DRP to report details related to the parate DRP. | | |
| PART | ГΙ | | | | | | |
| Α. | The person(s) O You (the a | or entity(ies) for whom this DRP dvisory firm) | is being filed is (are): | | | | |
| | O You and o | ne or more of your advisory affilia | tes | | | | |
| | | ore of your advisory affiliates | | | | | |
| | | davicery animates | | | | | |
| | If this DRP is being filed for an <i>advisory affiliate</i> , give the full name of the <i>advisory affiliate</i> below (for individuals, Last name, First name, Middle name). If the <i>advisory affiliate</i> has a <i>CRD</i> number, provide that number. If not, indicate "non-registered" by checking the appropriate box. | | | | | | |
| | ADV DRP - AL | ADV DRP - ADVISORY AFFILIATE | | | | | |
| | CRD Number: | inis <i>advisory attiliate</i> is wa firm wan individual | | | | | |
| | Registered: | ⊙ Yes ○ No | | | | | |
| | Name: | VANGUARD GLOBAL ADVISERS, | | | | | |
| | | LLC | | | | | |
| | | (For individuals, Last, First, Middle) | | | | | |
| | This DRP should be removed from the ADV record because the <i>advisory affiliate(s)</i> is no longer associated with the adviser. This DRP should be removed from the ADV record because: (1) the event or <i>proceeding</i> occurred more than ten years ago or (2) the adviser is registered or applying for registration with the SEC or reporting as an <i>exempt reporting adviser</i> with the SEC and the event was resolved in the adviser's or <i>advisory affiliate's</i> favor. | | | | | | |
| | If you are registered or registering with a <i>state securities authority</i> , you may remove a DRP for an event you reported only in response to Item 11.D(4), and only if that event occurred more than ten years ago. If you are registered or registering with the SEC, you may remove a DRP for any event listed in Item 11 that occurred more than ten years ago. | | | | | | |
| | ☐ This DRP s | | record because it was filed in er | ror, such as due to a clerical o | r data-entry mistake. Explain the | | |
| B. | - | If the advisory affiliate is registered through the IARD system or CRD system, has the advisory affiliate submitted a DRP (with Form ADV, BD or U-4) to the IARD or CRD for the event? If the answer is "Yes," no other information on this DRP must be provided. | | | | | |
| | • Yes • | No | | | | | |
| | NOTE: The co | empletion of this form does not re | lieve the <i>advisory affiliate</i> of its o | bligation to update its IARD or | CRD records. | | |
| PART | ГП | | | | | | |
| 1. | | ction initiated by: | _ | | | | |
| | | ther Federal OState OSRO regulator, foreign financial regulat | | SRO) | | | |
| | | JPERVISORY SERVICE ("FSS"), SO | | | | | |

| | | GENERAL INSTRUCTIONS |
|------|--|---|
| | | |
| | (KRW 22.5 MILLION) ON VGA, IN CONNECTION WITH ONE INC | EVICES COMMISSION IMPOSED AN ADMINISTRATIVE FINE IN THE AMOUNT OF \$19,177 CIDENT DURING 2020 IN WHICH VGA SOLD A KOREAN-LISTED SECURITY WITHOUT A PRACTICE THAT IS PROHIBITED UNDER SOUTH KOREAN LAW. |
| 13. | must fit within the space provided). | is and (or) disposition and include relevant terms, conditions and dates (your response |
| | Financial Operations Principal, etc.). If requalification by requalify/retrain, type of exam required and whether co | de duration including start date and capacities affected (General Securities Principal, exam/retraining was a condition of the sanction, provide length of time given to ndition has been satisfied. If disposition resulted in a fine, penalty, restitution, amount, portion levied against you or an <i>advisory affiliate</i> , date paid and if any portion WAS SUBMITTED AS PAYMENT. |
| | B. Other Sanctions <i>Ordered:</i> | |
| | □ Bar | ☐ Suspension |
| | ☐ Censure | Cease and Desist/Injunction |
| | Revocation/Expulsion/Denial | Disgorgement/Restitution |
| | Monetary/Fine Amount: \$ 19,177.00 | |
| | A. Were any of the following Sanctions <i>Ordered</i> (check all a | appropriate items)? |
| 12. | . Resolution Detail: | |
| | If not exact, provide explanation: | |
| | 12/22/2021 © Exact © Explanation | |
| 11. | . Resolution Date (MM/DD/YYYY): | |
| 10. | . How was matter resolved: Decision & Order of Offer of Settlement | |
| lf F | Final or On Appeal, complete all items below. For Pending Action | ns, complete Item 13 only. |
| 9. | If on appeal, regulatory action appealed to (SEC, SRO, Federal | al or State Court) and Date Appeal Filed: |
| 8. | Current Status? C Pending C On Appeal Final | |
| 7. | | ur response must fit within the space provided): MED THAT ON MARCH 18, 2020 VANGUARD GLOBAL ADVISERS, LLC ("VGA"), ENGAGED IN RESPONDING OWNERSHIP OF THE POSITION, A PRACTICE WHICH IS PROHIBITED UNDER |
| 6. | Principal Product Type: Equity Listed (Common & Preferred Stock) Other Product Types: | |
| 5. | Advisory Affiliate Employing Firm when activity occurred which | led to the regulatory action (if applicable): |
| 4. | Docket/Case Number: CAPITAL MARKET INVESTIGATION DEPARTMENT, INVESTIGATION | ON TEAM 3 - 116 |
| | 02/03/2021 © Exact © Explanation If not exact, provide explanation: | |
| 3. | Date Initiated (MM/DD/YYYY): | |
| | Other Sanctions: | |
| | Civil and Administrative Penalt(ies) /Fine(s) | |

11.E., 11.F. or 11.G. of Form ADV.

| Ched | ck item(s) bei | ng responded to: | | | | | | |
|-------------|---|--|---|-----------------------------------|--|-------------|--|--|
| 1 | 1.C(1) | ■ 11.C(2) | ■ 11.C(3) | □ 11.C(4) | □ 11.C(5) | | | |
| | 1.D(1) | ☑ 11.D(2) | □ 11.D(3) | ☑ 11.D(4) | □ 11.D(5) | | | |
| | | • • | • • | • • | L 11.D(3) | | | |
| | 1.E(1) | □ 11.E(2) - | ☐ 11.E(3) | □ 11.E(4) | | | | |
| 1 1 | 1.F. | □ 11.G. | | | | | | |
| with One | a completed event may re | Execution Page. Sult in more than one affirmative | answer to Items 11.C., 11.D., 1 | 1.E., 11.F. or 11.G. Use only on | ne <i>person</i> or entity using one DRP. File e DRP to report details related to the | ÷ | | |
| | | event gives rise to actions by mo | re than one regulator, provide o | details for each action on a sepa | arate DRP. | | | |
| PAR | | | | | | | | |
| A. | • |) or entity(ies) for whom this DRP advisory firm) | is being filed is (are): | | | | | |
| | | one or more of your advisory affilia | ntes | | | | | |
| | One or m | ore of your advisory affiliates | | | | | | |
| | | being filed for an <i>advisory affiliate</i> y <i>affiliate</i> has a <i>CRD</i> number, prov | • | | s, Last name, First name, Middle name the appropriate box. | ;) . | | |
| | ADV DRP - A | DVISORY AFFILIATE | | | | | | |
| | CRD Number: | 282933 | This <i>advisory affiliate</i> is ⓒ a Firm | n O an Individual | | | | |
| | Registered: | ⊙ Yes O No | | | | | | |
| | Name: | VANGUARD INVESTMENTS | | | | | | |
| | | AUSTRALIA LIMITED | | | | | | |
| | | (For individuals, Last, First, | | | | | | |
| | | Middle) | | | | | | |
| | This DRP should be removed from the ADV record because the <i>advisory affiliate(s)</i> is no longer associated with the adviser. This DRP should be removed from the ADV record because: (1) the event or <i>proceeding</i> occurred more than ten years ago or (2) the adviser is registered or applying for registration with the SEC or reporting as an <i>exempt reporting adviser</i> with the SEC and the event was resolved in the adviser's or <i>advisory affiliate's</i> favor. | | | | | | | |
| | If you are registered or registering with a <i>state securities authority</i> , you may remove a DRP for an event you reported only in response to Item 11.D(4), and only if that event occurred more than ten years ago. If you are registered or registering with the SEC, you may remove a DRP for any event listed in Item 11 that occurred more than ten years ago. | | | | | | | |
| | This DRP should be removed from the ADV record because it was filed in error, such as due to a clerical or data-entry mistake. Explain the circumstances: | | | | | | | |
| B. | If the advisory affiliate is registered through the IARD system or CRD system, has the advisory affiliate submitted a DRP (with Form ADV, BD or U-4) to the IARD or CRD for the event? If the answer is "Yes," no other information on this DRP must be provided. | | | | | | | |
| | • Yes • No | | | | | | | |
| | NOTE: The completion of this form does not relieve the advisory affiliate of its obligation to update its IARD or CRD records. | | | | | | | |
| PAR | ΤΙΙ | | | | | | | |
| 1. | 0 | ction initiated by: ther Federal OState OSRO | ♠ Foreign | | | | | |
| | | regulator, foreign financial regulat | | SRO) | | | | |
| | | UPERVISORY SERVICE ("FSS"), SO | | | | | | |
| 2. | Principal San | ction: | | | | | | |
| 2. | • | ninistrative Penalt(ies) /Fine(s) | | | | | | |
| | Other Sanction | | | | | | | |
| | Janet Janeth | oo. | | | | | | |
| | D-1 1 | L (MANA / D.D. (1994) | | | | | | |
| 3. | | I (MM/DD/YYYY): | | | | | | |
| | | ⊙ Exact | | | | | | |
| | If not exact, | provide explanation: | | | | | | |
| | Docket/Case | Number | | | | | | |
| 4. | DOCKET/Case | NUTTINET. | | | | | | |

CAPITAL MARKET INVESTIGATION DEPARTMENT, INVESTIGATION TEAM 3 - 116

| 5. | Advisory Affiliate Emp | oloying Firm when activity of | occurred which led to the regulato | ory action (if applicable): | |
|--------------|---|---|--|--|--|
| 6. | Principal Product Typ Equity Listed (Commo Other Product Types: | on & Preferred Stock) | | | |
| 7. | THE SOUTH KOREAN ENGAGED IN THE SAI | FINANCIAL SUPERVISORY | | :H 31, 2020 VANGUARD INVES | : STMENTS AUSTRALIA LIMITED ("VIA"), IE POSITIONS, A PRACTICE WHICH IS |
| 8. | Current Status? | O Pending O On App | eal © Final | | |
| 9. | If on appeal, regulate | ory action appealed to (SE | EC, <i>SRO,</i> Federal or State Court) a | and Date Appeal Filed: | |
| If F | inal or On Appeal, com | nplete all items below. For | Pending Actions, complete Item | 13 only. | |
| 10. | How was matter reso Decision & Order of C | | | | |
| 11. | Resolution Date (MM/ | (DD/YYYY): | | | |
| | 02/24/2022 © Exac | ct C Explanation | | | |
| | If not exact, provide | explanation: | | | |
| 12. | Resolution Detail: | | | | |
| | A. Were any of the | e following Sanctions <i>Orde</i> | red (check all appropriate items)? | | |
| | ▼ Monetary/Fi | ine Amount: \$ 19,821.00 | | | |
| | | /Expulsion/Denial | | Disgorgement/Restitution | |
| | Censure | | | Cease and Desist/Injunction | n |
| | Bar | | L | Suspension | |
| | B. Other Sanctions | s Ordered: | | | |
| | Financial Operate requalify/retraine disgorgement of penalty was | tions Principal, etc.). If recon, type of exam required a primonetary compensation waived: 02/24/2022 ~ \$ 19821 (KR) | qualification by exam/retraining w nd whether condition has been so , provide total amount, portion le | as a condition of the sanction at isfied. If disposition resulted evied against you or an advisor and advisor advisor and advisor advisor advisor advisor and advisor adviso | iffected (General Securities Principal, in, provide length of time given to ed in a fine, penalty, restitution, ory affiliate, date paid and if any portion DISCOUNT FROM THE KRW 30 MILLION |
| 13. | must fit within the sp ON FEBRUARY 24, 20 ON VIA, (A DISCOUN | pace provided). 122, THE FINANCIAL SERVI T FROM KRW 30 MILLION F D SECURITIES WITHOUT CO | CES COMMISSION IMPOSED AN AIFOR VOLUNTARY PAYMENT) IN CO | DMINISTRATIVE FINE IN THE NNECTION WITH ONE INCIDE | AMOUNT OF ~\$ 19821 (KRW 24 MILLION) ENT DURING 2020 IN WHICH VIA SOLD PRACTICE THAT IS PROHIBITED UNDER |
| | | | | | |
| - , · | B | 0.000 15:3: | GENERAL INSTRUC | | col III |
| | Disclosure Reporting I ., 11.F. or 11.G. of For | | NITIAL OR © AMENDED respons | e used to report details for a | ffirmative responses to Items 11.C., 11.D |
| | | | Regulatory Acti | on | |
| Chec | ck item(s) being respo | onded to: | ga.atory rioti | | |
| 1 | 1.C(1) | □ 11.C(2) | □ 11.C(3) | □ 11.C(4) | □ 11.C(5) |
| | 1.D(1) | □ 11.D(2) | □ 11.D(3) | □ 11.D(4) | □ 11.D(5) |
| | 1.E(1) | ☑ 11.E(2) | □ 11.E(3) | □ 11.E(4) | |
| 1 | 1.F. | □ 11.G. | | | |
| | | | | | |

Use a separate DRP for each event or *proceeding*. The same event or *proceeding* may be reported for more than one *person* or entity using one DRP. File with a completed Execution Page.

| | • | It in more than one affirmative answer to Items 11.C., 11.D., 11.E., 11.F. or 11.G. Use only one DRP to report details related to the vent gives rise to actions by more than one regulator, provide details for each action on a separate DRP. | | | | | |
|------------------------|---|--|--|--|--|--|--|
| PAR | ТΙ | | | | | | |
| A. | The <i>person(s)</i> o | or entity(ies) for whom this DRP is being filed is (are): visory firm) | | | | | |
| | You and one | e or more of your advisory affiliates | | | | | |
| | | | | | | | |
| | | e of your advisory affiliates eing filed for an advisory affiliate, give the full name of the advisory affiliate below (for individuals, Last name, First name, Middle name). | | | | | |
| | If the advisory affiliate has a CRD number, provide that number. If not, indicate "non-registered" by checking the appropriate box. | | | | | | |
| | ADV DRP - ADV | /ISORY AFFILIATE | | | | | |
| | Number: | This advisory affiliate is • a Firm • an Individual | | | | | |
| | | 9 Yes O No | | | | | |
| | | YANGUARD MARKETING CORPORATION | | | | | |
| | 1) | For individuals, Last, First, Middle) | | | | | |
| | This DRP shored o | ould be removed from the ADV record because the advisory affiliate(s) is no longer associated with the adviser. ould be removed from the ADV record because: (1) the event or proceeding occurred more than ten years ago or (2) the adviser is a rapplying for registration with the SEC or reporting as an exempt reporting adviser with the SEC and the event was resolved in the advisory affiliate's favor. | | | | | |
| | 11.D(4), and or | stered or registering with a <i>state securities authority</i> , you may remove a DRP for an event you reported only in response to Item nly if that event occurred more than ten years ago. If you are registered or registering with the SEC, you may remove a DRP for any Item 11 that occurred more than ten years ago. | | | | | |
| | This DRP sho | ould be removed from the ADV record because it was filed in error, such as due to a clerical or data-entry mistake. Explain the es: | | | | | |
| B. | • | affiliate is registered through the IARD system or <i>CRD</i> system, has the <i>advisory affiliate</i> submitted a DRP (with Form ADV, BD or U-4) to <i>D</i> for the event? If the answer is "Yes," no other information on this DRP must be provided. | | | | | |
| | NOTE: The com | apletion of this form does not relieve the <i>advisory affiliate</i> of its obligation to update its IARD or <i>CRD</i> records. | | | | | |
|) | T 11 | | | | | | |
| PAR ⁻ 1. | Regulatory Action | on initiated by: | | | | | |
| •• | | er Federal OState Son OForeign | | | | | |
| | (Full name of re | egulator, <i>foreign financial regulatory authority</i> , federal, state, or <i>SRO</i>) USTRY REGULATORY AUTHORITY (FINRA) | | | | | |
| 2. | Principal Sanction Civil and Admin Other Sanctions CENSURE | nistrative Penalt(ies) /Fine(s) | | | | | |
| 3. | Date Initiated (N | MM/DD/YYYY): | | | | | |
| | | Exact C Explanation ovide explanation: | | | | | |
| 4. | Docket/Case Nu 202006695600 | | | | | | |
| 5. | Advisory Affiliate | e Employing Firm when activity occurred which led to the regulatory action (if applicable): | | | | | |
| 6. | Principal Product Options Other Product 1 | | | | | | |

| 7. | FINRA ALLEGES TO OPTIONS EXERCIS AND MAINTAIN A | HAT VANGUARD SE INSTRUCTION SUPERVISORY S | MARKETING CORPO S ON MAY 22, 202 YSTEM, INCLUDING | ORATION ("VMC") VIOLA O, AFTER THE 5:30 PM (G WRITTEN SUPERVISOR | CUTOFF TIME, AND FINRA RULES |):) AND 2010 BY ACCEPTING A CLIENT'S 3110 AND 2010 BY FAILING TO ESTABLISH ESIGNED TO ACHIEVE COMPLIANCE WITH |
|------------------|---|--|--|---|--|---|
| 8. | Current Status? | C Pending | C On Appeal | • Final | | |
| 9. | If on appeal, regu | ulatory action ap | pealed to (SEC, S | RO, Federal or State Co | urt) and Date Appeal Filed: | |
| If F | inal or On Appeal, | complete all iten | ns below. For Penc | ling Actions, complete I | tem 13 only. | |
| 10. | How was matter | | | | | |
| | Acceptance, Waiv | er & Consent(A\ | NC) | | | |
| 11. | Resolution Date (M | MM/DD/YYYY): | | | | |
| | 11/04/2022 © E | • | nation | | | |
| 12. | Resolution Detail: | | | | | |
| | A. Were any of | the following Sa | anctions <i>Ordered</i> (d | check all appropriate ite | ms)? | |
| | | y/Fine Amount: | | | _ | |
| | ☐ Revocat ☑ Censure | ion/Expulsion/De | enial | | Disgorgement/Restitution | |
| | ✓ Censure ■ Bar | | | | ☐ Cease and Desist/Injunction ☐ Suspension | on |
| | | ions <i>Ordered:</i> | | | | |
| 13. | disgorgemer of penalty w FINRA ASSES Provide a brief su must fit within the | nt or monetary of vas waived: SSED A FINE OF mmary of details e space provided | ompensation, prospective states of the action of the actio | vide total amount, porti | on levied against you or an <i>advis</i> T). VMC PAID THE FINE BY WIRE position and include relevant teri | ed in a fine, penalty, restitution, sory affiliate, date paid and if any portion ON NOVEMBER 16, 2022. ms, conditions and dates (your response OF A CENSURE AND A FINE IN THE AMOUNT |
| | | | | OFNEDAL INC. | EDUCTIONS | |
| | Disclosure Reporti | | OV) is an 👩 INITIA | GENERAL INST AL OR © AMENDED res | | affirmative responses to Items 11.C., 11.D., |
| Che | ck item(s) being re | esponded to: | | Regulatory | Action | |
| | 11.C(1) | □ 11.0 | (2) | □ 11.C(3) | □ 11.C(4) | □ 11.C(5) |
| | 11.D(1) | ☑ 11.□ | | □ 11.D(3) | ☑ 11.D(4) | □ 11.D(5) |
| | 11.E(1) | □ 11.E | (2) | □ 11.E(3) | □ 11.E(4) | |
| □ 1 | 11.F. | □ 11.G | i. | | | |
| with One | a completed Exec | ution Page. n more than one | e affirmative answe | er to Items 11.C., 11.D | | one <i>person</i> or entity using one DRP. File one DRP to report details related to the parate DRP. |
| PAR ⁻ | ΤΙ | | | | | |
| A. | The person(s) or e | | nom this DRP is be | ing filed is (are): | | |
| | O You and one o | r more of your ¿ | advisory affiliates | | | |

| ADV DRP - ADVISORY AFFILIATE | | | | | |
|---|--|---|--|--|--|
| CRD Number: | 282933 | This advisory affiliate is 🌀 a Firm 🤼 an Individual | | | |
| Registered | · • Yes • No | | | | |
| Name: | VANGUARD INVESTMEN | TS | | | |
| | AUSTRALIA LIMITED (For individuals, Last, F | irst, | | | |
| | Middle) | | | | |
| This DRP registere | should be removed from | the ADV record because the <i>advisory affiliate(s)</i> is no longer associated with the adviser. the ADV record because: (1) the event or <i>proceeding</i> occurred more than ten years ago or (2) the adviser is tion with the SEC or reporting as an <i>exempt reporting adviser</i> with the SEC and the event was resolved in the or. | | | |
| 11.D(4), an | d only if that event occur | with a state securities authority, you may remove a DRP for an event you reported only in response to Item red more than ten years ago. If you are registered or registering with the SEC, you may remove a DRP for any more than ten years ago. | | | |
| This DRP circumsta | | the ADV record because it was filed in error, such as due to a clerical or data-entry mistake. Explain the | | | |
| | • | rough the IARD system or <i>CRD</i> system, has the <i>advisory affiliate</i> submitted a DRP (with Form ADV, BD or U-4) to answer is "Yes," no other information on this DRP must be provided. | | | |
| • Yes C | No | | | | |
| NOTE: The o | ampletion of this form do | ass not relieve the advisory offiliate of its obligation to undate its LADD or CDD records | | | |
| NOTE: THE C | ompletion of this form do | pes not relieve the <i>advisory affiliate</i> of its obligation to update its IARD or <i>CRD</i> records. | | | |
| ГΙΙ | | | | | |
| 0 | Action initiated by: Other Federal Ostate | O spo | | | |
| (Full name o | f regulator, <i>foreign financ</i> | ial regulatory authority, federal, state, or SRO) TMENTS COMMISSION (ASIC) | | | |
| Principal Sar Civil and Adr Other Sanct | ministrative Penalt(ies) /F | ine(s) | | | |
| Date Initiate | d (MM/DD/YYYY): | | | | |
| 11/11/2022 | ⊙ Exact | on | | | |
| If not exact, | provide explanation: | | | | |
| Docket/Case S02553190, | Number: S02553191, S02553192 | | | | |
| Advisory Affi | liate Employing Firm wher | activity occurred which led to the regulatory action (if applicable): | | | |
| Principal Pro Other | duct Type: | | | | |
| Other Produ | ct Types: REGISTERED MANAGED I | NVESTMENT SCHEME | | | |
| | | | | | |
| ASIC ALLEGE | ED THAT VIA ISSUED A PREERTAIN SECURITIES WHI | is regulatory action (your response must fit within the space provided): ODUCT DISCLOSURE STATEMENT (PDS) FOR THREE FUNDS THAT STATED THAT THE INDEX TRACKED BY THE FUNI CH WERE NOT IN FACT EXCLUDED BY THE INDEX METHODOLOGY. ASIC HAS ACKNOWLEDGED THAT THE ENT ERROR AND NOT INTENTIONAL. | | | |
| Current Stat | us? C Pending C | On Appeal | | | |
| | | | | | |

| If Final or On Appeal, complete all items below. For Pending Actions, complete Item 13 only. | | | | | | | |
|--|--|--|--|---|---|--|--|
| 10. | How was matter resolved | d: | | | | | |
| | Other | | | | | | |
| | | | | | | | |
| 11. | Resolution Date (MM/DD/ | YYYY): | | | | | |
| | 12/02/2022 🌀 Exact 🕻 | Explanation | | | | | |
| | If not exact, provide exp | lanation: | | | | | |
| | | | | | | | |
| 12. | Resolution Detail: | | | | | | |
| | · · | - | lered (check all appropriate items) |)? | | | |
| | 3 | Amount: \$ 27,116.00 | | - | | | |
| | ☐ Revocation/Exp ☐ Censure | ulsion/Denial | | □ Disgorgement/Restitution□ Cease and Desist/Injunction | | | |
| | ☐ Bar | | | Suspension | 1 | | |
| | B. Other Sanctions <i>Ord</i> | dered: | | | | | |
| | | | | | | | |
| | Financial Operations requalify/retrain, typedisgorgement or most of penalty was waive | s Principal, etc.). If repending period on etary compensation yed: | equalification by exam/retraining and whether condition has been | was a condition of the sanction satisfied. If disposition resulted levied against you or an advisor | d in a fine, penalty, restitution, ory affiliate, date paid and if any portion | | |
| | • | | the action status and (or) dispos | ition and include relevant term | s, conditions and dates (your response | | |
| | SUPPLEMENTARY PDS FOI | ERROR IN THE PDS T R EACH OF THE AFFE | | RROR, AND COMMUNICATED TH | CCLUSIONS INDEX FUNDS AND ISSUED A HE UPDATE TO INVESTORS. THE NOTICES PRE 12/2/2022. | | |
| | | | | | | | |
| | | | GENERAL INSTRU | CTIONS | | | |
| This [| Disclosure Reporting Page | e (DRP ADV) is an O | INITIAL OR • AMENDED respon | nse used to report details for af | firmative responses to Items 11.C., 11.D., | | |
| 11.E., | 11.F. or 11.G. of Form Al | DV. | | | | | |
| | | | Regulatory Ac | tion | | | |
| | (item(s) being responde | | | = | - | | |
| | .C(1) .D(1) | □ 11.C(2) □ 11.D(2) | ☐ 11.C(3) ☐ 11.D(3) | □ 11.C(4) ☑ 11.D(4) | □ 11.C(5) □ 11.D(5) | | |
| | .E(1) | □ 11.E(2) | □ 11.D(3) □ 11.E(3) | □ 11.E(4) | L 11.D(5) | | |
| ☐ 11 | | □ 11.G. | L 11.L(3) | L 11.L(4) | | | |
| | | | | | | | |
| | separate DRP for each each caches | | The same event or <i>proceeding</i> ma | ay be reported for more than o | ne <i>person</i> or entity using one DRP. File | | |
| | One event may result in more than one affirmative answer to Items 11.C., 11.D., 11.E., 11.F. or 11.G. Use only one DRP to report details related to the same event. If an event gives rise to actions by more than one regulator, provide details for each action on a separate DRP. | | | | | | |
| PART | l | | | | | | |
| | The <i>person(s)</i> or entity(ie | | P is being filed is (are): | | | | |
| | O You (the advisory firm) | | | | | | |
| | O You and one or more | of your <i>advisory affili</i> | ates | | | | |
| | $oldsymbol{\circ}$ One or more of your ${}_{i}$ | advisory affiliates | | | | | |
| | _ | | e, give the full name of the <i>advisc</i> vide that number. If not, indicate | | s, Last name, First name, Middle name). the appropriate box. | | |
| | ADV DRP - ADVISORY AF | FILIATE | | | | | |
| | <i>CRD</i> 282933 Number: | | This advisory affiliate is 🗿 a Firm | o C an Individual | | | |

| | Registered: • Yes O No |
|------|--|
| | Name: VANGUARD INVESTMENTS |
| | AUSTRALIA LIMITED |
| | (For individuals, Last, First, Middle) |
| | ·····ac··s/ |
| | This DRP should be removed from the ADV record because the <i>advisory affiliate(s)</i> is no longer associated with the adviser. This DRP should be removed from the ADV record because: (1) the event or <i>proceeding</i> occurred more than ten years ago or (2) the adviser is registered or applying for registration with the SEC or reporting as an <i>exempt reporting adviser</i> with the SEC and the event was resolved in the adviser's or <i>advisory affiliate's</i> favor. |
| | If you are registered or registering with a <i>state securities authority</i> , you may remove a DRP for an event you reported only in response to Item 11.D(4), and only if that event occurred more than ten years ago. If you are registered or registering with the SEC, you may remove a DRP for any event listed in Item 11 that occurred more than ten years ago. |
| | This DRP should be removed from the ADV record because it was filed in error, such as due to a clerical or data-entry mistake. Explain the circumstances: |
| B. | If the <i>advisory affiliate</i> is registered through the IARD system or <i>CRD</i> system, has the <i>advisory affiliate</i> submitted a DRP (with Form ADV, BD or U-4) to the IARD or <i>CRD</i> for the event? If the answer is "Yes," no other information on this DRP must be provided. |
| | ⊙ Yes C No |
| | NOTE: The completion of this form does not relieve the advisory affiliate of its obligation to update its IARD or CRD records. |
| PAR | ΓII |
| 1. | Regulatory Action initiated by: |
| | OSEC Other Federal OState OSRO oForeign |
| | (Full name of regulator, <i>foreign financial regulatory authority</i> , federal, state, or <i>SRO</i>) FINANCIAL MARKETS AUTHORITY (FMA), NEW ZEALAND |
| 2. | Principal Sanction: |
| | Reprimand Other Sanctions: |
| 3. | Date Initiated (MM/DD/YYYY): |
| | 03/03/2023 © Exact C Explanation |
| | If not exact, provide explanation: |
| 4. | Docket/Case Number: NA |
| 5. | Advisory Affiliate Employing Firm when activity occurred which led to the regulatory action (if applicable): NA |
| 6. | Principal Product Type: Other |
| | Other Product Types: |
| | AUSTRALIAN REGISTERED MANAGED INVESTMENT SCHEME |
| 7. | Describe the allegations related to this regulatory action (your response must fit within the space provided): THE FMA ISSUED A WARNING TO VANGUARD INVESTMENTS AUSTRALIA LIMITED (VIA) FOR FAILING TO COMPLY WITH ITS FINANCIAL MARKETS CONDUCT REGULATIONS 2014 REQUIRING DISCLOSURE OF THREE ASIC INFRINGEMENT NOTICES "AS SOON AS PRACTICABLE AFTER THE ACTION IS TAKEN OR THE POWER IS EXERCISED AND NO LATER THAN 5 WORKING DAYS AFTER THE DAY ON WHICH THE ACTION IS TAKEN OR THE POWER IS EXERCISED." |
| 8. | Current Status? C Pending C On Appeal G Final |
| 9. | If on appeal, regulatory action appealed to (SEC, <i>SRO</i> , Federal or State Court) and Date Appeal Filed: NA |
| lf F | inal or On Appeal, complete all items below. For Pending Actions, complete Item 13 only. |
| 10 | How was matter resolved. |
| 10. | How was matter resolved: Other |
| | |

11. Resolution Date (MM/DD/YYYY):

| ot exact, pr | ovide explanation: | | | |
|---|--|---|--|--|
| olution Deta | ail: | | | |
| | | Ordered (check all appropriate items |)? | |
| | • | | , | |
| | | | ☐ Disgorgement/Restitution | |
| | · | | | n |
| ■ Bar | | | Suspension | |
| Other San | ctions <i>Ordered:</i> | | | |
| NA | | | | |
| Financial (requalify/I disgorgem of penalty | Operations Principal, etc.). If retrain, type of exam requirement or monetary compensator was waived: | requalification by exam/retraining a dand whether condition has been | was a condition of the sanction satisfied. If disposition resulte | , provide length of time given to d in a fine, penalty, restitution, |
| | • | o the action status and (or) dispos | sition and include relevant term | s, conditions and dates (your response |
| FMA ISSUE | D A FORMAL WARNING TO VI | | | |
| | | | | |
| | | GENERAL INSTRL | CTIONS | |
| losure Repo | rting Page (DRP ADV) is an 🕻 | O INITIAL OR O AMENDED respon | nse used to report details for at | firmative responses to Items 11.C., 11.D |
| .F. or 11.G. | of Form ADV. | | | |
| m(s) boing | recognized to | Regulatory Ac | tion | |
| _ | | 11 ((3) | 1 11 C(4) | □ 11.C(5) |
| | | • • | | □ 11.D(5) |
| • | , , | • • • | • • | |
| , | ☐ 11.G. | | , | |
| mpleted Ex | ecution Page. | ve answer to Items 11.C., 11.D., 1 | 1.E., 11.F. or 11.G. Use only or | ne DRP to report details related to the |
| nerson(s) c | r antity(ias) for whom this D | IPP is haing filed is (are). | | |
| You (the adv | visory firm) | | | |
| You and one | e or more of your advisory aft | filiates | | |
| One or more | e of your <i>advisory affiliates</i> | | | |
| | | | ory affiliate below (for individual | s Last name First name Middle name) |
| | 9 | iate, give the full name of the advisor rovide that number. If not, indicate | "non-registered" by checking | |
| ne <i>advisory a</i> | • | • | "non-registered" by checking | |
| ne <i>advisory a</i> V DRP - <i>AD</i> V | affiliate has a <i>CRD</i> number, pi | • | | |
| ne <i>advisory a</i> V DRP - <i>ADV</i> RD 7 Imber: | affiliate has a CRD number, province of the company | rovide that number. If not, indicate | | |
| V DRP - ADV 2D 7 Imber: egistered: | Affiliate has a CRD number, provided the control of | rovide that number. If not, indicate | | |
| V DRP - ADV PD 7 Imber: egistered: | affiliate has a CRD number, province of the company | rovide that number. If not, indicate | | |
| V DRP - ADV CD 7 Imber: egistered: Ime: V | Affiliate has a CRD number, provided to the company of the company | rovide that number. If not, indicate | | |
| | Monet Revoce Censul Bar Other San NA Sanction of Financial of requalify/r disgorgem of penalty A FORMAL vide a brief st fit within FMA ISSUE SISTER WITH losure Repo F. or 11.G. em(s) being 1) 1) 1) 1) coarate DRP empleted Ex th may result ent. If an even person(s) of You (the adv | Monetary/Fine Amount: \$ Revocation/Expulsion/Denial Censure Bar Other Sanctions Ordered: NA Sanction detail: if suspended, enjoined Financial Operations Principal, etc.). If requalify/retrain, type of exam require disgorgement or monetary compensat of penalty was waived: A FORMAL WARNING WAS ISSUED. Wide a brief summary of details related the stift within the space provided). FMA ISSUED A FORMAL WARNING TO VOUSTER WITHIN THE REQUIRED FIVE-DAY BISTER WITHIN THE REQUIRED FIVE-DAY | Monetary/Fine Amount: \$ Revocation/Expulsion/Denial Censure Bar Other Sanctions Ordered: NA Sanction detail: if suspended, enjoined or barred, provide duration inclue Financial Operations Principal, etc.). If requalification by exam/retraining requalify/retrain, type of exam required and whether condition has been disgorgement or monetary compensation, provide total amount, portion of penalty was waived: A FORMAL WARNING WAS ISSUED. Wide a brief summary of details related to the action status and (or) disposit fit within the space provided). FMA ISSUED A FORMAL WARNING TO VIA FOR FAILING TO LODGE THE RECURSTER WITHIN THE REQUIRED FIVE-DAY TIMEFRAME REGARDING THE THRE CONTROL OF FORMADING TO VIA FOR FAILING TO LODGE THE RECURSTER WITHIN THE REQUIRED FIVE-DAY TIMEFRAME REGARDING THE THRE CONTROL OF FORMADING TO VIA FOR FAILING TO LODGE THE RECURSTER WITHIN THE REQUIRED FIVE-DAY TIMEFRAME REGARDING THE THRE CONTROL OF FORMADING TO VIA FOR FAILING TO LODGE THE RECURSTER WITHIN THE REQUIRED FIVE-DAY TIMEFRAME REGARDING THE THRE CONTROL OF FORMADING THE THREE CONTROL OF THE PROPERTY OF THE PROP | Revocation/Expulsion/Denial Disgorgement/Restitution Censure Cease and Desist/Injunction Suspension Suspension |

registered or applying for registration with the SEC or reporting as an exempt reporting adviser with the SEC and the event was resolved in the

| | adviser's or <i>advisory affiliate's</i> favor. |
|------|--|
| | If you are registered or registering with a <i>state securities authority</i> , you may remove a DRP for an event you reported only in response to Item 11.D(4), and only if that event occurred more than ten years ago. If you are registered or registering with the SEC, you may remove a DRP for any event listed in Item 11 that occurred more than ten years ago. |
| | This DRP should be removed from the ADV record because it was filed in error, such as due to a clerical or data-entry mistake. Explain the circumstances: |
| 3. | If the advisory affiliate is registered through the IARD system or CRD system, has the advisory affiliate submitted a DRP (with Form ADV, BD or U-4) to the IARD or CRD for the event? If the answer is "Yes," no other information on this DRP must be provided. |
| | • Yes • No |
| | NOTE: The completion of this form does not relieve the advisory affiliate of its obligation to update its IARD or CRD records. |
| ۱R۶ | |
| | Regulatory Action initiated by: O SEC O Other Federal O State SRO O Foreign |
| | (Full name of regulator, foreign financial regulatory authority, federal, state, or SRO) FINANCIAL INDUSTRY REGULATORY AUTHORITY (FINRA) |
| !. | Principal Sanction: |
| | Other Sanctions: |
| ١. | Date Initiated (MM/DD/YYYY): |
| | 05/25/2023 © Exact C Explanation |
| | If not exact, provide explanation: |
| | Docket/Case Number: 2020068469601 |
| | Advisory Affiliate Employing Firm when activity occurred which led to the regulatory action (if applicable): |
| ١. | Principal Product Type: No Product |
| | Other Product Types: UNSPECIFIED SECURITIES |
| | Describe the allegations related to this regulatory action (your response must fit within the space provided): FINRA FOUND THAT FROM NOVEMBER 2019 TO SEPTEMBER 2020, VMC OVERSTATED PROJECTED YIELD AND PROJECTED ANNUAL INCOME FOR NINE MONEY MARKET FUNDS ON CERTAIN BROKERAGE ACCOUNT STATEMENTS. FINRA ALSO FOUND THAT FROM AT LEAST OCTOBER 2019 TO JUNE 2021, CERTAIN ACCOUNT STATEMENTS INACCURATELY PRESENTED MARKET APPRECIATION/DEPRECIATION AND INVESTMENT RETURNS. THE AFOREMENTIONED ERRORS DID NOT AFFECT THE ACTUAL MARKET YIELD PAID TO CUSTOMERS OR HOLDINGS INFORMATION DISPLAYED ON CUSTOMER STATEMENTS AND HAVE BEEN RESOLVED. FINRA ALSO FOUND THAT THE FIRM FAILED TO REASONABLY SUPERVISE ITS ACCOUNT STATEMENTS BY FAILING TO TIMELY ADDRESS CUSTOMER REPORTS OF INACCURACIES. THEREFORE, FINRA FOUND THAT VMC VIOLATED FINRA RULES 2210, 3110, 4511 AND 2010. |
| ١. | Current Status? C Pending C On Appeal C Final |
| ١. | If on appeal, regulatory action appealed to (SEC, SRO, Federal or State Court) and Date Appeal Filed: |
| f Fi | nal or On Appeal, complete all items below. For Pending Actions, complete Item 13 only. |
| Ο. | How was matter resolved: |
| 0. | Acceptance, Waiver & Consent(AWC) |
| 1. | Resolution Date (MM/DD/YYYY): |
| | 05/25/2023 © Exact C Explanation |
| | If not exact, provide explanation: |
| 2. | Resolution Detail: |
| | A Were any of the following Sanctions Ordered (check all appropriate items)? |

| | □ Do | | | | | |
|------------------------------|---|--|---|---|---|-----|
| | L Ret | vocation/Expulsion/Denial | | Disgorgement/Restitution | | |
| | ▽ Cer | nsure | | Cease and Desist/Injunct | ion | |
| | Bar | - | | Suspension | | |
| | B. Other S | Sanctions <i>Ordered:</i> | | | | |
| | Financia requalif disgorg of pena | al Operations Principal, etc.). If rec fy/retrain, type of exam required a | qualification by exam/retraining nd whether condition has been , provide total amount, portion | was a condition of the sanction satisfied. If disposition resultive levied against you or an advi | affected (General Securities Principal, on, provide length of time given to ted in a fine, penalty, restitution, isory affiliate, date paid and if any portion | |
| 13. | must fit with WITHOUT AD | nin the space provided). | ATIONS OR FINDINGS, VMC AGRI | EED TO THE IMPOSITION OF A | ms, conditions and dates (your response CENSURE AND A FINE IN THE AMOUNT OF 023. | |
| CIVII | . JUDICIAL / | ACTION DISCLOSURE REPORTIN | IG PAGE (ADV) | | | |
| | | | GENERAL INSTRU | CTIONS | | |
| | | eporting Page (DRP ADV) is an 👩 I Part 1B of Form ADV. | NITIAL OR 6 AMENDED respon | se used to report details for | affirmative responses to Item 11.H. of Pa | rt |
| | | | 2 | | | |
| Chec | k Part 1A iter | m(s) being responded to: | Civil Judicia | | | |
| | 1.H(1)(a) | ☐ 11.H(1) |) (b) | □ 11.H(1)(c) | ☑ 11.H(2) | |
| Chec | | m(s) being responded to: \square 2.F(2) | □ 2.F(3) | □ 2.F(4) | □ 2.F(5) | |
| | . (.) | | | | | |
| Use a | • | , | The same event or <i>proceeding</i> ma | | one <i>person</i> or entity using one DRP. File | |
| Use a with One same | a completed event may re event. Unre | Execution Page. | answer to Item 11.H. of Part 1A reported on separate DRPs. | ay be reported for more than | | the |
| Use a with One same | a completed event may re event. Unre I The person(s | Execution Page. esult in more than one affirmative a lated civil judicial actions must be | answer to Item 11.H. of Part 1A reported on separate DRPs. | ay be reported for more than | one <i>person</i> or entity using one DRP. File | the |
| Use a with One same | a completed event may re event. Unre I The person(s O You (the | Execution Page. esult in more than one affirmative a slated civil judicial actions must be solved or entity (ies) for whom this DRP advisory firm) | answer to Item 11.H. of Part 1A reported on separate DRPs. is being filed is (are): | ay be reported for more than | one <i>person</i> or entity using one DRP. File | the |
| Use a with One same | a completed event may re event. Unre I The person(s You (the | Execution Page. esult in more than one affirmative a slated civil judicial actions must be so or entity(ies) for whom this DRP | answer to Item 11.H. of Part 1A reported on separate DRPs. is being filed is (are): | ay be reported for more than | one <i>person</i> or entity using one DRP. File | the |
| Use a with One same | a completed event may re event. Unre I The person(s You (the You and o One or m | Execution Page. esult in more than one affirmative a elated civil judicial actions must be solved or entity (ies) for whom this DRP advisory firm) one or more of your advisory affiliation of your advisory affiliates | answer to Item 11.H. of Part 1A reported on separate DRPs. is being filed is (are): tes | or Item 2.F. of Part 1B. Use | one <i>person</i> or entity using one DRP. File only one DRP to report details related to the also that also the content of the con | |
| Use a with One same | a completed event may re event. Unre I The person(s You (the You and o One or m If this DRP is If the advisor | Execution Page. esult in more than one affirmative a slated civil judicial actions must be solved or entity(ies) for whom this DRP advisory firm) one or more of your advisory affiliates or entity advisory affiliates or entity advisory affiliates or entity advisory affiliates | answer to Item 11.H. of Part 1A reported on separate DRPs. is being filed is (are): tes | or Item 2.F. of Part 1B. Use | one <i>person</i> or entity using one DRP. File only one DRP to report details related to the also that also the content of the con | |
| Use a with One same | a completed event may re event. Unre I The person(s You (the You and o One or m If this DRP is If the advisor ADV DRP - A CRD Number: | Execution Page. esult in more than one affirmative a elated civil judicial actions must be solved or entity (ies) for whom this DRP advisory firm) one or more of your advisory affiliates or advisory affiliates or solved or advisory affiliate or an advisory affiliate or | answer to Item 11.H. of Part 1A reported on separate DRPs. is being filed is (are): tes | or Item 2.F. of Part 1B. Use or affiliate below (for individue "non-registered" by checking | one <i>person</i> or entity using one DRP. File only one DRP to report details related to the also that also the content of the con | |
| Use a with One same | a completed event may re event. Unre I The person(s You (the You and o One or m If this DRP is If the advisor ADV DRP - A CRD Number: | Execution Page. Sesult in more than one affirmative a selated civil judicial actions must be selated civil judicial actions advisory firm) The provided civil judicial actions must be selated civil judicial actions advisory affiliate actions advisory affiliate actions advisory affiliate actions action actions action actions acti | answer to Item 11.H. of Part 1A reported on separate DRPs. is being filed is (are): tes give the full name of the advisoride that number. If not, indicate | or Item 2.F. of Part 1B. Use or affiliate below (for individue "non-registered" by checking | one <i>person</i> or entity using one DRP. File only one DRP to report details related to the also that also the content of the con | |
| Use a with One same | a completed event may re event. Unre I The person(s You (the You and o One or m If this DRP is If the advisor ADV DRP - A CRD Number: | Execution Page. esult in more than one affirmative a elated civil judicial actions must be solved or entity (ies) for whom this DRP advisory firm) one or more of your advisory affiliates or advisory affiliates or advisory affiliate or an advisory affiliate or an advisory affiliate or affiliate has a CRD number, proved ADVISORY AFFILIATE 282933 • • Yes • No VANGUARD INVESTMENTS | answer to Item 11.H. of Part 1A reported on separate DRPs. is being filed is (are): tes give the full name of the advisoride that number. If not, indicate | or Item 2.F. of Part 1B. Use or affiliate below (for individue "non-registered" by checking | one <i>person</i> or entity using one DRP. File only one DRP to report details related to the also that also the content of the con | |
| Use a with One same | a completed event may re event. Unre I The person(s You (the You and o One or m If this DRP is If the advisor ADV DRP - A CRD Number: Registered | Execution Page. Sesult in more than one affirmative a selated civil judicial actions must be selated civil judicial actions advisory firm) The provided civil judicial actions must be selated civil judicial actions advisory affiliate actions advisory affiliate actions advisory affiliate actions action actions action actions acti | answer to Item 11.H. of Part 1A reported on separate DRPs. is being filed is (are): tes give the full name of the advisoride that number. If not, indicate | or Item 2.F. of Part 1B. Use or affiliate below (for individue "non-registered" by checking | one <i>person</i> or entity using one DRP. File only one DRP to report details related to the also that also the content of the con | |

| | ☐ This DRP should be removed from the ADV record because it was filed in error, so circumstances: | uch as due to a clerical or data-entry mistake. Explain the |
|------|---|---|
| B. | B. If the <i>advisory affiliate</i> is registered through the IARD system or <i>CRD</i> system, has the IARD or <i>CRD</i> for the event? If the answer is "Yes," no other information on this I | |
| | | |
| | NOTE: The completion of this form does not relieve the advisory affiliate of its obligat | ion to update its IARD or <i>CRD</i> records. |
| PAR | ART II | |
| 1. | Court Action initiated by: (Name of regulator, foreign financial regulatory authority, SF AUSTRALIAN SECURITIES AND INVESTMENTS COMMISSION | RO, commodities exchange, agency, firm, private plaintiff, etc.) |
| 2. | 2. Principal Relief Sought: Other | |
| | Other Relief Sought: PROPOSED REMEDIATION FOR BREACH | |
| 3. | 3. Filing Date of Court Action (MM/DD/YYYY): | |
| 0. | 07/24/2023 © Exact © Explanation If not exact, provide explanation: | |
| 4 | 4. Principal Product Type: | |
| | Mutual Fund(s) Other Product Types: | |
| 5. | 5. Formal Action was brought in (include name of Federal, State or Foreign Court, Loca Number): | tion of Court - City or County <u>and</u> State or Country, Docket/Case |
| | SERVED BY FEDERAL COURT OF AUSTRALIA, VICTORIA CASE# - VID563/2023 | |
| 6. | 6. Advisory Affiliate Employing Firm when activity occurred which led to the civil judicial and NA | action (if applicable): |
| 7. | 7. Describe the allegations related to this civil action (your response must fit within the ON 25 JULY 2023, ASIC LODGED CIVIL PENALTY PROCEEDINGS IN THE FEDERAL COULLTD, ALLEGING MISLEADING CONDUCT IN RELATION TO CLAIMS ABOUT CERTAIN ENSIGNED SCREENS APPLIED TO INVESTMENTS IN THE VANGUARD ETHICALLY CONSCIOUS GLO AND FEBRUARY 2021. ASIC IS ALLEGING THAT THE DESCRIPTION OF THE EXCLUSION DID NOT PROVIDE A SUFFICIENTLY DETAILED EXPLANATION THAT CERTAIN DEBT ISSENT THE BENCHMARK SUCH THAT THE FUND AND ETF MAY HAVE HAD EXPOSURE TO CE EXPECTED BY INVESTORS. | RT OF AUSTRALIA AGAINST VANGUARD INVESTMENTS AUSTRALIA //IRONMENTAL, SOCIAL AND GOVERNANCE (ESG) EXCLUSIONARY BAL AGGREGATE BOND INDEX AND ETF BETWEEN AUGUST 2018 IARY SCREENS IN THE PRODUCT DISCLOSURE STATEMENT (PDS) GUERS LACKING ESG RESEARCH COVERAGE WERE STILL INCLUDED |
| 8. | 3. Current Status? • Pending • On Appeal • Final | |
| 9. | 9. If on appeal, action appealed to (provide name of court) and Date Appeal Filed (MM/ | DD/YYYY): |
| 10. | 10. If pending, date notice/process was served (MM/DD/YYYY): | |
| | 07/25/2023 © Exact © Explanation If not exact, provide explanation: | |
| If F | f Final or On Appeal, complete all items below. For Pending Actions, complete Item 14 o | nly. |
| 11. | 11. How was matter resolved: | |
| 12. | 12. Resolution Date (MM/DD/YYYY): | |
| | © Exact © Explanation If not exact, provide explanation: | |
| 13. | 13. Resolution Detail: | |
| | A. Were any of the following Sanctions Ordered or Relief Granted(check appropria | ate items)? |
| | Monetary/Fine Amount: \$ | |
| | | gorgement/Restitution |
| | ☐ Censure ☐ Cea | ase and Desist/Injunction |

| requalify/retrain, type of exam required and whether condition has been satisfied. If disposition resulted in a fine, disgorgement, or monetary compensation, provide total amount, portion levied against you or an <i>advisory affiliate</i> , of penalty was waived: | |
|---|---|
| 14. Provide a brief summary of circumstances related to the action(s), allegation(s), disposition(s) and/or finding(s) disclosing within the space provided). ON 25 JULY 2023, ASIC LODGED CIVIL PENALTY PROCEEDINGS IN THE FEDERAL COURT OF AUSTRALIA AGAINST VANGUAL LTD, ALLEGING MISLEADING CONDUCT IN RELATION TO CLAIMS ABOUT CERTAIN ENVIRONMENTAL, SOCIAL AND GOVERN SCREENS APPLIED TO INVESTMENTS IN THE VANGUARD ETHICALLY CONSCIOUS GLOBAL AGGREGATE BOND INDEX AND FABRUARY 2021. ASIC IS ALLEGING THAT THE DESCRIPTION OF THE EXCLUSIONARY SCREENS IN THE PRODUCT DIS DID NOT PROVIDE A SUFFICIENTLY DETAILED EXPLANATION THAT CERTAIN DEBT ISSUERS LACKING ESG RESEARCH COVIN THE BENCHMARK SUCH THAT THE FUND AND ETF MAY HAVE HAD EXPOSURE TO CERTAIN SECURITIES THAT MAY HAVE EXPECTED BY INVESTORS. | RD INVESTMENTS AUSTRALIA NANCE (ESG) EXCLUSIONARY ETF BETWEEN AUGUST 2018 SCLOSURE STATEMENT (PDS) VERAGE WERE STILL INCLUDED |
| | |
| Part 2 | |
| Exemption from brochure delivery requirements for SEC-registered advisers | |
| SEC rules exempt SEC-registered advisers from delivering a firm brochure to some kinds of clients. If these exemptions excubrochure to all of your advisory clients, you do not have to prepare a brochure. | use you from delivering a |
| | Yes No |
| Are you exempt from delivering a brochure to all of your clients under these rules? | © 0 |
| If no, complete the ADV Part 2 filing below. | |
| Amend, retire or file new brochures: | |
| | |
| Part 3 | |
| CRS Type(s) Affiliate Info | Retire |
| There are no CRS filings to display. | |

C. Sanction detail: if suspended, *enjoined* or barred, provide duration including start date and capacities affected (General Securities Principal, Financial Operations Principal, etc.). If requalification by exam/retraining was a condition of the sanction, provide length of time given to

Suspension

Execution Pages

Bar

B. Other Sanctions:

DOMESTIC INVESTMENT ADVISER EXECUTION PAGE

You must complete the following Execution Page to Form ADV. This execution page must be signed and attached to your initial submission of Form ADV to the SEC and all amendments.

Appointment of Agent for Service of Process

By signing this Form ADV Execution Page, you, the undersigned adviser, irrevocably appoint the Secretary of State or other legally designated officer, of the state in which you maintain your *principal office and place of business* and any other state in which you are submitting a *notice filing*, as your agents to receive service, and agree that such *persons* may accept service on your behalf, of any notice, subpoena, summons, *order* instituting *proceedings*, demand for arbitration, or other process or papers, and you further agree that such service may be made by registered or certified mail, in any federal or state action, administrative *proceeding* or arbitration brought against you in any place subject to the jurisdiction of the United States, if the action, *proceeding*, or arbitration (a) arises out of any activity in connection with your investment advisory business that is subject to the jurisdiction of the United States, and (b) is *founded*, directly or indirectly, upon the provisions of: (i) the Securities Act of 1933, the Securities Exchange Act of 1934, the Trust Indenture Act of 1939, the Investment Company Act of 1940, or the Investment Advisers Act of 1940, or any rule or regulation under any of these acts, or (ii) the laws of the state in which you maintain your *principal office and place of business* or of any state in which you are submitting a *notice filing*.

Signature

I, the undersigned, sign this Form ADV on behalf of, and with the authority of, the investment adviser. The investment adviser and I both certify, under penalty of perjury under the laws of the United States of America, that the information and statements made in this ADV, including exhibits and any other information submitted, are true and correct, and that I am signing this Form ADV Execution Page as a free and voluntary act.

I certify that the adviser's books and records will be preserved and available for inspection as required by law. Finally, I authorize any *person* having *custody* or possession of these books and records to make them available to federal and state regulatory representatives.

Signature: Date: MM/DD/YYYY

JACQUELINE ANGELL

Printed Name:

JACQUELINE ANGELL

Adviser CRD Number:

03/27/2024

Title:

CHIEF COMPLIANCE OFFICER

NON-RESIDENT INVESTMENT ADVISER EXECUTION PAGE

You must complete the following Execution Page to Form ADV. This execution page must be signed and attached to your initial submission of Form ADV to the SEC and all amendments.

1. Appointment of Agent for Service of Process

By signing this Form ADV Execution Page, you, the undersigned adviser, irrevocably appoint each of the Secretary of the SEC, and the Secretary of State or other legally designated officer, of any other state in which you are submitting a *notice filing*, as your agents to receive service, and agree that such persons may accept service on your behalf, of any notice, subpoena, summons, *order* instituting *proceedings*, demand for arbitration, or other process or papers, and you further agree that such service may be made by registered or certified mail, in any federal or state action, administrative *proceeding* or arbitration brought against you in any place subject to the jurisdiction of the United States, if the action, *proceeding* or arbitration (a) arises out of any activity in connection with your investment advisory business that is subject to the jurisdiction of the United States, and (b) is *founded*, directly or indirectly, upon the provisions of: (i) the Securities Act of 1933, the Securities Exchange Act of 1934, the Trust Indenture Act of 1939, the Investment Company Act of 1940, or the Investment Advisers Act of 1940, or any rule or regulation under any of these acts, or (ii) the laws of any state in which you are submitting a *notice filing*.

2. Appointment and Consent: Effect on Partnerships

If you are organized as a partnership, this irrevocable power of attorney and consent to service of process will continue in effect if any partner withdraws from or is admitted to the partnership, provided that the admission or withdrawal does not create a new partnership. If the partnership dissolves, this irrevocable power of attorney and consent shall be in effect for any action brought against you or any of your former partners.

3. Non-Resident Investment Adviser Undertaking Regarding Books and Records

By signing this Form ADV, you also agree to provide, at your own expense, to the U.S. Securities and Exchange Commission at its principal office in Washington D.C., at any Regional or District Office of the Commission, or at any one of its offices in the United States, as specified by the Commission, correct, current, and complete copies of any or all records that you are required to maintain under Rule 204-2 under the Investment Advisers Act of 1940. This undertaking shall be binding upon you, your heirs, successors and assigns, and any *person* subject to your written irrevocable consents or powers of attorney or any of your general partners and *managing agents*.

Signature

105958

I, the undersigned, sign this Form ADV on behalf of, and with the authority of, the *non-resident* investment adviser. The investment adviser and I both certify, under penalty of perjury under the laws of the United States of America, that the information and statements made in this ADV, including exhibits and any other information submitted, are true and correct, and that I am signing this Form ADV Execution Page as a free and voluntary act.

I certify that the adviser's books and records will be preserved and available for inspection as required by law. Finally, I authorize any *person* having *custody* or possession of these books and records to make them available to federal and state regulatory representatives.

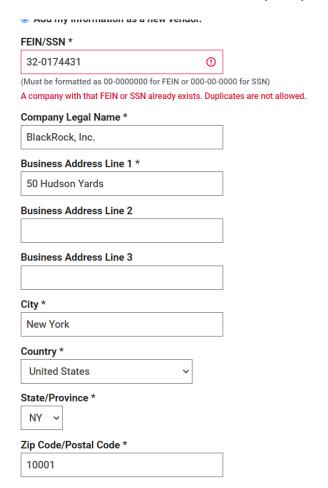
Signature: Date: MM/DD/YYYY

Printed Name: Title:

Adviser CRD Number:

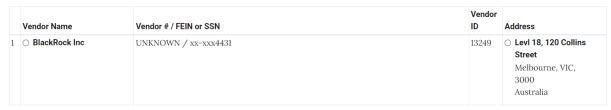
105958

The address on the 10k form for BlackRock is 50 Hudson Yards, New York, NY. The FEIN on the 10k form is linked with a different address in your system. I get this message (see screenshot below) when I try to add the FEIN and address on the 10k form into your system.



This is the address in your system linked with the FEIN on the 10k form:

Please select one of the following options.



The address on the 10K form is linked to this FEIN number in your system:

