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

FORM 10-K

☒ Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the Fiscal Year Ended December 31, 2024
or
☐ Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Commission File Number 001-35651

THE BANK OF NEW YORK MELLON CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**13-2614959**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*

240 Greenwich Street
New York, New York 10286
(Address of principal executive offices) (Zip Code)
Registrant's telephone number, including area code – (212) 495-1784

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, $0.01 par value	BK	New York Stock Exchange
6.244% Fixed-to-Floating Rate Normal Preferred Capital Securities of Mellon Capital IV (fully and unconditionally guaranteed by The Bank of New York Mellon Corporation)	BK/P	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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. ☐

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. ☐

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). ☐

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

As of June 30, 2024, the aggregate market value of the registrant’s common stock, $0.01 par value per share, held by non-affiliates of the registrant was $44,178,538,132.

As of January 31, 2025, 716,320,652 shares of the registrant’s common stock, $0.01 par value per share, were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the following documents are incorporated by reference in the following parts of this Form 10-K:

The Bank of New York Mellon Corporation 2025 Proxy Statement – Part III

The Bank of New York Mellon Corporation 2024 Annual Report to Shareholders – Parts I, II and IV

Available Information

This Form 10-K filed by The Bank of New York Mellon Corporation ("BNY" or the "Company") with the Securities and Exchange Commission (the "SEC") contains the Exhibits listed on the Index to Exhibits beginning on page 14, including those portions of BNY's 2024 Annual Report to Shareholders (the "Annual Report") which are incorporated herein by reference. The Annual Report and BNY's Proxy Statement for its 2025 Annual Meeting (the "Proxy") will be available on our website at www.bny.com. We also make available on our website, free of charge, the following materials:

- All of our SEC filings, including annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to these reports as soon as reasonably practicable after we electronically file such materials with, or furnish them to, the SEC pursuant to Section 13(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and any proxy statement mailed by us in connection with the solicitation of proxies;
- Our earnings materials and selected management conference calls and presentations;
- Other regulatory disclosures, including: Pillar 3 Disclosures (and Market Risk Disclosure contained therein); Liquidity Coverage Ratio Disclosures; Net Stable Funding Ratio Disclosures; Federal Financial Institutions Examination Council – Consolidated Reports of Condition and Income for a Bank with Domestic and Foreign Offices; Consolidated Financial Statements for Bank Holding Companies; and the Dodd-Frank Act Stress Test Results for BNY and The Bank of New York Mellon; and
- Our Corporate Governance Guidelines, Amended and Restated By-laws, Directors' Code of Conduct and the Charters of the Audit, Finance, Corporate Governance, Nominating and Social Responsibility, Human Resources and Compensation, Risk and Technology Committees of our Board of Directors.

We may use our website, our LinkedIn accounts (e.g., www.linkedin.com/company/BNYglobal), our X accounts (e.g., @BNYglobal) and other social media channels as additional means of sharing information with the public. The information shared through those channels may be considered to be material, and we encourage investors, the media and others interested in BNY to review the business and financial information we post on our website and on our social media channels. The contents of our website, our social media channels and any other websites referenced herein or in the Annual Report are not part of or incorporated by reference into this Form 10-K.

Forward-looking Statements

In this Form 10-K, and other public disclosures of BNY, words, such as "estimate," "forecast," "project," "anticipate," "likely," "target," "expect," "intend," "continue," "seek," "believe," "plan," "goal," "could," "should," "would," "may," "might," "will," "strategy," "synergies," "opportunities," "trends," "momentum," "ambition," "aspiration," "objective," "aim," "future," "potentially," "outlook" and words of similar meaning, may signify forward-looking statements. Some statements in this document are forward-looking. These include statements about the usefulness of Non-GAAP measures, the future results of BNY, our businesses, financial, liquidity and capital condition, results of operations, capital plans including dividends and repurchases, liquidity, risk and capital management and processes, human capital management (including related ambitions, objectives, aims and goals), strategic priorities and initiatives, acquisitions, related integration and divestiture activity, transition to a platforms operating model, efficiency savings, estimates (including those regarding expenses, interest rate and net interest income sensitivities, losses inherent in our credit portfolios and capital ratios), intentions (including those regarding our capital returns and expenses, including our investments in technology and pension expense), outlook (including those regarding our performance results, fee revenue, net interest income, expenses, impacts of currency fluctuations, capital ratios and effective tax rate) and expectations (including those regarding products, nonperforming assets, legal proceedings and other contingencies, impacts of trends on our businesses, regulatory, technology, market, economic or accounting developments and the impacts of such developments on our businesses).

These forward-looking statements, and other forward-looking statements contained in other public disclosures of BNY (including those incorporated into this Form 10-K), are not guarantees of future results or occurrences, are inherently uncertain and are based upon current beliefs and expectations of future events, many of which are, by their nature, difficult to predict, outside of our control and subject to change. By identifying these statements in this manner, we are alerting investors to the possibility that our actual results may differ, possibly materially, from the anticipated results expressed or implied in these forward-looking statements as a result of a number of important factors, including those factors described in the Annual Report under "Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") – Risk Factors," such as:

- errors or delays in our operational and transaction processing, or those of third parties, may materially adversely affect our business, financial condition, results of operations and reputation;
- our risk management framework, policies and processes may not be effective in identifying or mitigating risk and reducing the potential for losses and any inadequacy or lapse in our risk management framework, policies and processes could expose us to unexpected losses that could materially adversely affect our results of operations or financial condition;
- limitations of the models we use to measure, monitor and manage risk could lead to unexpected losses and adverse business impacts;
- a communications or technology disruption or failure within our infrastructure or the infrastructure of third parties that results in a loss of information, delays our ability to access information or impacts our ability to provide services to our clients may materially adversely affect our business, financial condition and results of operations;
- a cybersecurity incident, or a failure in our computer systems, networks and information, or those of third parties, could result in the theft, disclosure, use or alteration of information, unauthorized access to or loss of information, or system or network failures. Any such incident or failure could adversely impact our ability to conduct our businesses, damage our reputation and cause losses;
- the development and use of artificial intelligence present risks and challenges that may adversely impact our business;
- we are subject to extensive government rulemaking, policies, regulation and supervision that impact our operations. Changes to and introduction of new rules and regulations have compelled, and in the future may compel, us to change how we manage our businesses, which could have a material adverse effect on our business, financial condition and results of operations;
- regulatory or enforcement actions or litigation could materially adversely affect our results of operations or harm our businesses or reputation;
- our business may be adversely affected if we are unable to attract, retain, develop and motivate employees;
- a failure or circumvention of our controls, policies and procedures could have a material adverse effect on our business, financial condition, results of operations and reputation;
- weakness and volatility in financial markets and the economy generally may materially adversely affect our business, financial condition and results of operations;
- we are dependent on fee-based business for a substantial majority of our revenue and our fee-based revenues could be adversely affected by slowing market activity, weak financial markets, underperformance and/or negative trends in savings rates or in investment preferences;
- levels of and changes in interest rates have impacted, and will in the future continue to impact, our profitability and capital levels, at times adversely;
- we have experienced, and may continue to experience, unrealized or realized losses on securities related to volatile and illiquid market conditions, reducing our capital levels and/or earnings;
- the failure or perceived weakness of any of our significant clients or counterparties, many of whom are major financial institutions or sovereign entities, and our assumption of credit, counterparty and concentration risk, could expose us to credit losses and adversely affect our business;
- we could incur losses if our allowance for credit losses, including loan and lending-related commitment reserves, is inadequate or if our expectations of future economic conditions deteriorate;

- our business, financial condition and results of operations could be adversely affected if we do not effectively manage our liquidity;
- failure to satisfy regulatory standards, including "well capitalized" and "well managed" status or capital adequacy and liquidity rules more generally, could result in limitations on our activities and adversely affect our business and financial condition;
- the Parent is a non-operating holding company and, as a result, is dependent on dividends from its subsidiaries and extensions of credit from its IHC to meet its obligations, including with respect to its securities, and to provide funds for share repurchases, payment of income taxes and payment of dividends to its stockholders;
- our ability to return capital to shareholders is subject to the discretion of our Board of Directors and may be limited by U.S. banking laws and regulations, including those governing capital and capital planning, applicable provisions of Delaware law and our failure to pay full and timely dividends on our preferred stock;
- any material reduction in our credit ratings or the credit ratings of our principal bank subsidiaries, The Bank of New York Mellon, BNY Mellon, N.A. or The Bank of New York Mellon SA/NV, could increase the cost of funding and borrowing to us and our rated subsidiaries and have a material adverse effect on our business, financial condition and results of operations and on the value of the securities we issue;
- the application of our Title I preferred resolution strategy or resolution under the Title II orderly liquidation authority could adversely affect the Parent's liquidity and financial condition and the Parent's security holders;
- new lines of business, new products and services or transformational or strategic project initiatives subject us to new or additional risks, and the failure to implement these initiatives could affect our results of operations;
- our strategic transactions present risks and uncertainties and could have an adverse effect on our business, financial condition and results of operations;
- we may not realize some or all of the expected benefits of our transition to a platforms operating model;
- we are subject to competition in all aspects of our business, which could negatively affect our ability to maintain or increase our profitability;
- our businesses may be negatively affected by adverse events, publicity, government scrutiny or other reputational harm;
- impacts from geopolitical events, acts of terrorism, war, natural disasters, the physical effects of climate change, pandemics and other similar events may have a negative impact on our business and operations;
- sustainability concerns, including a focus on climate change and diversity, could adversely affect our business, affect client activity levels, subject us to additional regulatory requirements and damage our reputation;
- tax law changes or challenges to our tax positions with respect to historical transactions may adversely affect our net income, effective tax rate and our overall results of operations and financial condition; and
- changes in accounting standards governing the preparation of our financial statements and future events could have a material impact on our reported financial condition, results of operations, cash flows and other financial data.

Investors should not place undue reliance on any forward-looking statement and should consider all risk factors discussed in the Annual Report and any subsequent reports filed with the SEC by BNY pursuant to the Exchange Act. All forward-looking statements speak only as of the date on which such statements are made, and BNY undertakes no obligation to update any statement to reflect events or circumstances after the date on which such forward-looking statement is made or to reflect the occurrence of unanticipated events.

THE BANK OF NEW YORK MELLON CORPORATION

FORM 10-K INDEX

ITEM 1. BUSINESS

Description of Business

The Bank of New York Mellon Corporation, a Delaware corporation (NYSE symbol: BK), is a global company headquartered in New York, New York, with $52.1 trillion in assets under custody and/or administration and $2.0 trillion in assets under management as of Dec. 31, 2024. With its subsidiaries, BNY has been in business since 1784.

We divide our businesses into three principal business segments: Securities Services, Market and Wealth Services and Investment and Wealth Management. We also have an Other segment, which includes the leasing portfolio, corporate treasury activities (including our securities portfolio), derivatives and other trading activity, corporate and bank-owned life insurance, tax credit investments and other corporate investments and certain business exits.

For a further discussion of BNY's lines of business, products and services, see the "Overview," "Summary of financial highlights," "Fee and other revenue," "Review of business segments" and "International operations" sections in the MD&A section in the Annual Report and Notes 24 and 25 of the Notes to Consolidated Financial Statements in the Annual Report, of which portions are incorporated herein by reference. See the "Available Information" section on page 1 of this Form 10-K, which is incorporated herein by reference, for a description of how to access financial and other information regarding BNY.

Our two principal U.S. banking subsidiaries engage in trust and custody activities, investment management services, banking services and various securities-related activities. Our two principal U.S. banking subsidiaries are:

- The Bank of New York Mellon, a New York state-chartered bank, which houses our Securities Services businesses, including Asset Servicing and Issuer Services and certain Market and Wealth Services businesses, including Treasury Services and Clearance and Collateral Management, as well as the bank-advised business of Investment Management; and
- BNY Mellon, National Association ("BNY Mellon, N.A."), a national bank, which houses our Wealth Management business and certain activities of our Pershing businesses.

We have four other U.S. bank and/or trust company subsidiaries concentrating on trust products and services across the United States: The Bank of New York Mellon Trust Company, National Association, BNY Mellon Trust of Delaware, BNY Mellon Investment Servicing Trust Company and BNY Mellon Trust Company of Illinois. Most of our Investment Management business and Pershing businesses are direct or indirect non-bank subsidiaries of BNY.

Each of our bank and trust company subsidiaries is subject to regulation by the applicable bank regulatory authority. The deposits of our U.S. banking subsidiaries are insured by the Federal Deposit Insurance Corporation to the extent provided by law.

BNY's banking subsidiaries outside the United States are subject to regulation by non-U.S. regulatory authorities in addition to the Board of Governors of the Federal Reserve System (the "Federal Reserve"). The Bank of New York Mellon SA/NV ("BNY SA/NV") is the main banking subsidiary of The Bank of New York Mellon in continental Europe. It is authorized and regulated as a credit institution by the European Central Bank and the National Bank of Belgium under the Single Supervisory Mechanism and is also supervised by the Belgian Financial Services and Markets Authority for conduct of business rules. BNY SA/NV has its principal office in Brussels and branches in Amsterdam, the Netherlands; Copenhagen, Denmark; Dublin, Ireland; Frankfurt, Germany; the City of Luxembourg, Luxembourg; Madrid, Spain; Milan, Italy; Paris, France; and Wroclaw, Poland. BNY SA/NV's activities are in the Securities Services and Market and Wealth Services segments of BNY with a focus on global custody, asset servicing and collateral management. For additional discussion, see the "MD&A – Supervision and Regulation" section in the Annual Report.

Primary Subsidiaries

Exhibit 21.1 to this Form 10-K presents a list of BNY's primary subsidiaries as of Dec. 31, 2024.

Human Capital Management

Our enduring ambition is to build the best global team —one that includes varying perspectives, backgrounds and experiences, and reflects the increasingly varied markets and clients we serve. Our core objective is to empower our teams to do their best work, make unique contributions and build purposeful careers in an environment where they are treated with fairness, dignity and respect.

Belonging

Belonging is integral to who we are as a company, what our people experience as members of our global team, and how we serve all of our stakeholders. Our strategy is not separate, it includes all of our employees and is embedded in the way we do business, our operating model, talent experience and client value proposition.

At the end of 2024, women represented 40% of BNY's global workforce and 43% of BNY's U.S. workforce. Further, 39% of BNY's U.S. workforce were from U.S. underrepresented ethnic and/or racial backgrounds.

At the end of 2024, 43% of BNY's Executive Committee were women and 26% of BNY's Executive Committee were from underrepresented ethnic and/or racial backgrounds.

At the end of 2024, 45% of our Board of Directors were women and 27% of our Board of Directors was composed of individuals from underrepresented ethnic and/or racial backgrounds.

Retention, Training and Development

We seek to attract and retain employees by providing a rewarding employee experience. We recognize that employees seek a supportive and safe workplace, and we continually evaluate our employee engagement and wellbeing programs in an effort to meet those expectations. We offer a 401(k) plan for U.S. employees and other defined contribution retirement plans worldwide, where consistent with market practice. We also maintain defined benefit plans for certain current and former employees, some of which are frozen (including in the U.S.). At Dec. 31, 2024, we had approximately 41,500 participants in our 401(k) plan, including former employees. In addition, our frozen U.S. defined benefit pension plan covered approximately 6,400 U.S. participants, and our non-U.S. defined benefit plans (some frozen) covered approximately 18,400 non-U.S. participants.

In 2024, The Bank of New York Mellon Corporation again provided eligible employees an award of 10 restricted stock units ("RSUs") or "BK Shares". BK Shares is an equity grant that allows for eligible employees to become equity owners, or increase their equity holdings in the Company, and share in the Company's success.

At key career transition points, from internship to executive management, we offer programs and development opportunities to help employees advance their careers and progress within our organization. Our extensive training and development opportunities are designed to enable employees to grow professionally and advance within our organization.

We engage with employees to encourage innovation, show appreciation for their contributions, and gather feedback on how we can build a more rewarding, inclusive workplace. For example, we regularly gather feedback through an all-employee survey.

Employee Wellbeing, Health and Safety

BNY's holistic approach to employee wellbeing is designed to create a healthy, resilient and vibrant workforce. Our programs are designed to provide employees access to resources to help improve their physical health, emotional resilience, financial wellbeing and social connections. Further, we work to ensure the safety of our employees and clients in all of our facilities.

BNY fosters a high-performance culture and supports employee work/life balance, while also delivering on our regulatory requirements and business imperatives. We endeavor to promote a collaborative and effective workplace for our people, while continuing to embrace the concept of flexibility and enhancing our culture and commercial impact.

Employees and International Operations

Globally, at Dec. 31, 2024, BNY and its subsidiaries had approximately 51,800 full-time employees.

We pride ourselves on providing dedicated service through our multilingual sales, marketing and client service teams. At Dec. 31, 2024, approximately 60% of our total employees (full-time and part-time employees) were based outside the U.S., with approximately 10,900 employees in Europe, the Middle East and Africa ("EMEA"), approximately 18,900 employees in the Asia-Pacific region ("APAC") and approximately 800 employees in other global locations, primarily Brazil.

Supervision and Regulation

Information on the supervision and regulation of BNY can be found in the "MD&A – Supervision and Regulation" section in the Annual Report, which is incorporated herein by reference.

Competition

BNY is subject to competition in all aspects and areas of our business. Our Securities Services and Market and Wealth Services businesses compete with domestic and international financial services firms that offer custody services, corporate trust services, clearing services, collateral management services, credit services, securities brokerage, foreign exchange services, derivatives, depositary receipt services and integrated cash management solutions and related products, as well as a wide range of technology service providers, such as financial services data processing firms. Our Investment and Wealth Management business competes with domestic and international investment management and wealth management firms, hedge funds, investment banking companies and other financial services companies, including trust banks, brokerage firms and insurance companies, as well as a wide range of technology service providers.

Competition in the financial services industry continues to be intense. Competition is based on a number of factors including, among others, customer service and convenience, transaction execution, capital or access to capital, quality and range of products and services offered, performance, technological innovation and expertise, including adaptation to technological change, price, reputation and lending limits. Competition also varies based on the types of clients, customers, industries and geographies served. Our ability to continue to compete effectively also depends in large part on our ability to attract new employees, retain, develop and motivate our existing employees, amid heightened regulatory restrictions and an inflationary or uncertain interest rate environment. Our competitive position may be affected by institutions that are not similarly subject to extensive regulation, such as financial technology firms, and as further technological advances enable more companies, such as financial technology firms, to provide financial services.

For additional discussion regarding competition, see "MD&A – Risk Factors – Operational Risk – Our business may be adversely affected if we are unable to attract, retain, develop and motivate employees" and "MD&A – Risk Factors – Strategic Risk – We are subject to competition in all aspects of our business, which could negatively affect our ability to maintain or increase our profitability" in the Annual Report, which are incorporated herein by reference.

ITEM 1A. RISK FACTORS

The information required by this Item is set forth in the Annual Report under "MD&A – Risk Factors," which portion is incorporated herein by reference.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 1C. CYBERSECURITY

The information required by this Item is set forth in the "MD&A – Cybersecurity" section in the Annual Report, which is incorporated herein by reference.

ITEM 2. PROPERTIES

Our corporate headquarters, located at 240 Greenwich Street in New York City, is a 23-story building of approximately 1.2 million square feet that we own.

We have additional offices and commercial space in the U.S. and elsewhere in the Americas, primarily Brazil and Canada, which together consist of approximately 4.4 million square feet of leased and owned space.

In the EMEA region, we have offices that total approximately 1.1 million square feet of leased and owned space, and we have 1.8 million square feet of leased space in the APAC region.

Our global facilities are used across our business segments for corporate purposes. In the preceding paragraphs, square footage figures do not include excess space that has been vacated and/or subleased to third parties. We regularly evaluate our space capacity in relation to current and projected needs. We have incurred and may in the future incur costs if we reduce our space capacity or commit to, or occupy, new properties in locations in which we operate and dispose of existing space. These costs may be material to our operating results in a given period.

ITEM 3. LEGAL PROCEEDINGS

The information required by this Item is set forth in the "Legal proceedings" section in Note 22 of the Notes to Consolidated Financial Statements in the Annual Report, which portion is incorporated herein by reference.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is listed on the New York Stock Exchange under the ticker symbol BK. As of Jan. 31, 2025, there were 19,981 holders of record of our common stock.

Additional information about our common stock, including additional information about share repurchases and existing Board of Directors authorizations with respect to purchases by us of our common stock and other equity securities is provided in the "Capital – Issuer purchases of equity securities" section in the MD&A in the Annual Report and Note 15 of the Notes to Consolidated Financial Statements in the Annual Report, which portions are incorporated herein by reference. Share repurchases may be executed through open market repurchases, in privately negotiated transactions or by other means, including through repurchase plans designed to comply with Rule 10b5-1 and other derivative, accelerated share repurchase and other structured transactions.

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The information required by this Item is set forth in the MD&A and Notes 3, 6, 12, 14, 19, 22 and 23 of the Notes to Consolidated Financial Statements in the Annual Report, which portions are incorporated herein by reference.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The information required by this Item is set forth in the "Trading activities and risk management," "Asset/ liability management" and "Risk Management" sections in the MD&A in the Annual Report and "Derivative financial instruments" under Note 1 and Notes 20 and 23 of the Notes to Consolidated Financial Statements in the Annual Report, which portions are incorporated herein by reference.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Reference is made to Item 15 on page 13 hereof for a detailed listing of the items under Exhibits and Financial Statements, which are incorporated herein by reference.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, including the Chief Executive Officer and Chief Financial Officer, with participation by the members of the Disclosure Committee, has responsibility for ensuring that there is an adequate and effective process for establishing, maintaining, and evaluating disclosure controls and procedures that are designed to ensure that information required to be disclosed by us in our SEC reports is timely recorded, processed, summarized and reported and that information required to be disclosed by BNY is accumulated and communicated to BNY's management to allow timely decisions regarding the required disclosure. In addition, our ethics hotline can be used by employees and others for the anonymous communication of concerns about financial controls or reporting matters. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives.

As of Dec. 31, 2024, an evaluation was carried out under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures as defined in Rule 13a-15(e) of the Exchange Act. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective.

Changes in Internal Control over Financial Reporting

In the ordinary course of business, we may routinely modify, upgrade or enhance our internal controls and procedures for financial reporting. There have not been any changes in our internal control over financial reporting as defined in Rule 13a-15(f) of the Exchange Act during the fourth quarter of 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management Report on Internal Control over Financial Reporting and Report of Independent Registered Public Accounting Firm

See "Report of Management on Internal Control Over Financial Reporting" and "Report of Independent Registered Public Accounting Firm" on pages 124 and 125 of the Annual Report, each of which is incorporated herein by reference.

ITEM 9B. OTHER INFORMATION

(b) Certain of our officers or directors have made elections to participate in, and are participating in, our dividend reinvestment plan, employee stock purchase plan and 401(k) plan, and have made, and may from time to time make, elections to have shares withheld to cover withholding taxes or pay the exercise price of stock awards, which may be designed to satisfy the affirmative defense conditions of Rule 10b5-1 under the Exchange Act or may constitute non-Rule 10b5-1 trading arrangements (as defined in Item 408(c) of Regulation S-K).

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item is included below and in the Proxy in the following sections: "Delinquent Section 16(a) Reports" under the heading "Additional Information – Information on Stock Ownership;" "Background" under the heading "Item 1 – Election of Directors – Resolution;" "Nominees" under the heading "Item 1 – Election of Directors;" and "Board Meetings and Committee Information – Committees and Committee Charters" and "– Audit Committee" under the heading "Item 1 – Election of Directors – Corporate Governance and Board Information," which are incorporated herein by reference.

CODE OF ETHICS

We have adopted a code of ethics for our employees which we refer to as our Code of Conduct. The Code of Conduct applies to all employees of BNY or an entity that is more than 50% owned by us, including our Chief Executive Officer (principal executive officer), Chief Financial Officer (principal financial officer) and Controller (principal accounting officer). The Code of Conduct is posted on our website at https://www.bny.com/content/dam/bnymellon/documents/pdf/csr/employee-code-of-conduct.pdf. We also have a code of ethics for our directors, which we refer to as our Directors' Code of Conduct. The Directors' Code of Conduct applies to all directors of BNY. The Directors' Code of Conduct is posted on our website at https://www.bny.com/content/dam/bnymellon/documents/pdf/investor-relations/directors-code-of-conduct.pdf. We intend to disclose on our website any amendments to or waivers of (i) the Code of Conduct relating to executive officers (including the officers specified below) and (ii) the Directors' Code of Conduct relating to our directors.

INSIDER TRADING POLICIES AND PROCEDURES

We have adopted insider trading policies and procedures governing the purchase, sale and other dispositions of the Company's securities by our directors, officers and employees, and by the Company itself. We believe that these policies and procedures are reasonably designed to promote compliance with insider trading laws, rules and regulations and applicable listing standards. Our insider trading policies and procedures are filed as Exhibit 19.1 to this Form 10-K.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

The position of Chief Executive Officer is held for the year for which the Board of Directors was elected and until the appointment and qualification of a successor or until earlier death, resignation, disqualification or removal. All other executive officers serve at the pleasure of the appointing authority. No executive officer has a family relationship to any other executive officer or director.

Name	Age	Positions and offices
Shannon Hobbs	54	Ms. Hobbs has served as Senior Executive Vice President and Chief People Officer of BNY since June 2024. Ms. Hobbs served as Chief People Officer at GEICO from March 2022 to May 2024; as Chief Human Resources Officer at American Century Investments from October 2020 to March 2022; and as Head of Talent at JPMorgan Chase from September 2009 to October 2020.
Catherine M. Keating	63	Ms. Keating has served as Senior Executive Vice President and Global Head of BNY Wealth since July 2018. From February 2015 to June 2018, Ms. Keating was the Chief Executive Officer of Commonfund.
Jayee Koffey	44	Ms. Koffey has served as Senior Executive Vice President, Global Head of Enterprise Execution and Chief Corporate Affairs Officer at BNY since February 2023. She served as Head of the Executive Office and Company Chief of Staff from August 2022 to February 2023. Previously, from 2011 to July 2022, Ms. Koffey worked at The Goldman Sachs Group, Inc., most recently as Chief Enterprise Risk Officer.
Senthil Kumar	59	Mr. Kumar has served as Senior Executive Vice President and Chief Risk Officer of BNY since July 2019. Mr. Kumar served as Chief Risk Officer of the Institutional Clients Group at Citigroup Inc. from April 2014 to June 2019.

Name	Age	Positions and offices
Kurtis R. Kurimsky	51	Mr. Kurimsky has served as Vice President and Controller of BNY since July 2015.
J. Kevin McCarthy	60	Mr. McCarthy has served as Senior Executive Vice President and General Counsel of BNY since April 2014.
Dermot McDonogh	59	Mr. McDonogh has served as Senior Executive Vice President since October 2022 and as Chief Financial Officer of BNY since February 2023. From 2015 to July 2022, Mr. McDonogh served as the Chief Operating Officer of the Europe, Middle East, and Africa region for Goldman Sachs International and as the Chief Executive Officer of Goldman Sachs International Bank.
Jose Minaya	53	Mr. Minaya has served as BNY's Global Head of BNY Investments and Wealth since September 2024. Previously, Mr. Minaya served as Chief Executive Officer of Nuveen, which he joined in 2017.
Robin Vince	53	Mr. Vince has served as President and Chief Executive Officer of BNY since September 2022, and served as President and Chief Executive Officer-Elect from March 2022 until September 2022. Previously, Mr. Vince was Vice Chair and Chief Executive Officer of Global Market Infrastructure at BNY since October 2020. From 1994 until September 2020, Mr. Vince worked at Goldman Sachs, most recently as Chief Risk Officer and a member of the Management Committee.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is included in the Proxy in the following sections: "Director Compensation" under the heading "Item 1 – Election of Directors;" "Compensation Discussion & Analysis" and "Executive Compensation Tables and Other Compensation Disclosures" under the heading "Item 2 – Advisory Vote on Compensation;" "Board Meetings and Committee Information – Committees and Committee Charters" and "– Human Resources and Compensation Committee" under the heading "Item 1 – Election of Directors – Corporate Governance and Board Information," which are incorporated herein by reference. The information incorporated herein by reference to the section "Report of the HRC Committee" under the heading "Item 2 – Advisory Vote on Compensation – Compensation Discussion & Analysis" is deemed furnished hereunder.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item is included in the Proxy in the following sections: "Equity Compensation Plans" and "Information on Stock Ownership" under the heading "Additional Information," which are incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item is included in the Proxy in the following sections: "Business Relationships and Related Party Transactions Policy" and "Director Independence" under the heading "Item 1 – Election of Directors – Corporate Governance and Board Information;" and "Board Meetings and Committee Information – Committees and Committee Charters," "– Audit Committee," "– Corporate Governance, Nominating and Social Responsibility Committee" and "– Human Resources and Compensation Committee" under the heading "Item 1 – Election of Directors – Corporate Governance and Board Information," which are incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item is included in the Proxy in the following section: "Item 3 – Ratification of KPMG LLP," which is incorporated herein by reference. KPMG LLP's Public Company Accounting Oversight Board ("PCAOB") firm identification number is 185.

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The financial statements, schedules and exhibits required for this Form 10-K are incorporated by reference as indicated in the following index. Page numbers refer to pages of the Annual Report for Items (1) and (2) Financial Statements and Schedules.

(3) Exhibits

See (b) below.

(b) The exhibits listed on the Index to Exhibits on pages 14 through 19 hereof are incorporated by reference or filed or furnished herewith in response to this Item.

(c) Other Financial Data

None.

ITEM 16. FORM 10-K SUMMARY

None.

Pursuant to the rules and regulations of the SEC, BNY has filed certain agreements as exhibits to this Form 10-K. These agreements may contain representations and warranties by the parties to such agreements. These representations and warranties have been made solely for the benefit of the other party or parties to such agreements and (i) may have been qualified by disclosures made to such other party or parties, (ii) were made only as of the date of such agreements or such other date(s) as may be specified in such agreements and are subject to more recent developments, which may not be fully reflected in BNY's public disclosure, (iii) may reflect the allocation of risk among the parties to such agreements and (iv) may apply materiality standards that are different from what may be viewed as material to investors. Accordingly, these representations and warranties may not describe BNY's actual state of affairs at the date hereof and should not be relied upon.

Exhibit	Description	Method of Filing
3.1	Restated Certificate of Incorporation of The Bank of New York Mellon Corporation.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 000-52710) as filed with the Commission on July 2, 2007, and incorporated herein by reference.
3.2	Certificate of Amendment to The Bank of New York Mellon Corporation's Restated Certificate of Incorporation, as filed with the Secretary of State of the State of Delaware on April 9, 2019.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-35651) as filed with the Commission on April 10, 2019, and incorporated herein by reference.
3.3	Certificate of Designations of The Bank of New York Mellon Corporation with respect to the Series A Noncumulative Preferred Stock, dated June 15, 2007.	Previously filed as Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 000-52710) as filed with the Commission on July 5, 2007, and incorporated herein by reference.
3.4	Certificate of Designations of The Bank of New York Mellon Corporation with respect to the Series F Noncumulative Perpetual Preferred Stock, dated July 29, 2016.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-35651) as filed with the Commission on Aug. 1, 2016, and incorporated herein by reference.
3.5	Certificate of Designations of The Bank of New York Mellon Corporation with respect to the Series G Noncumulative Perpetual Preferred Stock, dated May 15, 2020.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-35651) as filed with the Commission on May 19, 2020 and incorporated herein by reference.
3.6	Certificate of Designations of The Bank of New York Mellon Corporation with respect to the Series H Noncumulative Perpetual Preferred Stock, dated Nov. 2, 2020.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-35651) as filed with the Commission on Nov. 3, 2020 and incorporated herein by reference.
3.7	Certificate of Designations of The Bank of New York Mellon Corporation with respect to the Series I Noncumulative Perpetual Preferred Stock, dated Nov. 16, 2021.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-35651) as filed with the Commission on Nov. 18, 2021, and incorporated herein by reference.

Exhibit		Description	Method of Filing
3.8		Amended and Restated By-Laws of The Bank of New York Mellon Corporation, as amended and restated on Aug. 8, 2023.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-35651) as filed with the Commission on Aug. 11, 2023, and incorporated herein by reference.
4.1		None of the instruments defining the rights of holders of long-term debt of the Parent or any of its subsidiaries represented long-term debt in excess of 10% of the total assets of the Company as of Dec. 31, 2024. The Company hereby agrees to furnish to the Commission, upon request, a copy of any such instrument.	N/A
4.2		Description of the Company's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934.	Filed herewith.
10.1	*	Deferred Compensation Plan for Non-Employee Directors of The Bank of New York Company, Inc.	Previously filed as Exhibit 10(s) to The Bank of New York Company, Inc.'s Annual Report on Form 10-K (File No. 001-06152) for the year ended Dec. 31, 1993, and incorporated herein by reference.
10.2	*	Amendment effective as of Nov. 8, 1994 to Deferred Compensation Plan for Non-Employee Directors of The Bank of New York Company, Inc.	Previously filed as Exhibit 10(z) to The Bank of New York Company, Inc.'s Annual Report on Form 10-K (File No. 001-06152) for the year ended Dec. 31, 1994, and incorporated herein by reference.
10.3	*	Amendment effective Feb. 11, 1997 to Deferred Compensation Plan for Non-Employee Directors of The Bank of New York Company, Inc.	Previously filed as Exhibit 10(j) to The Bank of New York Company, Inc.'s Annual Report on Form 10-K (File No. 001-06152) for the year ended Dec. 31, 1996, and incorporated herein by reference.
10.4	*	Amendment to Deferred Compensation Plan for Non-Employee Directors of The Bank of New York Company, Inc. effective as of July 11, 2000.	Previously filed as Exhibit 10(d) to The Bank of New York Company, Inc.'s Quarterly Report on Form 10-Q (File No. 001-06152) for the quarter ended Sept. 30, 2000, and incorporated herein by reference.
10.5	*	Amendment effective as of Nov. 12, 2002 to Deferred Compensation Plan for Non-Employee Directors of The Bank of New York Company, Inc.	Previously filed as Exhibit 10(yy) to The Bank of New York Company, Inc.'s Annual Report on Form 10-K (File No. 001-06152) for the year ended Dec. 31, 2003, and incorporated herein by reference.
10.6	*	The Bank of New York Mellon Corporation Deferred Compensation Plan for Directors, effective Jan. 1, 2008.	Previously filed as Exhibit 10.71 to the Company's Annual Report on Form 10-K (File No. 000-52710) for the year ended Dec. 31, 2007, and incorporated herein by reference.
10.7	*	The Bank of New York Mellon Corporation Deferred Compensation Plan for Employees.	Previously filed as Exhibit 4.4 to the Company's Form S-8 (File No. 333-149473) filed on Feb. 29, 2008, and incorporated herein by reference.

Exhibit		Description	Method of Filing
10.8	*	Form of Long-Term Incentive Plan Deferred Stock Unit Agreement for Directors of The Bank of New York Mellon Corporation.	Previously filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-52710) for the quarter ended June 30, 2008, and incorporated herein by reference.
10.9	*	The Bank of New York Mellon Corporation Policy Regarding Shareholder Approval of Future Senior Officers Severance Arrangements, effective July 12, 2010.	Previously filed as Exhibit 99.3 to the Company's Current Report on Form 8-K (File No. 000-52710) as filed with the Commission on July 16, 2010, and incorporated herein by reference.
10.10	*	The Bank of New York Mellon Corporation Defined Contribution IRC 401(a)(17) Plan (as amended and restated).	Previously filed as Exhibit 10.69 to the Company's Annual Report on Form 10-K (File No. 001-35651) for the year ended Dec. 31, 2015, and incorporated herein by reference.
10.11	*	Form of Amended and Restated Indemnification Agreement with Directors of The Bank of New York Mellon Corporation.	Previously filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-35651) for the quarter ended June 30, 2016, and incorporated herein by reference.
10.12	*	The Bank of New York Mellon Corporation Executive Severance Plan, as amended on Feb. 12, 2018.	Previously filed as Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35651) as filed with the Commission on Feb. 13, 2018, and incorporated herein by reference.
10.13	*	The Bank of New York Mellon Corporation 2019 Long-Term Incentive Plan.	Previously filed as Annex C to the Company's Definitive Proxy Statement on Schedule 14A filed on March 8, 2019 and incorporated herein by reference.
10.14	*	The Bank of New York Mellon Corporation 2019 Executive Incentive Compensation Plan.	Previously filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-35651) for the quarter ended Sept. 30, 2019, and incorporated herein by reference.
10.15	*	Letter Agreement, dated Aug. 19, 2020, between The Bank of New York Mellon Corporation and Robin Vince.	Previously filed as Exhibit 10.49 to the Company's Annual Report on Form 10-K (File No. 001-35651) for the year ended Dec. 31, 2020, and incorporated herein by reference.
10.16	*	2021 Form of Performance Share Unit Agreement.	Previously filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 001-35651) for the quarter ended June 30, 2021, and incorporated herein by reference.
10.17	*	2021 Form of Restricted Stock Unit Agreement.	Previously filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-35651) for the quarter ended June 30, 2021, and incorporated herein by reference.
10.18	*	2022 Form of Performance Share Unit Agreement.	Previously filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 001-35651) for the quarter ended Sept. 30, 2022, and incorporated herein by reference.

Exhibit		Description	Method of Filing
10.19	*	2022 Form of Restricted Stock Unit Agreement.	Previously filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-35651) for the quarter ended Sept. 30, 2022, and incorporated herein by reference.
10.20	*	Amendment, dated Aug. 30, 2022, to Letter Agreement between The Bank of New York Mellon Corporation and Robin Vince.	Previously filed as Exhibit 10.42 to the Company's Annual Report on Form 10-K (File No. 001-35651) for the year ended Dec. 31, 2022, and incorporated herein by reference.
10.21	*	Aircraft Time Sharing Agreement, entered into as of Jan. 23, 2023, by and between The Bank of New York Mellon and Robin Vince.	Previously filed as Exhibit 10.24 to the Company's Annual Report on Form 10-K (File No. 001-35651) for the year ended Dec. 31, 2023, and incorporated herein by reference.
10.22	*	Aircraft Time Sharing Agreement, entered into as of Oct. 29, 2024, by and between The Bank of New York Mellon and Robin Vince.	Filed herewith.
10.23	*	2023 Form of Performance Share Unit Agreement.	Previously filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 001-35651) for the quarter ended March. 31, 2023, and incorporated herein by reference.
10.24	*	2023 Form of Restricted Stock Unit Agreement.	Previously filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-35651) for the quarter ended March 31, 2023, and incorporated herein by reference.
10.25	*	2024 Form of Performance Share Unit Agreement.	Previously filed as Exhibit 10.28 to the Company's Annual Report on Form 10-K (File No. 001-35651) for the year ended Dec. 31, 2023, and incorporated herein by reference.
10.26	*	2024 Form of Restricted Stock Unit Agreement.	Previously filed as Exhibit 10.29 to the Company's Annual Report on Form 10-K (File No. 001-35651) for the year ended Dec. 31, 2023, and incorporated herein by reference.
10.27	*	The Bank of New York Mellon Corporation Executive Severance Plan, as amended and restated effective March 1, 2024.	Previously filed as Exhibit 10.30 to the Company's Annual Report on Form 10-K (File No. 001-35651) for the year ended Dec. 31, 2023, and incorporated herein by reference.
10.28	*	2025 Form of Performance Share Unit Agreement.	Filed herewith.
10.29	*	2025 Form of Restricted Stock Unit Agreement.	Filed herewith.

Exhibit	Description	Method of Filing
13.1	All portions of The Bank of New York Mellon Corporation 2024 Annual Report to Shareholders that are incorporated herein by reference. The remaining portions are furnished for the information of the SEC and are not "filed" as part of this filing.	Filed and furnished herewith.
19.1	Insider Trading Policies and Procedures.	Filed herewith.
21.1	Primary subsidiaries of the Company.	Filed herewith.
22.1	Subsidiary Issuer of Guaranteed Securities.	Previously filed as Exhibit 22.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-35651) for the quarter ended March 31, 2021, and incorporated herein by reference.
23.1	Consent of KPMG LLP.	Filed herewith.
24.1	Power of Attorney.	Filed herewith.
31.1	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed herewith.
31.2	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed herewith.
32.1	Certification of the Chief Executive Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	Furnished herewith.
32.2	Certification of the Chief Financial Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	Furnished herewith.
97.1	Recovery of Erroneously Awarded Incentive-Based Compensation Policy.	Previously filed as Exhibit 97.1 to the Company's Annual Report on Form 10-K (File No. 001-35651) for the year ended Dec. 31, 2023, and incorporated herein by reference.
101.INS	Inline XBRL Instance Document.	This 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 Document.	Filed herewith.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.	Filed herewith.

Exhibit	Description	Method of Filing
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.	Filed herewith.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.	Filed herewith.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.	Filed herewith.
104	The cover page of The Bank of New York Mellon Corporation's Annual Report on Form 10-K for the year ended Dec. 31, 2024, formatted in inline XBRL.	The cover page interactive data file is embedded within the inline XBRL document and included in Exhibit 101.

* Management contract or compensatory plan, contract or arrangement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, BNY has duly caused this Annual Report to be signed on its behalf by the undersigned, thereunto duly authorized.

The Bank of New York Mellon Corporation

By: /s/ Robin Vince
Robin Vince
President and Chief Executive Officer

DATED: February 27, 2025

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report has been signed below by the following persons on behalf of BNY and in the capacities and on the date indicated.

Signature	Capacities
By: /s/ Robin Vince Robin Vince President and Chief Executive Officer	Director and Principal Executive Officer
By: /s/ Dermot McDonogh Dermot McDonogh Chief Financial Officer	Principal Financial Officer
By: /s/ Kurtis R. Kurimsky Kurtis R. Kurimsky Corporate Controller	Principal Accounting Officer
Linda Z. Cook; Joseph J. Echevarria; M. Amy Gilliland; Jeffrey A. Goldstein; K. Guru Gowrappan; Ralph Izzo; Sandra E. O'Connor; Elizabeth E. Robinson; Rakefet Russak-Aminoach; Alfred W. Zollar	Directors
By: /s/ J. Kevin McCarthy J. Kevin McCarthy Attorney-in-fact	DATED: February 27, 2025

Exhibit 4.2

THE BANK OF NEW YORK MELLON CORPORATION
DESCRIPTION OF SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934
AS OF DECEMBER 31, 2024

The following is a summary description of each class of securities of The Bank of New York Mellon Corporation (the "Company") that is registered under Section 12 of the Securities and Exchange Act of 1934, as amended (the "Exchange Act").

The following summary is not complete. It is subject to and qualified in its entirety by reference to the pertinent sections of the Company's Restated Certificate of Incorporation, as amended (including, but not limited to, the Series A Certificate of Designations (as defined below)), and Amended and Restated By-Laws, each of which are incorporated by reference as exhibits to this Annual Report on Form 10-K, and to the applicable provisions of the Delaware General Corporation Law (the "DGCL") and federal law governing bank holding companies.

DESCRIPTION OF COMMON STOCK

General

The Company is authorized to issue 3,500,000,000 shares of common stock, par value $0.01 per share (the "Common Stock"). The Common Stock is listed on the New York Stock Exchange under the symbol "BK."

The rights of holders of Common Stock are subject to, and may be adversely affected by, the rights of holders of any of the Company's preferred stock that have been issued and may be issued in the future.

Dividends

The holders of Common Stock are entitled to receive dividends, when, as and if declared by the Company's board of directors out of any funds legally available therefor, subject to the preferences applicable to any outstanding preferred stock.

The Company's ability to pay dividends on its Common Stock:

- depends primarily upon the ability of its subsidiaries, including The Bank of New York Mellon, BNY Mellon, National Association and Pershing LLC, to pay dividends or otherwise transfer funds to it;
- is subject to policies established by the Federal Reserve Bank of New York (the "Federal Reserve"). See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Supervision and Regulation—Capital Planning and Stress Testing—Payment of Dividends, Stock Repurchases and Other Capital Distributions" and Part I, "Item 1. Business—Supervision and Regulation" in this Annual Report on Form 10-K; and
- will be prohibited, subject to certain restrictions, in the event that the Company does not declare and pay in full preferred dividends for the then-current dividend period of its Series A Noncumulative Preferred Stock, $100,000 liquidation preference per share (the "Series A Preferred Stock") or the last preceding dividend period of its Series F Noncumulative Perpetual Preferred Stock, $100,000 liquidation preference per share (the "Series F Preferred Stock"), its Series G Noncumulative Perpetual Preferred Stock, $100,000 liquidation preference per share (the "Series G Preferred Stock"), its Series H Noncumulative Perpetual Preferred Stock, $100,000 liquidation preference per share (the "Series H

Preferred Stock") and its Series I Noncumulative Perpetual Preferred Stock, $100,000 liquidation preference per share (the "Series I Preferred Stock").

Voting

Holders of Common Stock are entitled to one vote for each share held on all matters as to which shareholders are entitled to vote. The holders of Common Stock do not have cumulative voting rights.

In any uncontested election of directors, each director will be elected under a majority voting standard as opposed to a plurality voting standard. Under a majority voting standard, a nominee for director is elected if the votes cast "for" such nominee's election exceed the votes cast "against" such nominee's election (with "abstentions" not counted as a vote cast either "for" or "against" that director's election). A plurality standard will apply in any contested election of directors, which is an election in which the number of nominees for director exceeds the number of directors to be elected. Under the Company's Corporate Governance Guidelines, in an election of directors, any incumbent director who fails to receive more "for" votes than "against" votes in any uncontested election must tender his or her resignation to the independent Chair or Lead Director (or such other director designated by the Company's board of directors if the director failing to receive the majority of votes cast is the independent Chair or Lead Director) promptly after the certification of the stockholder vote. The matter will then be referred to the Corporate Governance, Nominating and Social Responsibility Committee. The Corporate Governance, Nominating and Social Responsibility Committee will promptly consider the tendered resignation and recommend to the Company's board of directors whether to accept or reject it, or whether other action should be taken. If, because of recusals, the Corporate Governance, Nominating and Social Responsibility Committee is unable to meet and consider the issue with a quorum of its members participating in the discussion, the Company's board of directors may assign the issue to another committee consisting solely of independent directors. The Corporate Governance, Nominating and Social Responsibility Committee (or other committee to which the matter is assigned) will consider whatever factors its members deem relevant, including, without limitation, the stated reasons for the "against" votes, the length of service and qualifications of any incumbent director whose resignation has been tendered, the incumbent director's contributions to the Company, and the mix of skills and backgrounds on the Company's board of directors. The board of directors will act on the Corporate Governance, Nominating and Social Responsibility Committee's recommendation (or the recommendation of such other committee to which the matter is assigned) no later than 90 days following the certification of the election in question, considering the factors considered by the committee (or such other committee) and such additional information and factors as it deems relevant. Following the decision by the Company's board of directors, the Company will publicly disclose such decision (and, if applicable, the reasons for rejecting the tendered resignation) in a Current Report on Form 8-K filed with the Securities and Exchange Commission. If the board of directors does not accept the director's resignation, it may elect to address the underlying stockholder concern or to take such other actions as it deems appropriate and in the best interest of the Company and its stockholders. A director who tenders his or her resignation pursuant to the above-described Corporate Governance Guidelines will not vote on the issue of whether his or her tendered resignation will be accepted or rejected. If the board of directors accepts an incumbent director's resignation pursuant to the above-described Corporate Governance Guidelines, or if a nominee for director is not elected and the nominee is not an incumbent director, then the board of directors may fill the resulting vacancy pursuant to the Company's Amended and Restated By-Laws.

Liquidation Rights

Upon liquidation of the Company, holders of Common Stock are entitled to receive pro rata the net assets of the Company after satisfaction in full of the prior rights of creditors of the Company (including holders of the Company's debt securities) and holders of any of the Company's preferred stock.

Miscellaneous

Holders of Common Stock do not have any preferential or preemptive right with respect to any securities of the Company or any conversion rights. The Common Stock is not subject to redemption. The outstanding shares of Common Stock are fully paid and non-assessable.

Computershare Trust Company, N.A. is the Transfer Agent and Registrar for the Common Stock. Computershare, Inc. is the Dividend Disbursement Agent for the Common Stock.

Certain Provisions of Delaware Law and the Company’s Amended and Restated By-Laws

The Company is also subject to Section 203 of the DGCL. Section 203 prohibits the Company from engaging in any business combination (as defined in Section 203) with an “interested stockholder” for a period of three years subsequent to the date on which the stockholder became an interested stockholder unless:

- prior to such date, the board of directors of the Company approves either the business combination or the transaction in which the stockholder became an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owns at least 85% of the outstanding voting stock (with certain exclusions); or
- the business combination is approved by the Company’s board of directors and authorized by a vote (and not by written consent) of at least 66 2/3% of the outstanding voting stock not owned by the interested stockholder.

For purposes of Section 203, an “interested stockholder” is defined as an entity or person beneficially owning 15% or more of the Company’s outstanding voting stock, based on voting power, and any entity or person affiliated with or controlling or controlled by such an entity or person.

A “business combination” includes mergers, asset sales and other transactions resulting in financial benefit to a stockholder. Section 203 could prohibit or delay mergers or other takeover or change of control attempts with respect to the Company and, accordingly, may discourage attempts that might result in a premium over the market price for the shares held by stockholders.

Such provisions may have the effect of deterring hostile takeovers or delaying changes in control of management or the Company.

Under the provisions of Section 203, a corporation can expressly elect not to be governed by the business combination provisions in its Restated Certificate of Incorporation or Amended and Restated By-Laws, but, as of the date of this report, the Company has not done so.

The Company’s Amended and Restated By-Laws establish advance notice procedures with regards to proposals by stockholders to be brought before a meeting of stockholders and for nominations by stockholders of candidates for election as directors. In general, written notice must be received by the Secretary of the Company:

- for proposals by stockholders to be brought before a meeting of stockholders in the case of an annual meeting, not less than 90 calendar days or more than 120 calendar days before the anniversary date of the Company’s proxy statement released to the stockholders in connection with the previous year’s annual meeting; provided, however, that in the event that the date of the annual meeting is more than 30 calendar days from the date of the most recent previous annual meeting, notice by the stockholder will be timely if it is received (A) on or before the later of (1) 120 calendar days before the date of the annual meeting at which such business is to be presented, or (2) 10 calendar days following the first public announcement by the Company of the annual meeting date and (B) not later than 15 calendar days prior to the scheduled mailing date of the Company’s proxy materials for that annual meeting;
- for nominations of candidates to be properly brought before a meeting by a stockholder for the election of directors, (i) in the case of an annual meeting, not less than 90 calendar days or more than 120 calendar days prior to the first anniversary of the previous year’s annual meeting; provided, however, that in the event that the date of the annual meeting at which directors are to be elected is more than 30 calendar days from the date of the most recent previous annual meeting, notice by the stockholder of intent to make a nomination for director will be timely if it is received (A) on or before the later of (1) 120 calendar days before the date of the annual meeting at which such business is to be presented or such election is to take place, as the case may be, or (2) 30 calendar days following the first public announcement by the Company of the annual meeting date and (B) not later than 15 calendar days prior

to the scheduled mailing date of the Company's proxy materials for that annual meeting or (ii) in the case of a special meeting of stockholders at which directors are to be elected, not later than the close of business on the tenth calendar day following the earlier of the day on which notice of the meeting date was mailed and the day on which public announcement of the meeting date was made.

The notice associated with a stockholder nominee for the board of directors must also provide certain information, questionnaires, representations and agreements and be updated and supplemented as set forth in the Company's Amended and Restated By-Laws. A stockholder that complies with the procedures set forth in the Company's Amended and Restated By-Laws and the Exchange Act, including Rule 14a-8 thereunder, would be permitted to nominate individual(s) for the board of directors at a stockholders meeting, and any stockholder may vote in person or by proxy for any individual who has been nominated in accordance with the Company's Amended and Restated By-Laws. In addition, the Company's Amended and Restated By-Laws permit a stockholder, or a group of up to 20 stockholders, owning 3% or more of the outstanding Common Stock continuously for at least three years, to nominate and include in the Company's proxy materials for an annual meeting directors constituting up to two individuals or 20% of the board of directors, whichever is greater, provided that the stockholder(s) and the nominee(s) satisfy the requirements specified in the Company's Amended and Restated By-Laws. Further, the Company's Amended and Restated By-Laws establish that the Company need not present and may disregard a stockholder nomination if the proposing stockholder fails to meet applicable requirements, including the failure to meet the requirements under the Company's Amended and Restated By-Laws or Rule 14a-19 of the Exchange Act, or failure of the stockholder or qualified representative to appear at such meeting to present the nomination.

The Company's Amended and Restated By-Laws set forth the information that must be provided in connection with any proposal by stockholders to be brought before a meeting of the stockholders. In general, the advance notice of the stockholder's proposal must set forth a description of the business that the stockholder intends to bring before the meeting, including the text of the proposal, and certain information regarding the proposing stockholder, including the name and address of the stockholder, the classes and numbers of shares of the Company's capital stock beneficially owned by each such stockholder, a representation that such stockholder is and will at the time of the annual meeting be a holder of record of the Company's capital stock who is entitled to vote at the meeting on the date of the meeting and that such stockholder intends to appear in person or by proxy at the meeting to present such proposal(s), the name and address of any beneficial owners of the Company's stock on whose behalf such business is to be presented, the reasons for conducting the business at the meeting and any material interest of the stockholder or any such beneficial owner in such business proposed at the meeting, information on any agreement, arrangement or understanding (including any hedging, derivative, or other similar transactions, regardless of the form of settlement) that is in place or has been entered into by or for the benefit of such stockholder or any such beneficial owner with respect to the Company's securities, debt instruments or credit ratings within the prior six months preceding the date of delivery of the stockholder's notice, the effect or intent of which transaction is to give rise to gain or loss as a result of changes in the trading price of such securities or debt instruments or changes in the credit ratings of the Company or to increase or decrease the voting power of such stockholder or any such beneficial owner, and if so, a summary of the material terms thereof, and a representation that the stockholder or any such beneficial owner intends, or is part of a group that intends to deliver a proxy statement to and solicit proxies from stockholders of at least the percentage of voting power of all of the shares of capital stock required under applicable law to approve the proposal or otherwise solicit proxies from stockholders in support of such proposal in compliance with applicable legal requirements.

The Company's Amended and Restated By-Laws provide stockholders holding an aggregate "net long position" (as defined in the Amended and Restated By-Laws) representing at least 20% of the outstanding Common Stock the right to request that the Secretary of the Company call a special meeting of stockholders. The Company's Amended and Restated By-Laws also set forth the requirements and procedures of such a stockholder special meeting request, including with respect to (i) when multiple requests will be considered together, (ii) the information required when submitting a request, (iii) limitations on when requests may be made, (iv) the time for holding a special meeting following a request and (v) the appropriate scope of business at any meeting held pursuant to a request.

The Company's Amended and Restated By-Laws also provide that vacancies on the board of directors may only be filled by a majority of directors then in office, except that those vacancies resulting from removal from office by a vote of the stockholders may be filled by a vote of the stockholders at the same meeting at which such removal occurs.

DESCRIPTION OF THE 6.244% FIXED-TO-FLOATING RATE NORMAL PREFERRED CAPITAL SECURITIES OF MELLON CAPITAL IV (FULLY AND UNCONDITIONALLY GUARANTEED BY THE BANK OF NEW YORK MELLON CORPORATION) AND THE SERIES A PREFERRED STOCK

Description of the 6.244% Fixed-to-Floating Rate Normal Preferred Capital Securities

General

The 6.244% Fixed-to-Floating Rate Normal Preferred Capital Securities ("PCS") are beneficial interests in Mellon Capital IV, a Delaware statutory trust (the "Trust") organized pursuant to the Amended and Restated Trust Agreement (the "Trust Agreement") among the Company, Manufacturers and Traders Trust Company, as the property trustee (the "Property Trustee"), M&T Trust Company of Delaware, as the Delaware trustee (the "Delaware Trustee"), the administrative trustees, who are employees or officers of, or affiliated with, the Company and the several holders of the Trust securities.

The Trust will pass through, as distributions on or the redemption price of PCS, amounts that it receives on its assets that are the "corresponding assets" for the PCS. The corresponding asset for each PCS is a $1/100^{th}$, or a \$1,000, interest in one share of Series A Preferred Stock.

PCS

Holders of PCS are entitled to receive distributions corresponding to non-cumulative dividends on the Series A Preferred Stock held by the Trust. The Trust must make distributions on the PCS on the relevant distribution dates to the extent that it has funds available therefor. The Trust's funds available for distribution to a holder of PCS will be limited to payments received from the Company on the assets held by the Trust corresponding to the PCS. The Company guarantees the payment of distributions on the PCS out of moneys held by the Trust to the extent of available Trust funds, as described under "Description of the Guarantee" below. The distribution dates for PCS are each March 20, June 20, September 20 and December 20, or if any such day is not a business day, the next succeeding business day.

Dividends on the Series A Preferred Stock will be payable if, as and when declared by the Company's board of directors, on March 20, June 20, September 20 and December 20 of each year (each, a "Dividend Payment Date") (or if such day is not a business day, the immediately succeeding business day).

Dividends on each share of Series A Preferred Stock will be calculated on the liquidation preference of \$100,000 per share for each related Dividend Period (as defined below) at a rate *per annum* equal to the greater of (x) from and including September 2023, three-month CME Term SOFR (as defined below) (plus a spread adjustment of 0.26161%) plus 0.565% and (y) 4.000%.

Mandatory Redemption of PCS upon Redemption of Series A Preferred Stock

The PCS have no stated maturity but must be redeemed on the date the Company redeems the Series A Preferred Stock, and the Property Trustee or paying agent will apply the proceeds from such repayment or redemption to redeem a like amount of the PCS. The Series A Preferred Stock is perpetual but the Company may, at its option, redeem it in whole at any time or in part from time to time, subject to certain limitations. The redemption price per PCS will equal the redemption price of the Series A Preferred Stock. See "Description of the Series A Preferred Stock—Redemption" below. If notice of redemption of any Series A Preferred Stock has been duly given and if on or before the redemption date specified in the redemption notice all funds necessary for the redemption have been set aside by the Company in trust for the *pro rata* benefit of the holders of any shares of Series A Preferred Stock called for redemption, then, on and after the redemption date, such shares of Series A Preferred Stock will no longer be deemed outstanding and all rights of the holders with respect to such shares (including the right to receive any dividends) will terminate, except the right to receive the redemption price without interest.

If less than all of the shares of Series A Preferred Stock held by the Trust are to be redeemed on a redemption date, then the proceeds from such redemption will be allocated *pro rata* to the PCS being redeemed and the common securities issued to the Company by the Trust (the "Trust Common Securities"), except as set forth under "—Ranking of Trust Common Securities" below.

The term "like amount" as used above means PCS having a liquidation amount equal to that portion of the liquidation amount of the Series A Preferred Stock to be contemporaneously redeemed, the proceeds of which will be used to pay the redemption price of such PCS.

Redemption Procedures

Notice of any redemption will be mailed by the Property Trustee at least 30 days but not more than 60 days before the redemption date to the registered address of each holder of PCS to be redeemed.

Each notice shall state:

- the redemption date;
- estimate of the redemption price together with a statement that it is an estimate and that the actual Redemption Price will be calculated on the third Business Day prior to the Redemption Date (and if an estimate is provided, a further notice shall be sent of the actual Redemption Price on the date that such Redemption Price is calculated);
- if less than all of the outstanding PCS are to be redeemed, the identification and the total liquidation amount of the particular PCS to be redeemed;
- that on the redemption date, the redemption price will become due and payable upon each PCS to be redeemed and distributions thereon will cease to accumulate on and after said date; and
- if the PCS are not held in book-entry on the redemption date, the place or places where certificates for the PCS are to be surrendered for payment of the redemption price.

If (i) the Trust gives a notice of redemption of PCS for cash and (ii) the Company has paid to the Property Trustee a sufficient amount of cash in connection with the related redemption of the Series A Preferred Stock, then on the redemption date, the Property Trustee will irrevocably deposit with DTC funds sufficient to pay the redemption price for the PCS being redeemed. The Trust will also give DTC irrevocable instructions and authority to pay the redemption amount in immediately available funds to the beneficial owners of the global securities representing the PCS. Distributions to be paid on or before the redemption date for any PCS called for redemption will be payable to the holders on the record date for the related Distribution Date. If the PCS called for redemption are no longer in book-entry form, the Property Trustee, to the extent funds are available, will irrevocably deposit with the paying agent for the PCS funds sufficient to pay the applicable redemption price and will give such paying agent irrevocable instructions and authority to pay the redemption price to the holders thereof upon surrender of their certificates evidencing the PCS.

If notice of redemption shall have been given and funds deposited as required, then upon the date of such deposit:

- all rights of the holders of such PCS called for redemption will cease, except the right of the holders of such PCS to receive the redemption price and any distribution payable in respect of the PCS on or prior to the redemption date, but without interest on such redemption price; and
- the PCS called for redemption will cease to be outstanding.

If any redemption date is not a business day, then the redemption amount will be payable on the next succeeding business day (and without any interest or other payment in respect of any such delay).

If payment of the redemption amount for any shares of Series A Preferred Stock called for redemption is improperly withheld or refused and accordingly the redemption amount of the relevant PCS is not paid either by the

Trust or by the Company under the Guarantee, then dividends on the Series A Preferred Stock will continue to accrue and distributions on such PCS called for redemption will continue to accumulate at the applicable rate then borne by such PCS from the original redemption date scheduled to the actual date of payment. In this case, the actual payment date will be considered the redemption date for purposes of calculating the redemption amount.

Redemptions of the PCS will require prior approval of the Federal Reserve.

If less than all of the outstanding shares of Series A Preferred Stock are to be redeemed on a redemption date, then the aggregate liquidation amount of PCS and Trust Common Securities to be redeemed shall be allocated *pro rata* to the PCS and Trust Common Securities based upon the relative liquidation amounts of such series, except as set forth under "—Ranking of Trust Common Securities" below. The Property Trustee will select the particular PCS to be redeemed on a *pro rata* basis not more than 60 days before the redemption date from the outstanding PCS not previously called for redemption or, if that is not practical, by lot or any other method the Property Trustee deems fair and appropriate, or if the PCS are in book-entry only form, in accordance with the procedures of DTC. The Property Trustee shall promptly notify the Transfer Agent in writing of the PCS selected for redemption and, in the case of any PCS selected for partial redemption, the liquidation amount to be redeemed.

For all purposes of the Trust Agreement, unless the context otherwise requires, all provisions relating to the redemption of PCS shall relate, in the case of any PCS redeemed or to be redeemed only in part, to the portion of the aggregate liquidation amount of PCS that has been or is to be redeemed. If less than all of the PCS are redeemed, the PCS held through the facilities of DTC will be redeemed *pro rata* in accordance with the procedures of DTC.

Subject to applicable law, including, without limitation, U.S. federal securities laws and subject to the Federal Reserve's risk-based capital rules applicable to bank holding companies, the Company or its affiliates may at any time and from time to time purchase outstanding PCS by tender, in the open market or by private agreement.

Liquidation Distribution upon Dissolution

Pursuant to the Trust Agreement, the Trust shall dissolve on the first to occur of:

- certain events of bankruptcy, dissolution or liquidation of the holder of the Trust Common Securities;
- upon the direction of the holder of the Trust Common Securities to terminate the Trust and distribute corresponding assets in exchange for the PCS;
- redemption of all of the PCS as described above; and
- the entry of an order for the dissolution of the Trust by a court of competent jurisdiction.

Except as set forth in the next paragraph, if an early dissolution occurs as a result of certain events of bankruptcy, dissolution or liquidation of the holder of Trust Common Securities, the Property Trustee and the administrative trustees will liquidate the Trust as expeditiously as they determine possible by distributing, after satisfaction of liabilities to creditors of the Trust as provided by applicable law, to each holder of PCS a like amount of corresponding assets as of the date of such distribution. Except as set forth in the next paragraph, if an early dissolution occurs as a result of the entry of an order for the dissolution of the Trust by a court of competent jurisdiction, unless otherwise required by applicable law, the Property Trustee and the administrative trustees will liquidate the Trust as expeditiously as they determine to be possible by distributing, after satisfaction of liabilities to creditors of the Trust as provided by applicable law, to each holder of PCS a like amount of corresponding assets as of the date of such distribution. The Property Trustee or the administrative trustees shall give notice of liquidation to each holder of PCS at least 30 days and not more than 60 days before the date of liquidation.

If, whether because of an order for dissolution entered by a court of competent jurisdiction or otherwise, the Property Trustee determines that distribution of the corresponding assets in the manner described above is not practical, or if the early dissolution occurs as a result of the redemption of all the PCS, the Property Trustee shall liquidate the property of the Trust and wind up its affairs. In that case, upon the winding-up of the Trust, except with respect to an early dissolution that occurs as a result of the redemption of all the PCS, the holders will be entitled to receive out of the assets of the Trust available for distribution to holders and, after satisfaction of liabilities to creditors of the Trust as provided by applicable law, an amount equal to the aggregate liquidation amount per Trust security plus accrued and unpaid distributions to the date of payment. If, upon any such winding-up, the Trust has insufficient assets available to pay in full such aggregate liquidation distribution, then the amounts payable directly by the Trust on its Trust securities shall be paid on a *pro rata* basis based upon liquidation amounts, except as set forth under "—Ranking of Trust Common Securities" below.

The term "like amount" as used above means, with respect to a distribution of Series A Preferred Stock to holders of PCS in connection with a dissolution or liquidation of the Trust therefor, Series A Preferred Stock having a Liquidation Preference equal to the liquidation amount of the PCS of the holder to whom such Series A Preferred Stock would be distributed.

Distribution of Trust Assets

Upon liquidation of the Trust other than as a result of an early dissolution upon the redemption of all the PCS and after satisfaction of the liabilities of creditors of the Trust as provided by applicable law, holders of the Trust will be entitled to receive out of the assets of the Trust an amount equal to the liquidation amount per Trust security plus accumulated and unpaid distributions thereon to the date of payment.

After the liquidation date fixed for any distribution of assets of the Trust:

- the PCS will no longer be deemed to be outstanding;
- if the assets to be distributed are shares of Series A Preferred Stock, DTC or its nominee, as the record holder of the PCS, will receive a registered global certificate or certificates representing the Series A Preferred Stock to be delivered upon such distribution;
- any certificates representing the PCS not held by DTC or its nominee or surrendered to the exchange agent will be deemed to represent shares of Series A Preferred Stock having a Liquidation Preference equal to the PCS until such certificates are so surrendered for transfer and reissuance; and
- all rights of the holders of the PCS will cease, except the right to receive Series A Preferred Stock upon such surrender.

Since each PCS corresponds to $1/100^{th}$ of a share of Series A Preferred Stock, holders of PCS may receive fractional shares of Series A Preferred Stock or depositary shares representing the Series A Preferred Stock upon this distribution.

Ranking of Trust Common Securities

If on any Distribution Date the Trust does not have funds available from payments of dividends on the Series A Preferred Stock to make full distributions on the PCS and the Trust Common Securities, then if the deficiency in funds results from the Company's failure to pay a full dividend on shares of Series A Preferred Stock on a Dividend Payment Date, then the available funds from dividends on the Series A Preferred Stock shall be applied first to make distributions then due on the PCS on a *pro rata* basis on such Distribution Date up to the amount of such distributions corresponding to dividends on the Series A Preferred Stock (or if less, the amount of the corresponding distributions that would have been made on the PCS had the Company paid a full dividend on the Series A Preferred Stock) before any such amount is applied to make a distribution on Trust Common Securities on such Distribution Date.

If on any date where PCS and Trust Common Securities must be redeemed because the Company is redeeming Series A Preferred Stock and the Trust does not have funds available from the Company's redemption of shares of Series A Preferred Stock to pay the full redemption price then due on all of the outstanding PCS and Trust Common Securities to be redeemed, then (i) the available funds shall be applied first to pay the redemption price on the PCS to be redeemed on such redemption date and (ii) Trust Common Securities shall be redeemed only to the extent funds are available for such purpose after the payment of the full redemption price on the PCS to be redeemed.

If an early dissolution event occurs in respect of the Trust, no liquidation distributions shall be made on the Trust Common Securities until full liquidation distributions have been made on the PCS.

In the case of any event of default under the Trust Agreement resulting from the Company's failure to comply in any material respect with any of its obligations as issuer of the Series A Preferred Stock, including obligations set forth in its Restated Certificate of Incorporation or arising under applicable law, the Company, as holder of the Trust Common Securities, will be deemed to have waived any right to act with respect to any such event of default under the Trust Agreement until the effect of all such events of default with respect to the PCS have been cured, waived or otherwise eliminated. Until all events of default under the Trust Agreement have been so cured, waived or otherwise eliminated, the Property Trustee shall act solely on behalf of the holders of the PCS and not on the Company's behalf, and only the holders of the PCS will have the right to direct the Property Trustee to act on their behalf.

Events of Default; Notice

Any one of the following events constitutes an event of default under the Trust Agreement, or a "Trust Event of Default," regardless of the reason for such event of default and whether it shall be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body:

- the failure of the Company to comply in any material respect with any of its obligations as issuer of the Series A Preferred Stock, under the Company's Restated Certificate of Incorporation, or arising under applicable law;

- the default by the Trust in the payment of any distribution on any Trust security of the Trust when such becomes due and payable, and continuation of such default for a period of 30 days;

- the default by the Trust in the payment of any redemption price of any Trust security of the Trust when such becomes due and payable;

- the failure to perform or the breach, in any material respect, of any other covenant or warranty of the trustees in the Trust Agreement for 90 days after the trustees and the Company have been given notice specifying such default or breach from holders of at least 25% in aggregate liquidation amount of the outstanding PCS and requiring it to be remedied; or

- the occurrence of certain events of bankruptcy or insolvency with respect to the Property Trustee and the Company's failure to appoint a successor Property Trustee within 60 days thereof.

Within 30 days after any Trust Event of Default actually known to the Property Trustee or the administrative trustees occurs, the Property Trustee or the administrative trustees will transmit notice of such Trust Event of Default to the holders of each affected series of Trust securities, unless such Trust Event of Default shall have been cured or waived. The Company, as depositor, and the administrative trustees are required to file annually with the Property Trustee a certificate as to whether or not the Company or they are in compliance with all the conditions and covenants applicable to the Company and to them under the Trust Agreement.

Mergers, Consolidations, Amalgamations or Replacements of the Trust

The Trust may not merge with or into, consolidate, amalgamate, or be replaced by, or convey, transfer or lease its properties and assets substantially as an entirety to the Company or any other person, except as described below or as otherwise described in the Trust Agreement. The Trust may, at the Company's request, with the consent of the administrative trustees but without the consent of the holders of the PCS, the Property Trustee or the Delaware Trustee, merge with or into, consolidate, amalgamate, or be replaced by, or convey, transfer or lease its properties and assets substantially as an entirety to, the Trust organized as such under the laws of any state if:

- such successor entity either:
  - o expressly assumes all of the obligations of the Trust with respect to the PCS, or
  - o substitutes for the PCS other securities having substantially the same terms as the PCS, or the "Successor Securities," so long as the Successor Securities rank the same as the PCS in priority with respect to distributions and payments upon liquidation, redemption and otherwise;
- the Successor Securities of any series are listed or will be listed upon notification of issuance, on any national securities exchange or other organization on which the PCS are listed;
- a trustee of such successor entity possessing the same powers and duties as the Property Trustee is appointed to hold the Series A Preferred Stock then held by or on behalf of the Property Trustee;
- such merger, consolidation, amalgamation, replacement, conveyance, transfer or lease does not cause the PCS, including any Successor Securities, to be downgraded by any nationally recognized statistical rating organization;
- such merger, consolidation, amalgamation, replacement, conveyance, transfer or lease does not adversely affect the rights, preferences and privileges of the holders of the PCS, including any Successor Securities, in any material respect;
- such successor entity has purposes substantially identical to those of the Trust;
- prior to such merger, consolidation, amalgamation, replacement, conveyance, transfer or lease, the Property Trustee has received an opinion from counsel to the Trust experienced in such matters to the effect that:
  - o such merger, consolidation, amalgamation, replacement, conveyance, transfer or lease does not adversely affect the rights, preferences and privileges of the holders of the PCS, including any Successor Securities, in any material respect, and
  - o following such merger, consolidation, amalgamation, replacement, conveyance, transfer or lease, neither the Trust nor such successor entity will be required to register as an investment company under the Investment Company Act of 1940, as amended (the "Investment Company Act");
- the Property Trustee, the Delaware Trustee and the administrative trustees have received an opinion of counsel experienced in such matters that such merger, consolidation, amalgamation, conveyance, transfer or lease will not cause the Trust or the successor entity to be classified as an association or a publicly traded partnership taxable as a corporation for U.S. federal income tax purposes; and
- the Company or any permitted transferee owns all of the common securities of such successor entity and guarantees the obligations of such successor entity under the Successor Securities at least to the extent provided by the Guarantee.

Notwithstanding the foregoing, the Trust may, with the consent of holders of 100% in liquidation amount of the PCS, consolidate, amalgamate, merge with or into, or be replaced by or convey, transfer or lease its properties and assets substantially as an entirety to any other entity or permit any other entity to consolidate, amalgamate, merge with or into, or replace it even if such consolidation, amalgamation, merger, replacement, conveyance, transfer or lease would cause the Trust or the successor entity to be classified as other than one or more grantor trusts or agency arrangements or to be classified as an association or a publicly traded partnership taxable as a corporation for U.S. federal income tax purposes.

Voting Rights; Amendment of the Trust Agreement

Except as provided herein and under "Description of the Guarantee—Amendments and Assignment" below and as otherwise required by law and the Trust Agreement, the holders of the PCS will have no voting rights or control over the administration, operation or management of the Trust or the obligations of the parties to the Trust

Agreement, including in respect of Series A Preferred Stock beneficially owned by the Trust. Under the Trust Agreement, however, the Property Trustee will be required to obtain their consent before exercising some of its rights in respect of these securities.

Trust Agreement. The Company and the administrative trustees may amend the Trust Agreement without the consent of the holders of the PCS, the Property Trustee or the Delaware Trustee, unless in the case of the first two bullets below such amendment will adversely affect in a material respect the interests of any holder of PCS, the Property Trustee or the Delaware Trustee, to:

- cure any ambiguity, correct or supplement any provisions in the Trust Agreement that may be inconsistent with any other provision, or to make any other provisions with respect to matters or questions arising under such Trust Agreement, which may not be inconsistent with the other provisions of the Trust Agreement;
- modify, eliminate or add to any provisions of the Trust Agreement to such extent as shall be necessary to ensure that the Trust will not be taxable as a corporation or classified as a partnership for U.S. federal income tax purposes at all times that any Trust securities are outstanding, to ensure that the Trust will not be required to register as an "investment company" under the Investment Company Act or to ensure the treatment of the PCS as Tier 1 capital under prevailing Federal Reserve rules and regulations;
- provide that certificates for the PCS may be executed by an administrative trustee by facsimile signature instead of manual signature, in which case such amendment(s) shall also provide for the appointment by the Company of an authentication agent and certain related provisions;
- require that holders that are not U.S. persons for U.S. federal income tax purposes irrevocably appoint a U.S. person to exercise any voting rights to ensure that the Trust will not be treated as a foreign trust for U.S. federal income tax purposes; or
- conform the terms of the Trust Agreement to the description of the Trust Agreement, the PCS and the Trust Common Securities in the prospectus supplement relating to the PCS, in the manner provided in the Trust Agreement.

Any such amendment shall become effective when notice thereof is given to the Property Trustee, the Delaware Trustee and the holders of the PCS.

The Company and the administrative trustees may generally amend the Trust Agreement with:

- the consent of holders representing not less than a majority, based upon liquidation amounts, of the PCS affected by the amendments; and
- receipt by the administrative trustees of the Trust of an opinion of counsel to the effect that such amendment or the exercise of any power granted to the trustees of the Trust or administrative trustees in accordance with such amendment will not affect the Trust's status as one or more grantor trusts or agency arrangements for U.S. federal income tax purposes, cause the Trust to be classified as an association or publicly traded partnership taxable as a corporation for U.S. federal income tax purposes or affect the Trust's exemption from status as an "investment company" under the Investment Company Act.

However, without the consent of each affected holder of Trust securities, the Trust Agreement may not be amended to:

- change the amount or timing, or otherwise adversely affect the amount, of any distribution required to be made in respect of Trust securities as of a specified date; or
- restrict the right of a holder of Trust securities to institute a suit for the enforcement of any such payment on or after such date.

Prior to the issuance of definitive certificates representing the PCS upon any termination of the global securities, without the consent of the holders of the PCS, the Company and the trustees of the Trust will enter into such amendments or supplements to the Trust Agreement as are necessary to provide for exchanges of PCS in definitive form and *vice versa*.

Series A Preferred Stock. So long as the Series A Preferred Stock is held by the Property Trustee on behalf of the Trust, the trustees of the Trust will not waive any rights in respect of the Series A Preferred Stock without obtaining the prior approval of the holders of at least a majority in liquidation amount of the PCS then outstanding. The trustees of the Trust shall also not consent to any amendment to the Trust's or the Company's governing documents that would change the dates on which dividends are payable or the amount of such dividends, without the prior written consent of each holder of PCS. In addition to obtaining the foregoing approvals from holders, the Property Trustee shall obtain, at the Company's expense, an opinion of counsel to the effect that such action shall not cause the Trust to be taxable as a corporation or classified as a partnership for U.S. federal income tax purposes.

General. Any required approval of holders of the PCS may be given at a meeting of holders of the PCS convened for such purpose or pursuant to written consent. The Property Trustee will cause a notice of any meeting at which holders the PCS are entitled to vote, or of any matter upon which action by written consent of such holders is to be taken, to be given to each record holder of such PCS in the manner set forth in the Trust Agreement.

No vote or consent of the holders of PCS will be required for the Trust to redeem and cancel the PCS in accordance with the Trust Agreement.

Notwithstanding that holders of the PCS are entitled to vote or consent under any of the circumstances described above, any of the PCS that are owned by the Company or its affiliates or the trustees or any of their affiliates shall, for purposes of such vote or consent, be treated as if they were not outstanding.

Voting and consensual rights available to or in favor of holders or beneficial owners under the Trust Agreement may be exercised only by a United States Person that is a beneficial owner of a Trust security or by a United States Person acting as irrevocable agent with discretionary powers for the beneficial owner of a Trust security that is not a United States Person. Holders that are not United States Persons must irrevocably appoint a United States Person with discretionary powers to act as their agent with respect to such voting and consensual rights. For this purpose, "United States Person" means a citizen or resident of the United States, a domestic partnership, a domestic corporation, an estate the income of which is subject to U.S. federal income taxation regardless of its source, and a trust if (i) a court within the United States is able to exercise primary supervision over the administration of the trust, and (ii) one or more United States persons have the authority to control all substantial decisions of the trust.

Listing

The PCS are listed on the New York Stock Exchange under the symbol "BK/P."

Payment and Paying Agent

Payments on the PCS shall be made to DTC, which shall credit the relevant accounts on the applicable Distribution Dates. If any PCS are not held by DTC, such payments shall be made by check mailed to the address of the holder as such address shall appear on the register.

The paying agent is The Bank of New York Mellon.

Registrar and Transfer Agent

The Bank of New York Mellon is the registrar and transfer agent, or the "Transfer Agent," for the PCS.

Information Concerning the Property Trustee

Other than during the occurrence and continuance of a Trust Event of Default, the Property Trustee undertakes to perform only the duties that are specifically set forth in the Trust Agreement. After a Trust Event of Default, the Property Trustee must exercise the same degree of care and skill as a prudent person would exercise or use under the circumstances in the conduct of his or her own affairs, subject to the protections and limitations on liability afforded to the Property Trustee under the Trust Agreement and the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act"). Subject to this provision, the Property Trustee is under no obligation to exercise any of the powers vested in it by the Trust Agreement at the request of any holder of PCS unless it is offered indemnity satisfactory to it by such holder against the costs, expenses and liabilities that might be incurred. If no Trust Event of Default has occurred and is continuing and the Property Trustee is required to decide between alternative courses of action, construe ambiguous or inconsistent provisions in the Trust Agreement or is unsure of the application of any provision of the Trust Agreement, and the matter is not one upon which holders of PCS are entitled under the Trust Agreement to vote, then the Property Trustee will take any action that the Company directs. If the Company does not provide direction, the Property Trustee may take any action that it deems advisable and in the interests of the holders of the Trust securities and will have no liability except for its own bad faith, negligence or willful misconduct.

The Company and its affiliates may maintain certain accounts and other banking relationships with the Property Trustee and its affiliates in the ordinary course of business.

Governing Law

The Trust Agreement is governed by and construed in accordance with the laws of the State of Delaware.

Miscellaneous

The administrative trustees are authorized and directed to conduct the affairs of and to operate the Trust in such a way that it will not be required to register as an "investment company" under the Investment Company Act or characterized as other than one or more grantor trusts or agency arrangements for U.S. federal income tax purposes.

In this regard, the Company and the administrative trustees are authorized to take any action, not inconsistent with applicable law, the certificate of trust of the Trust or the Trust Agreement, that the Company and the administrative trustees determine to be necessary or desirable to achieve such end, as long as such action does not materially and adversely affect the interests of the holders of the PCS.

Holders of the PCS have no preemptive or similar rights. The PCS are not convertible into or exchangeable for the Company's common stock or Series A Preferred Stock.

Description of the Guarantee

General

The following payments or distributions on the PCS, also referred to as the "guarantee payments," if not fully paid or made by or on behalf of the Trust, will be paid by the Company under a guarantee (the "Guarantee") for the benefit of the holders of PCS. Pursuant to the Guarantee, the Company will irrevocably and unconditionally agree to pay in full the guarantee payments, without duplication:

- any accumulated and unpaid distributions required to be paid on each series of PCS, to the extent the Trust has funds available to make the payment;
- the redemption price with respect to any PCS called for redemption by the Trust; and
- upon a voluntary or involuntary dissolution, winding-up or liquidation of the Trust, other than in connection with a distribution of a like amount of corresponding assets to the holders of the PCS, the lesser of:

- o the aggregate of the liquidation amount and all accumulated and unpaid distributions on the PCS to the date of payment, to the extent the Trust has funds available to make the payment; and
- o the amount of assets of the Trust remaining available for distribution to holders of the PCS upon liquidation of the Trust.

The Company's obligation to make a guarantee payment may be satisfied by direct payment of the required amounts by the Company to the holders of the PCS or by causing the Trust to pay the amounts to the holders.

If the Company does not make a regular dividend payment on the Series A Preferred Stock, the Trust will not have sufficient funds to make the related payments on the PCS. The Guarantee does not cover payments on the PCS when the Trust does not have sufficient funds to make these payments. Because the Company is a holding company, the Company's rights to participate in the assets of any of its subsidiaries upon the subsidiary's liquidation or reorganization will be subject to the prior claims of the subsidiary's creditors except to the extent that the Company may itself be a creditor with recognized claims against the subsidiary. The Guarantee does not limit the incurrence or issuance by the Company of secured or unsecured indebtedness.

The Guarantee is issued pursuant to a Guarantee Agreement (the "Guarantee Agreement") that the Company entered into with Manufacturers and Traders Trust Company ("M&T"). The Guarantee Agreement is qualified as an indenture under the Trust Indenture Act. M&T will act as "Guarantee Trustee" under the Guarantee Agreement for purposes of compliance with the provisions of the Trust Indenture Act. The Guarantee Trustee will hold the Guarantee for the benefit of the holders of the PCS.

Effect of the Guarantee

The Guarantee and the Trust's obligations under the Trust Agreement, including the obligations to pay costs, expenses, debts and liabilities of the Trust, other than with respect to the Trust securities, has the effect of providing a full and unconditional guarantee, on a subordinated basis, of payments due on the PCS. The Company also agreed separately to irrevocably and unconditionally guarantee the obligations of the Trust with respect to the Trust Common Securities to the same extent as the Guarantee.

Status of the Guarantee

The Guarantee is unsecured and ranks *pari passu* with other guarantees for payments on securities issued by the Company's trusts in the future to the extent the preferred stock held by such trusts ranks *pari passu* with the Series A Preferred Stock and the Company's preferred stock that it issues in the future to the extent that by its terms it ranks *pari passu* with the Series A Preferred Stock.

The Guarantee constitutes a guarantee of payment and not of collection, which means that the guaranteed party may sue the guarantor to enforce its rights under the Guarantee without suing any other person or entity. The Guarantee will be held for the benefit of the holders of the PCS. The Guarantee will be discharged only by payment of the guarantee payments in full to the extent not paid by the Trust.

Amendments and Assignment

The Guarantee may be amended only with the prior approval of the holders of not less than a majority in aggregate liquidation amount of the outstanding PCS. No vote will be required, however, for any changes that do not adversely affect the rights of holders of the PCS in any material respect. All guarantees and agreements contained in the Guarantee will bind the Company's successors, assignees, receivers, trustees and representatives and will be for the benefit of the holders of the PCS then outstanding.

Termination of the Guarantee

The Guarantee will terminate:

- upon full payment of the redemption price of all PCS; or

- upon full payment of the amounts payable in accordance with the Trust Agreement upon liquidation of the Trust.

The Guarantee will continue to be effective or will be reinstated, as the case may be, if at any time any holder of PCS must restore payment of any sums paid under the PCS or the Guarantee.

Events of Default

An event of default under the Guarantee will occur if the Company fails to perform any payment obligation or if the Company fails to perform any other obligation under the Guarantee and, except with respect to a default in payment of a guarantee payment, receives a notice of a default and such default remains uncured for 30 days.

The holders of a majority in liquidation amount of the PCS have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Guarantee Trustee in respect of the Guarantee or to direct the exercise of any trust or power conferred upon the Guarantee Trustee under the Guarantee Agreement. Any holder of PCS may institute a legal proceeding directly against the Company to enforce such holder's rights, without first instituting a legal proceeding against the Trust, the Guarantee Trustee or any other person or entity.

As guarantor, the Company is required to file annually with the Guarantee Trustee a certificate as to whether or not the Company is in compliance with all applicable conditions and covenants under the Guarantee.

Information Concerning the Guarantee Trustee

Prior to the occurrence of an event of default relating to the Guarantee, the Guarantee Trustee is required to perform only the duties that are specifically set forth in the Guarantee. Following the occurrence of an event of default, the Guarantee Trustee will exercise the same degree of care as a prudent person would exercise in the conduct of his or her own affairs. Provided that the foregoing requirements have been met, the Guarantee Trustee is under no obligation to exercise any of the powers vested in it by the Guarantee at the request of any holder of PCS, unless offered adequate security and indemnity satisfactory to it against the costs, expenses and liabilities which might be incurred thereby.

The Company and its affiliates may maintain certain accounts and other banking relationships with the Guarantee Trustee and its affiliates in the ordinary course of business.

Governing Law

The Guarantee is governed by and construed in accordance with the laws of the State of New York.

<u>Description of the Series A Preferred Stock</u>

General

Under the Company's Restated Certificate of Incorporation, the Company has authority to issue up to 100,000,000 shares of preferred stock, par value $0.01 per share. The Company has 5,001 shares of Series A Preferred Stock outstanding. The Series A Preferred Stock is validly issued, fully paid and nonassessable.

The Company's Certificate of Designations of Series A Preferred Stock (the "Series A Certificate of Designations") was filed on June 15, 2007 with the Secretary of State of the State of Delaware, and is incorporated by reference as an exhibit to this Annual Report on Form 10-K. The Series A Preferred Stock has a fixed liquidation preference of $100,000 per share. The Series A Preferred Stock is not convertible into common stock or any other class or series of the Company's securities and is not subject to any sinking fund or any other obligation of the Company for their repurchase or retirement. The Series A Preferred Stock represents non-withdrawable capital, is not an account of an insurable type, and is not insured or guaranteed by FDIC or any other governmental agency or instrumentality.

The Company issued the Series A Preferred Stock to the Trust. Unless the Trust is dissolved, prior to the redemption of the Series A Preferred Stock, holders of PCS will not receive shares of Series A Preferred Stock, and their interest in the Series A Preferred Stock will be represented by their PCS. If the Trust is dissolved, the Company may elect to distribute depositary shares representing the Series A Preferred Stock instead of fractional shares. Since the Series A Preferred Stock is held by the Property Trustee, holders of PCS may be able to exercise voting or other rights with respect to the Series A Preferred Stock only through the Property Trustee.

Ranking

With respect to the payment of dividends and the distributions of assets upon any liquidation, dissolution or winding-up, the Series A Preferred Stock ranks:

- senior to the Company’s Common Stock and all other equity securities issued by the Company, the terms of which specifically provide that such equity securities will rank junior to the Series A Preferred Stock (for purposes of the description of the Series A Preferred Stock, the “junior stock”);
- on a parity with the Company’s Series F Preferred Stock, Series G Preferred Stock, Series H Preferred Stock and Series I Preferred Stock;
- senior to or on a parity with each other series of preferred stock the Company may issue (except for any senior series that may be issued upon the requisite vote or consent of the holders of at least a majority of the shares of the Series A Preferred Stock at the time outstanding and entitled to vote and the requisite vote or consent of all other series of preferred stock) with respect to the payment of dividends and distributions of assets upon any liquidation, dissolution or winding-up of the Company; and
- junior to all existing and future indebtedness and other non-equity claims on the Company.

During any Dividend Period, so long as any shares of Series A Preferred Stock remain outstanding, unless (a) the full dividends for the then-current Dividend Period on all outstanding Series A Preferred Stock have been declared and paid, or declared and funds set aside therefor, and (b) the Company is not in default on its obligation to redeem any shares of Series A Preferred Stock that have been called for redemption, no dividend whatsoever shall be paid or declared on the Company’s common stock or other junior stock, other than a dividend payable solely in junior stock. The Company and its subsidiaries also may not purchase, redeem or otherwise acquire for consideration any shares of common stock or other junior stock (other than as a result of reclassification of junior stock for or into junior stock, or the exchange or conversion of one share of junior stock for or into another share of junior stock, and other than through the use of the proceeds of a substantially contemporaneous sale of other shares of junior stock), nor will the Company pay to or make available any monies for a sinking fund for the redemption of, any of its common stock or other junior stock during a Dividend Period, unless it has paid full dividends on the Series A Preferred Stock for the most recently-completed Dividend Period (or set aside a sum sufficient for the payment thereof). However, the foregoing provisions shall not restrict the ability of the Company or any of its affiliates to engage in any market-making transactions in the Company’s junior stock in the ordinary course of business.

On any Dividend Payment Date for which full dividends are not paid, or declared and funds set aside therefor, upon the Series A Preferred Stock, the Series F Preferred Stock, the Series G Preferred Stock, the Series H Preferred Stock, the Series I Preferred Stock and other equity securities designated as ranking on a parity with the Series A Preferred Stock as to payment of dividends (“Dividend Parity Stock”), all dividends paid or declared for payment on that Dividend Payment Date with respect to the Series A Preferred Stock and the Dividend Parity Stock shall be shared:

- first ratably by the holders of any such shares who have the right to receive dividends with respect to Dividend Periods prior to the then-current Dividend Period for which such dividends were not declared and paid, in proportion to the respective amounts of the undeclared and unpaid dividends relating to prior Dividend Periods; and
- thereafter by the holders of these shares on a *pro rata* basis.

The Company has agreed, in the Series A Certificate of Designations, not to issue preferred stock having dividend payment dates that are not also Dividend Payment Dates for the Series A Preferred Stock.

Subject to the foregoing, such dividends (payable in cash, stock or otherwise) as may be determined by the board of directors (or a duly authorized committee of the board of directors) may be declared and paid on the Company's common stock and any other stock ranking junior to the Series A Preferred Stock from time to time out of any funds legally available for such payment, and the Series A Preferred Stock shall not be entitled to participate in any such dividend.

Dividends

Dividends on shares of Series A Preferred Stock will not be mandatory. Holders of the Series A Preferred Stock, in preference to the holders of the Company's common stock and of any other shares of the Company's stock ranking junior to the Series A Preferred Stock as to payment of dividends, will be entitled to receive, only when, as and if declared by the board of directors or a duly authorized committee of the board of directors, out of funds legally available for payment, non-cumulative cash dividends. These dividends will be payable at a rate *per annum* that will be reset quarterly and will equal the greater of (i) from and including September 2023, three-month CME Term SOFR (plus a spread adjustment of 0.26161%) plus 0.565% and (ii) 4.000% (the "Dividend Rate"), each applied to the $100,000 liquidation preference per share and will be paid on March 20, June 20, September 20 and December 20 of each year (each, a "Dividend Payment Date"), with respect to the Dividend Period, or portion thereof, ending on the day preceding the respective Dividend Payment Date. A "Dividend Period" means each period commencing on (and including) a Dividend Payment Date and continuing to (but not including) the next succeeding Dividend Payment Date. Dividends will be paid to holders of record on the respective date fixed for that purpose by the board of directors or a committee thereof in advance of payment of each particular dividend. The Dividend Rate will be reset quarterly. If any day that would otherwise be a Dividend Payment Date is not a business day, then the next business day will be the applicable Dividend Payment Date.

The amount of dividends payable per share of Series A Preferred Stock on each Dividend Payment Date will be calculated by multiplying the *per annum* Dividend Rate in effect for that Dividend Period by a fraction, the numerator of which will be the actual number of days in that Dividend Period and the denominator of which will be 360, and multiplying the rate obtained by $100,000.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

"Dividend Determination Date" means the second London Banking Day immediately preceding the first day of the relevant Dividend Period.

"London Banking Day" means any day on which commercial banks are open for general business (including dealings in deposits in U.S. dollars) in London.

If the Company determines not to pay any dividend or a full dividend, it will provide prior written notice to the Property Trustee, who will notify holders of PCS and the administrative trustees.

The Company's ability to pay dividends on its Series A Preferred Stock is subject to policies established by the Federal Reserve. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Supervision and Regulation—Capital Planning and Stress Testing—Payment of Dividends, Stock Repurchases and Other Capital Distributions" and Part I, "Item 1. Business—Supervision and Regulation" in this Annual Report on Form 10-K.

Redemption

The Series A Preferred Stock may be redeemed, in whole or in part, at the Company's option. Any such redemption will be at a cash redemption price of $100,000 per share, plus any declared and unpaid dividends, without regard to any undeclared dividends. Holders of Series A Preferred Stock will have no right to require the redemption or repurchase of the Series A Preferred Stock.

If fewer than all of the outstanding shares of Series A Preferred Stock are to be redeemed, the shares to be redeemed will be selected either *pro rata* from the holders of record of shares of Series A Preferred Stock in proportion to the number of shares held by those holders or by lot or in such other manner as the board of directors or a committee thereof may determine to be fair and equitable.

The Company will mail notice of every redemption of Series A Preferred Stock by first class mail, postage prepaid, addressed to the holders of record of the Series A Preferred Stock to be redeemed at their respective last addresses appearing on its books. This mailing will be at least 30 days and not more than 60 days before the date fixed for redemption (provided that if the Series A Preferred Stock is held in book-entry form through DTC, the Company may give this notice in any manner permitted by DTC). Any notice mailed or otherwise given as described in this paragraph will be conclusively presumed to have been duly given, whether or not the holder receives this notice, and failure duly to give this notice by mail or otherwise, or any defect in this notice or in the mailing or provision of this notice, to any holder of Series A Preferred Stock designated for redemption will not affect the redemption of any other Series A Preferred Stock. If the Company redeems the Series A Preferred Stock, the Trust, as holder of the Series A Preferred Stock, will redeem the corresponding PCS as described above under "Description of the PCS—Mandatory Redemption of PCS upon Redemption of Series A Preferred Stock."

Each notice shall state:

- the redemption date;
- the number of shares of Series A Preferred Stock to be redeemed and, if less than all shares of Series A Preferred Stock held by the holder are to be redeemed, the number of shares to be redeemed from the holder;
- the redemption price; and
- the place or places where certificates for the Series A Preferred Stock are to be surrendered for payment of the redemption price.

If notice of redemption of any Series A Preferred Stock has been given and if the funds necessary for the redemption have been set aside by the Company for the benefit of the holders of any shares of Series A Preferred Stock so called for redemption, then, on and after the redemption date, those shares shall no longer be deemed outstanding and all rights of the holders of those shares (including the right to receive any dividends) will terminate, except the right to receive the redemption price.

The Company's right to redeem the Series A Preferred Stock once issued is subject to the prior approval of the Federal Reserve. Under the capital adequacy rules currently applicable to the Company, prior to exercising the Company's right to redeem the Series A Preferred Stock, the Company must either (i) demonstrate to the satisfaction of the Federal Reserve that, following redemption, the Company will continue to hold capital commensurate with the Company's risk; or (ii) replace the Series A Preferred Stock redeemed or to be redeemed with an equal amount of instruments that will qualify as Tier 1 capital under regulations of the Federal Reserve immediately following or concurrent with redemption.

Liquidation Rights

In the event that the Company voluntarily or involuntarily liquidates, dissolves or winds up its affairs, holders of Series A Preferred Stock will be entitled to receive an amount per share (the "Total Liquidation Amount") equal to the fixed liquidation preference of $100,000 per share, plus any declared and unpaid dividends prior to the date of payment of such distribution (but without any amount in respect of dividends that have not been declared prior to such payment date). Holders of the Series A Preferred Stock will be entitled to receive the Total Liquidation Amount out of the Company's assets or proceeds thereof (whether capital or surplus) that are available for distribution to stockholders, after payment or provision for payment of its debts and other liabilities but before any distribution of assets or proceeds is made to holders of the Company's common stock or any other shares ranking, as to that distribution, junior to the Series A Preferred Stock.

If the Company's assets or proceeds thereof are not sufficient to pay the Total Liquidation Amount in full to all holders of Series A Preferred Stock and all holders of any shares of its stock ranking as to any such distribution on a parity with the Series A Preferred Stock, the amounts paid to the holders of Series A Preferred Stock and to such other shares will be paid *pro rata* in accordance with the respective Total Liquidation Amount for those holders. If the Total Liquidation Amount per Series A Preferred Stock has been paid in full to all holders of Series A Preferred Stock and the liquidation preference of any other shares ranking on a parity with the Series A Preferred Stock has been paid in full, the holders of the Company's common stock or any other shares ranking, as to such distribution, junior to the Series A Preferred Stock will be entitled to receive all of the Company's remaining assets according to their respective rights and preferences.

For purposes of the liquidation rights, neither the sale, conveyance, exchange or transfer of all or substantially all of the Company's property and assets, nor the consolidation or merger by the Company with or into any other corporation or by another corporation with or into the Company, will constitute a liquidation, dissolution or winding-up of the Company's affairs.

Voting Rights

Except as indicated below or otherwise required by law, the holders of Series A Preferred Stock will not have any voting rights.

Right to Elect Two Directors upon Non-Payment of Dividends. If and when the dividends on the Series A Preferred Stock and any other class or series of the Company's stock, whether bearing dividends on a non-cumulative or cumulative basis but otherwise ranking on a parity with the Series A Preferred Stock as to payment of dividends and that has voting rights equivalent to those described in this paragraph ("Voting Parity Stock"), have not been declared and paid in an aggregate amount (i) in the case of the Series A Preferred Stock and Voting Parity Stock bearing non-cumulative dividends, equal to at least six quarterly dividend periods or their equivalent (whether or not consecutive), or (ii) in the case of Voting Parity Stock bearing cumulative dividends, in an aggregate amount equal to full dividends for at least six quarterly dividend periods or their equivalent (whether or not consecutive) (a "Nonpayment Event"), the authorized number of directors then constituting the board of directors will automatically be increased by two. Holders of Series A Preferred Stock, together with the holders of Voting Parity Stock, voting as a single class, will be entitled to elect the two additional members of the board of directors (the "Series A Preferred Stock Directors") at any annual or special meeting of shareholders at which directors are to be elected or any special meeting of the holders of Series A Preferred Stock and any voting parity stock for which dividends have not been paid, called as described below, but only if the election of any Series A Preferred Stock Directors would not cause the Company to violate the corporate governance requirement of the New York Stock Exchange (or any other exchange on which the Company's securities may be listed) that listed companies must have a majority of independent directors. In addition, the board of directors shall at no time have more than two Series A Preferred Stock Directors.

At any time after this voting power has vested as described above, the Company's Secretary may, and upon the written request of holders of record of at least 20% of the outstanding shares of Series A Preferred Stock and Voting Parity Stock (addressed to the Secretary at the Company's principal office) must, call a special meeting of the holders of Series A Preferred Stock and Voting Parity Stock for the election of the Series A Preferred Stock Directors. Notice for a special meeting will be given in a similar manner to that provided in the Company's Amended and Restated By-laws for a special meeting of the shareholders, which the Company will provide upon request, or as required by law. If the Secretary is required to call a meeting but does not do so within 20 days after receipt of any such request, then any holder of shares of Series A Preferred Stock may (at the Company's expense) call such meeting, upon notice as described in this section, and for that purpose will have access to the Company's stock books. The Series A Preferred Stock Directors elected at any such special meeting will hold office until the next annual meeting of shareholders unless they have been previously terminated as described below. In case any vacancy occurs among the Series A Preferred Stock Directors, a successor will be elected by the board of directors to serve until the next annual meeting of the shareholders upon the nomination of the then remaining Series A

Preferred Stock Director or, if none remains in office, by the vote of the holders of record of a majority of the outstanding shares of Series A Preferred Stock, voting as a single class. The Series A Preferred Stock Directors shall each be entitled to one vote per director on any matter.

Whenever full dividends have been paid on the Series A Preferred Stock and any non-cumulative Voting Parity Stock for at least one year after a Nonpayment Event and all dividends on any cumulative Voting Parity Stock have been paid in full, then the right of the holders of Series A Preferred Stock to elect the Series A Preferred Stock Directors will have ceased (but subject always to the same provisions for the vesting of these voting rights in the case of any similar non-payment of dividends in respect of future Dividend Periods), the terms of office of all Series A Preferred Stock Directors will immediately terminate and the number of directors constituting the board of directors will be reduced accordingly.

Other Voting Rights. So long as any shares of Series A Preferred Stock are outstanding, in addition to any other vote or consent of shareholders required by law or by the Company's Restated Certificate of Incorporation, the vote or consent of the holders of at least a majority of the shares of Series A Preferred Stock at the time outstanding, voting separately as a single class, given in person or by proxy, either in writing without a meeting or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

- ***Amendment of Restated Certificate of Incorporation.*** Any amendment, alteration or repeal of any provision of the Amended and Restated Certificate of Incorporation or Amended and Restated Bylaws of the Company so as to adversely affect the special rights, preferences, privileges or voting powers of the Series A Preferred Stock. However, any amendment of the Certificate of Incorporation to authorize or create, or to increase the authorized amount of, any junior stock or any class or series or any securities convertible into shares of any class or series of Dividend Parity Stock or other series of preferred stock ranking equally with the Series A Preferred Stock with respect to the distribution of assets upon liquidation, dissolution or winding-up of the Company will not be deemed to adversely affect the rights, preferences, privileges or voting powers of the Series A Preferred Stock; or

- ***Certain Mergers and Consolidations.*** Any consummation of a binding share exchange or reclassification involving the Series A Preferred Stock, or of a merger or consolidation of the Company with or into another corporation or other entity, or any merger or consolidation of the Company with or into any entity other than a corporation unless in each case (i) the shares of the Series A Preferred Stock remain outstanding or, in the case of any such merger or consolidation with respect to which the Company is not the surviving or resulting corporation, are converted into or exchanged for preference securities of the surviving or resulting corporation or a corporation controlling such corporation and (ii) such shares remaining outstanding or such preference securities have such rights, preferences, privileges and voting powers, and limitations and restrictions thereof that, if such change were effected by amendment of the Company's Restated Certificate of Incorporation, would not require a vote of the holders of the Series A Preferred Stock under the preceding paragraph.

Each holder of Series A Preferred Stock will be entitled to one vote per each $100,000 liquidation preference to which his or her shares are entitled on any matter on which holders of Series A Preferred Stock are entitled to vote, including any action by written consent.

The foregoing voting provisions will not apply if, at or prior to the time when the act with respect to which the vote would otherwise be required shall be effected, all outstanding shares of Series A Preferred Stock shall have been redeemed or called for redemption upon proper notice and sufficient funds shall have been set aside by the Company for the benefit of the holders of Series A Preferred Stock to effect the redemption.

Form

The Series A Preferred Stock will be issued only in fully registered form. No fractional shares will be issued unless the Trust is dissolved and the Company delivers the shares, rather than depositary receipts representing the shares, to the registered holders of the PCS. If the Trust is dissolved and depositary receipts or shares of Series A Preferred Stock are distributed to holders of PCS, the Company would intend to distribute them in book-entry form only and the procedures governing holding and transferring beneficial interests in the Series A Preferred Stock, and the circumstance in which holders of beneficial interests will be entitled to receive certificates evidencing their shares or depositary receipts, will be as described under "Book-Entry System" in the prospectus relating to the Series A Preferred Stock. If the Company determines to issue depositary shares representing fractional interests in the Series A Preferred Stock, each depositary share will be represented by a depositary receipt. In such an event, the Series A Preferred Stock represented by the depositary shares will be deposited under a deposit agreement among the Company, a depositary and the holders from time to time of the depositary receipts representing depositary shares. Subject to the terms and conditions of any deposit agreement, each holder of a depositary share will be entitled, through the depositary, in proportion to the applicable fraction of a share of the Series A Preferred Stock represented by such depositary share, to all the rights and preferences of the Series A Preferred Stock represented thereby (including dividends, voting, redemption and liquidation rights).

Title

The Company, the transfer agent and registrar for the Series A Preferred Stock, and any of their agents may treat the registered owner of the Series A Preferred Stock, which shall be the Property Trustee unless and until the Trust is dissolved, as the absolute owner of that stock, whether or not any payment for the Series A Preferred Stock shall be overdue and despite any notice to the contrary, for any purpose.

Transfer Agent and Registrar

If the Trust is dissolved and shares of Series A Preferred Stock or depositary receipts representing the Series A Preferred Stock are distributed to holders of PCS, the Company may appoint a transfer agent, registrar and dividend disbursement agent for the Series A Preferred Stock. The registrar for the Series A Preferred Stock will send notices to shareholders of any meetings at which holders of Series A Preferred Stock have the right to vote on any matter.

Exhibit 10.22

AIRCRAFT TIME SHARING AGREEMENT

This Aircraft Time Sharing Agreement (the "Agreement") is entered into as of October 29, 2024 (the "Effective Date"), by and between **The Bank of New York Mellon**, a New York corporation ("Lessor"), and Robin Vince, an individual ("Lessee").

RECITALS

A. Lessor is in legal possession of the Aircraft (as defined below).

B. Lessor employs (or contracts for the services of) a fully qualified flight crew to operate the Aircraft.

C. Lessee desires from time to time to lease the Aircraft, with a flight crew, on a non-exclusive basis, from Lessor on a time sharing basis as defined in Section 91.501(c)(1) of the FAR (as defined below) and in accordance with Sections 91.501(b)(6), 91.501(c)(1) and 91.501(d) of the FAR.

D. Lessor is willing to lease the Aircraft, with flight crew, on a non-exclusive basis, to Lessee on such a time sharing basis.

E. During the term of this Agreement, the Aircraft will be subject to use by Lessor and Lessor Related Persons (as defined in Section 6.3).

AGREEMENT

NOW, THEREFORE, Lessor and Lessee, in consideration of the promises of the other set forth herein, intending to be legally bound, hereby agree as follows:

1. **Definitions**.

1.1. **Specific Terms**. The following defined terms shall have the following meanings when used in this Agreement. The meanings assigned by this Agreement shall apply to the plural, singular, possessive or any other form of the term. Words of the masculine, feminine or neuter gender used in this Agreement include all other genders.

"**Agreement**" is defined in the preamble.

"**Aircraft**" means the Airframe, the Engines, and the Aircraft Documents. Such Engines shall be deemed part of the "Aircraft" whether or not from time to time attached to the Airframe or removed from the Aircraft.

"**Aircraft Documents**" means, as to the Aircraft, all flights, records, maintenance records, historical records, modification records, overhaul records, manuals, logbooks, authorizations, drawings and data relating to the Airframe, any Engine or any Part, that are required by Applicable Law to be created or maintained with respect to the maintenance and/or operation of the Aircraft.

"**Airframe**" means the Airframe described in **Schedule 1** attached hereto and made a part hereof, as the same may be amended from time to time as set forth below, together with any and all Parts (including, but not limited to, landing gear and auxiliary power units, but excluding Engines or engines) so long as such Parts shall be either incorporated or installed in or attached to the Airframe.

"**Applicable Law**" means, without limitation, all applicable laws, treaties, international agreements, decisions and orders of any court, arbitration or governmental agency or authority and rules, regulations, orders, directives, licenses and permits of any governmental body, instrumentality, agency or authority, including, without limitation, the FAR and 49 U.S.C. § 41101, et seq., as amended.

"**Business Day**" means Monday through Friday, exclusive of legal holidays under the laws of the United States or the State of New York.

"**Default Rate**" means a per annum rate of interest equal to the SOFR, plus one percent (1%).

"**Effective Date**" means the date so specified in the preamble of this Agreement.

"**Engine(s)**" means the engine(s) identified in **Schedule 1** (or any replacement or loaner engines), as the same may be amended from time to time as set forth below, together with any and all Parts so long as the same shall be either incorporated or installed in or attached to such Engine.

"**FAA**" means the Federal Aviation Administration or any successor agency.

"**FAR**" means collectively the Aeronautics Regulations of the Federal Aviation Administration and the Department of Transportation, as codified at Title 14, Parts 1 to 399 of the United States Code of Federal Regulations.

"**Lessee**" is defined in the preamble.

"**Lessor**" is defined in the preamble.

"**Lessor Related Person**" is defined in Section 6.3.

"**Operational Control**" has the same meaning given the term in Section 1.1 of the FAR.

"Owner" means The Bank of New York Mellon.

"**Parts**" means all appliances, components, parts, instruments, appurtenances, accessories, furnishings or other equipment of whatever nature (other than complete Engines or engines) which may from time to time be incorporated or installed in or attached to the Airframe or any Engine and includes replacement parts.

"**Pilot in Command**" has the same meaning given the term in Section 1.1 of the FAR.

"**Taxes**" means all sales taxes, use taxes, retailer taxes, duties, fees, excise taxes (including, without limitation federal transportation excise taxes), or other taxes of any kind which may be assessed or levied by any Taxing Jurisdiction as a result of the lease of the Aircraft to Lessee, or the use of the Aircraft by Lessee, or the provision of a taxable transportation service to Lessee using the Aircraft.

"**Taxing Jurisdiction**" means any federal, state, county, local, airport, district, foreign, or other governmental authority that imposes Taxes.

"**Term**" means the term of this Agreement set forth in Section 3.

1.2. **Other Terms**. Unless otherwise specified, the following terms, whether or not capitalized, will have the following meanings as used in this Agreement. "Hereof," "herein," "hereunder," and similar terms refer to this Agreement as a whole, and are not limited to the section or subdivision of this Agreement in which the term appears. "Includes," "including," and similar terms mean without limitation. "Person" includes any natural person, corporation, general or limited partnership, limited liability company, other incorporated or unincorporated association, trust, governmental body or other entity.

2. **Agreement to lease**.

2.1. **Agreement to lease**. Lessor agrees to lease the Aircraft to Lessee on an "as needed and as available" basis, and to provide a fully qualified flight crew for all flights of Lessee, in accordance with the terms and conditions of this Agreement.

2.2. **Intent and Interpretation**. The parties hereto intend that this Agreement shall constitute, and this Agreement shall be interpreted as, a Time Sharing Agreement as defined in Section 91.501(c)(1) of the FAR.

2.3. **Non-Exclusivity**. Lessee acknowledges that the Aircraft is leased to Lessee hereunder on a non-exclusive basis, and that the Aircraft will also be subject to use by Lessor and Lessor's Related Persons.

3. **Term**. The initial term (the "Initial Term") of this Agreement begins on the Effective Date, and ends on the 6-month anniversary of the Effective Date (subject to earlier termination as provided below). At the end of the Initial Term, this Agreement shall automatically be renewed for successive 6-month terms until terminated as provided below. Notwithstanding the foregoing, Lessee shall have the right to terminate this Agreement with or without cause on thirty (30) days written notice to Lessor. After the Initial Term, Lessor shall have the right to terminate this Agreement with or without cause on thirty (30) days written notice to Lessee; provided, however, this Agreement may be terminated on such shorter notice as may be required to comply with Applicable Law, the requirements of any financial institution, or insurance requirements; and provided further, however, that this Agreement shall automatically and immediately terminate upon Lessor's closing on the sale of the Aircraft.

4. **Payments**.

4.1. **Flight Charges**. Lessee shall pay Lessor for each flight conducted for Lessee under this Agreement for the amount charged, which amount shall not exceed the maximum amount of expense reimbursement permitted in accordance with Section 91.501(d) of the FAR, which expenses include and are limited to:

4.1.1. fuel oil, lubricants, and other additives;

4.1.2. travel expenses of the crew, including food, lodging and ground transportation;

4.1.3. hangar and tie down costs away from the Aircraft's base of operation;

4.1.4. insurance obtained for the specific flight;

4.1.5. landing fees, airport taxes and similar assessments;

4.1.6. customs, foreign permit, and similar fees directly related to the flight;

4.1.7. in-flight food and beverages;

4.1.8. passenger ground transportation;

4.1.9. flight planning and weather contract services; and

4.1.10. an additional charge equal to 100% of the expenses listed in Section 4.1.1.

4.2. **Invoices and Payment**. Lessor will initially pay all expenses related to the operation of the Aircraft in the ordinary course, provided that Lessor shall provide an invoice to Lessee for an amount determined in accordance with Section 4.1 above, and such billing shall not occur more frequently than monthly. Lessee shall remit the full amount of any such invoice, together with any applicable Taxes under Section 5, to Lessor promptly within thirty (30) days of receipt of the invoice. In the event Lessor has not received a supplier invoice for reimbursable charges relating to any such flight prior to such invoicing, Lessor shall re-compute the amount determined in accordance with Section 4.1 above and if an additional amount is due from Lessee to Lessor, issue a supplemental invoice for such charges to Lessee as soon as practicable after the date of receipt of such supplier invoice, and Lessee shall pay such supplemental invoice amount upon receipt thereof. Delinquent payments, defined as payments received more than thirty (30) days after receipt of invoice, to Lessor by Lessee hereunder shall bear interest at the Default Rate from the due date until the date of payment. Lessee shall further pay all costs incurred Lessor by in collecting any amounts due from Lessee pursuant to the provisions of this Section 4.2 after delinquency, including court costs and reasonable attorneys' fees.

5. **Taxes**. None of the payments to be made by Lessee under Section 4 of this Agreement includes, and Lessee shall be responsible for, shall indemnify and hold harmless Lessor against, any Taxes which may be assessed or levied by any Taxing Jurisdiction as a result of the lease of the Aircraft to Lessee, or the use of the Aircraft by Lessee, or the provision of a taxable transportation service to that Lessee using the Aircraft. Without limiting the generality of the foregoing, Lessee and Lessor specifically acknowledge that all Lessee's flights will be subject to commercial air transportation excise taxes pursuant to Section 4261 of the Internal Revenue Code of 1986, as amended, regardless of whether any such flight is considered "noncommercial" under the FAR. Lessee shall remit to Lessor all such Taxes together with each payment made pursuant to Section 4.2.

6. **Scheduling Flights**.

6.1. **Submitting Flight Requests**. Lessee shall submit requests for flights and proposed flight schedules to Lessor as far in advance of any given flight as possible, preferably at least two (2) Business Days prior to Lessee's desired departure date. Requests for flights and proposed flight schedules shall be in a form, whether written or oral, mutually convenient to, and agreed upon by, Lessor and Lessee. In addition to requests for flights and proposed flight schedules, Lessee shall provide Lessor at least the following information for each proposed flight as soon as possible prior to scheduled departure:

6.1.1. departure airport;

6.1.2. destination airport;

6.1.3. date and time of outbound departure (including any multiple leg destinations);

6.1.4. the number of anticipated passengers and their names;

6.1.5. the nature and extent of luggage and/or cargo to be carried;

6.1.6. the date and time of return flight (including any multiple leg destinations), if any;

6.1.7. for international trips, passport information and Customs-required information for all passengers; and

6.1.8. any other information concerning the proposed flight that may be pertinent or required by Lessor's flight crew.

Until such time as Lessor notifies Lessee otherwise, all flight requests hereunder shall be submitted to the following representative of Lessor:

The Bank of New York Mellon
240 Greenwich Street, 11W
New York, NY 10007
Attention: Global Travel Services
Global Corporate Services Division

6.2. **Coordination of Flight Requests**. Each use of the Aircraft by Lessee shall be subject to Lessor's prior approval. Lessor will use reasonable efforts to accommodate Lessee's needs and avoid conflicts in scheduling; provided however, that Lessor shall not be liable to Lessee or any other person for loss, injury, or damage occasioned by any delay or failure to furnish the Aircraft, with a flight crew, pursuant to this Agreement for any reason. Lessor shall not be obligated to retain or contract for additional flight crew or maintenance personnel or equipment in order to accommodate a flight request submitted by Lessee.

6.3. **Subordinated Use of Aircraft**. Lessee's rights to schedule the use of the Aircraft shall at all times be subordinate to the Aircraft use requirements of Lessor, and any parent corporation, subsidiary or affiliate of Lessor ("Lessor Related Persons").

7. **Title and Operation**.

7.1. **Title and Registration**. Lessee acknowledges that title to the Aircraft shall remain vested in Owner, and Lessee undertakes, to the extent permitted by Applicable Law to do all such further acts, deeds, assurances, or things as may, in the reasonable opinion of Owner or Lessor, be necessary or desirable in order to protect or preserve Owner's title to the Aircraft. To the extent requested by Owner or Lessor, or their respective and assigns, Lessee shall take all action necessary to continue all rights and interests of Owner, and their respective successors or assigns in the Aircraft under Applicable Law against any claims of Lessee and any persons claiming by, through, or under Lessee.

7.2. **Aircraft Maintenance**. Lessor shall be solely responsible for maintenance, preventative maintenance, and required or otherwise necessary inspections of the Aircraft, and shall take such requirements into account in scheduling the Aircraft. No period of maintenance, preventative maintenance, or inspection shall be delayed or postponed for the purpose of scheduling the Aircraft, unless said maintenance or inspection can be safely conducted at a later time in compliance with all Applicable Law, and with the sound discretion of the Pilot in Command.

7.3. **Flight Crews**. Lessor shall provide to Lessee a qualified flight crew for each flight conducted in accordance with this Agreement. Lessor may, if it so chooses, elect not to hire its own pilots for any given flight hereunder, but to contract instead for pilot services from a third party. Whether or not the flight crew is supplied by a third party, the flight crew is under the exclusive command and control of Lessor in all phases of all flights conducted hereunder.

7.4. **OPERATIONAL CONTROL**. THE PARTIES EXPRESSLY AGREE THAT LESSOR SHALL HAVE AND MAINTAIN OPERATIONAL CONTROL OF THE AIRCRAFT FOR ALL FLIGHTS OPERATED UNDER THIS AGREEMENT, AND THAT THE INTENT OF THE PARTIES IS THAT THIS AGREEMENT CONSTITUTE A "TIME SHARING AGREEMENT" AS SUCH TERM IS DEFINED IN SECTION 91.501(C)(1) OF THE FAR. LESSOR SHALL EXERCISE EXCLUSIVE AUTHORITY OVER INITIATING, CONDUCTING, OR TERMINATING ANY FLIGHT CONDUCTED ON BEHALF OF LESSEE PURSUANT TO THIS AGREEMENT.

7.5. **Authority of Pilot in Command**. Notwithstanding that Lessor shall have Operational Control of the Aircraft during any flight conducted pursuant to this Agreement, Lessor and Lessee expressly agree that the Pilot in Command, in his or her sole discretion, may terminate any flight, refuse to commence any flight, or take any other flight-related action which in the judgment of the Pilot in Command is necessitated by considerations of safety. The Pilot in Command shall have final and complete authority to postpone or cancel any flight for any reason or condition which in his or her judgment would compromise the safety of the flight. No such action of the Pilot in Command shall create or support any liability of Lessor to Lessee for loss, injury, damage, or delay.

7.6. **Base of Operation**. For purposes of this Agreement, the base of operation is means the airport described on **Schedule 2**; provided, however, that the base of operation for purposes of this Agreement may be changed temporarily or permanently by Lessor without notice. Lessor will make reasonable efforts to notify Lessee of changes in the base of operations at least forty-eight (48) hours prior to Lessee's scheduled flights.

7.7. **Force Majeure**. Lessor shall not be liable for delay or failure to furnish the Aircraft and flight crew pursuant to this Agreement when such failure is caused by government regulation or authority, mechanical difficulty, war, civil commotion, strikes or labor disputes, weather conditions, acts of God, or other unforeseen or unanticipated circumstances.

8. **Insurance and Limitation of Liability**. Lessor represents that the flight operations for the Aircraft as contemplated in this Agreement will be covered by the Lessor's aircraft all-risk physical damage insurance (hull coverage), aircraft bodily injury and property damage liability insurance. Lessor will retain all rights and benefits with respect to the proceeds payable under policies of hull insurance maintained by Lessor that may be payable as a result of any incident or occurrence while an Aircraft is being operated on behalf of Lessee under this Agreement.

8.1. **Additional policy requirements**. Any policies of insurance carried in accordance with this Agreement and any policies taken out in substitution or replacement of any such policies shall:

8.1.1. name Lessee as an additional insured;

8.1.2. include a severability of interest clause providing that such policy shall operate in the same manner as if there were a separate policy covering each insured;

8.1.3. shall be primary, without right of contribution from any other insurance maintained by Lessee; and

8.1.4. as respects hull physical damage, waive any right of set off or subrogation against Lessee.

8.2. **Limitation of Liability**. Lessee agrees that the insurance specified in this Section 8 provides its sole recourse for all claims, losses, liabilities, obligations, demands, suits, judgments or causes of action, penalties, fines, costs and expenses of any nature whatsoever, including attorneys' fees and expenses for or on account of or arising out of, or in any way connected with the use of the Aircraft by Lessee or its guests, including injury to or death of any persons, including Lessee and its guests which may result from or arise out of the use or operation of the Aircraft during the term of this Agreement ("Claims"), regardless of whether such Claims arise out of or are caused by, in whole or in part, the negligence, gross negligence, or strict liability of Lessor.

8.3. In no event shall Lessor be liable to Lessee or his employees, agents, representatives, guests, or invitees for any claims or liabilities, including property damage or injury and death, and expenses, including attorney's fees, in excess of the amount paid by Lessor's insurance carrier in the event of such loss.

8.4. Upon request, the Lessor shall deliver to Lessee a certificate of insurance evidencing the insurance required to be maintained by Lessor under this Article.

8.5. This Section shall survive termination of this Agreement.

9. **Representations and Warranties**. Lessee represents and warrants that Lessee shall:

9.1. use the Aircraft solely for and on account of his own business or personal use only, and will not use the Aircraft for the purpose of providing transportation of passengers or cargo for compensation or hire, for or in connection with any illegal purpose, in violation of any Applicable Law, or in violation of any insurance policy with respect to Aircraft;

9.2. refrain from incurring any mechanic's or other lien in connection with inspection, preventative maintenance, maintenance, or storage of the Aircraft, whether permissible or impermissible under this Agreement;

9.3. not attempt to convey, mortgage, assign, lease, lease, or in any way alienate the Aircraft or create any kind of lien or security interest involving the Aircraft, or do anything or take any action that might mature into such a lien; and

9.4. abide by and conform, during the Term, to all Applicable Laws, governmental and airport orders, rules and regulations, as shall from time to time be in effect relating in any way to the operation and use of the Aircraft by Lessee.

10. **Miscellaneous**.

10.1. **Notices**. All notices hereunder (except for notices made purely for flight scheduling, which are governed by the provisions of Section 6) shall be delivered by hand, sent by reputable guaranteed overnight delivery service, or sent by first-class United States mail, certified, postage prepaid, return receipt requested to the addresses of the parties set forth below:

If to Lessor:

The Bank of New York Mellon
240 Greenwich Street, 11W
New York, NY 10007
Attention: Global Travel Services
Global Corporate Services Division

and a copy to:

The Bank of New York Mellon
240 Greenwich Street
New York, NY 10007
Attention: General Counsel

If to Lessee:

Robin Vince

240 Greenwich Street
New York, NY 10286

Notice shall be deemed given when delivered or sent in the manner provided herein. At any time, either party may change its address for purposes of notices under this Agreement by giving notice to the other party in accordance herewith.

10.2. **No Waiver**. No purported waiver by either party of any default by the other party of any term or provision contained herein shall be deemed to be a waiver of such term or provision unless the waiver is in writing and signed by the waiving party. No such waiver shall in any event be deemed a waiver or any subsequent default under the same or any other term or provision contained herein.

10.3. **Entire Agreement**. This Agreement sets forth the entire understanding between the parties concerning the subject matter of this Agreement and incorporates all prior negotiations and understandings. There are no covenants, promises, agreements, conditions or understandings, either oral or written, between them relating to the subject matter of this Agreement other than those set forth herein. No representation or warranty has been made by or on behalf of any party (or any officer, director, employee, or agent thereof) to induce any other party to enter into this Agreement or to abide by or consummate any transaction contemplated by any timers of this Agreement, except representations and warranties, if any, expressly set forth herein. No alteration, amendment, change, or addition to this Agreement shall be binding upon either party unless in writing and signed by the party to be charged.

10.4. **No Agency or Partnership**. Nothing contained in this Agreement shall be deemed or construed by the parties hereto or by any third person to create the relationship of principal and agent or of partnership or of joint venture.

10.5. **Successors and Assigns**. Each and all of the provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto, and except as otherwise specifically provided in this Agreement, their respective successors and assigns, provided, however, that neither this Agreement, nor any rights herein granted may be assigned, transferred, or encumbered by Lessee, and any purported or attempted transfer or assignment by Lessee without the prior express written consent of Lessor shall be void and of no effect.

10.6. **Third Parties**. Nothing herein expressed or implied is intended or shall be construed to confer upon or give any person other than the parties hereto and their successors and assigns any rights or remedies under or by reason of this Agreement.

10.7. **Captions; Recitals**. The captions and section numbers appearing in this Agreement are inserted only as a matter of convenience. The captions and section numbers do not define, limit, construe, or describe the scope or intent of the provisions of this Agreement. The Recitals at the beginning of this Agreement are intended to give an understanding of the factual background that led the parties to enter into this Agreement. The Recitals are not intended to be warranties, representations, covenants, or otherwise contractually binding.

10.8. **Prohibited or Unenforceable Provisions**. Any provision of this Agreement which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof. To the extent permitted by Applicable Law, each of Lessor and Lessee hereby waives any provision of Applicable Law which renders any provision hereof prohibited or unenforceable in any respect.

10.9. **Governing Law**. The Agreement shall be governed and construed by the provisions hereof and in accordance with the laws of the State of New York applicable to agreements to be performed in the State of New York, without giving effect to its conflict of laws provisions. Any disputes arising out of this Agreement will be subject to the exclusive jurisdiction of the U.S. District Court located in New York County, New York if federal jurisdiction is available and to the courts of the State of New York if federal jurisdiction is not available.

10.10. **Counterparts**. This Agreement may be executed in one or more counterparts, each of which will be deemed an original and part of one and the same document.

11. **Required Filings**. Lessee authorizes Lessor at any time, and from time to time, to file any such document with the FAA and/or such other governmental agencies or offices as Lessor shall judge to be necessary or desirable in the name of, and on behalf of, Lessee, which authorization and power is coupled with an interest and shall be irrevocable.

12. **Disclaimer**. The Aircraft is being leased by Lessor to Lessee hereunder on a completely "as is, where is" basis, which is acknowledged and agreed to by Lessee. The warranties and representations set forth in this Agreement are exclusive and in lieu of all other representations or warranties whatsoever, express or implied, and Lessor has not made and shall not be construed or deemed to have made (whether by virtue of having leased the Aircraft under this Agreement, having leased the Aircraft from Lessor, having done or failed to do any act, or having acquired or failed to acquire any status under or in relation to this Agreement or otherwise) any other representation or warranty whatsoever, express or implied, with respect to the Aircraft or to any Part thereof, and specifically, without limitation, in this respect disclaims all representations and warranties concerning the title, airworthiness, value, condition, design, merchantability, compliance with specifications, construction and condition of the Aircraft, or fitness for a particular use of the Aircraft, and as to the absence of latent and other defects, whether or not discoverable, and as to the absence of any infringement or the like hereunder of any patent, trademark, or copyright, and as to the absence of obligations based on strict liability in tort, or as to the quality of the material or workmanship of the Aircraft or any part thereof, or any other representation or warranty whatsoever, express or implied (including any implied warranty arising from a course of performance, dealing, or usage of trade), with respect to the Aircraft or any Part thereof.

Lessee hereby waives, releases, disclaims and renounces all expectation of or reliance upon any such and other warranties, obligations, and liabilities of Lessor and rights, claims, and remedies of Lessee against Lessor express or implied, arising by law or otherwise, including but not limited to: (i) any implied warranty of merchantability or fitness for any particular use; (ii) any implied warranty arising from course of performance, course of dealing, or usage of trade; (iii) any obligation, liability, right, claim, or remedy in tort, whether or not arising from the negligence of Lessor, actual or imputed; and (iv) any obligation, liability, right, claim, or remedy for loss of or damage to the Aircraft, for loss of use, revenue, or profit with respect to the Aircraft, or for any other direct, indirect, incidental, or consequential damages.

13. **Truth in Leasing Disclosures**.

13.1. The parties hereto certify that a true copy of this Agreement shall be carried on the Aircraft at all times and shall be made available for inspection upon request by an appropriately constituted and identified representative of the Administrator of the FAA.

13.2. Lessor shall, for and on behalf of Lessor and Lessee, mail a copy of this Agreement by certified mail, return receipt requested, to: Federal Aviation Administration, Aircraft Registration Branch, Attn: Technical Section, P.O. Box 25724, Oklahoma City, Oklahoma 73125, within twenty-four (24) hours after execution of this Agreement.

13.3. At least forty-eight (48) hours before the first flight under this Agreement, Lessor shall, for and on behalf of Lessor and Lessee, comply with the notification requirements of Section 91.23(c)(3) of the FAR by notifying by telephone or in person the responsible Flight Standards office nearest the airport where such first flight will originate of the following: (i) the location of the airport of departure, (ii) the departure time, and (iii) the registration number of the Aircraft.

13.4. WITHIN THE TWELVE (12) MONTH PERIOD PRECEDING THE EFFECTIVE DATE, EXCEPT TO THE EXTENT THE AIRCRAFT IS LESS THAN TWELVE (12) MONTHS OLD, THE AIRCRAFT HAVE BEEN INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE FOLLOWING PROVISIONS OF FAR: FAR 91.409(F)(3) – A CURRENT INSPECTION PROGRAM RECOMMENDED BY THE MANUFACTURER.

13.5. THE PARTIES HERETO CERTIFY THAT, DURING THE TERM OF THIS AGREEMENT AND FOR ALL OPERATIONS CONDUCTED HEREUNDER, THE AIRCRAFT WILL BE MAINTAINED AND INSPECTED IN ACCORDANCE WITH THE PROVISIONS OF FAR 91.409(F)(3).

13.6. LESSOR, WHOSE ADDRESS APPEARS IN SECTION 10.1 ABOVE AND WHOSE AUTHORIZED SIGNATURE APPEARS BELOW, SHALL HAVE AND RETAIN OPERATIONAL CONTROL OF THE AIRCRAFT DURING ALL OPERATIONS CONDUCTED PURSUANT TO THIS AGREEMENT. EACH PARTY HERETO CERTIFIES THAT IT UNDERSTANDS THE EXTENT OF ITS RESPONSIBILITIES SET FORTH HEREIN FOR COMPLIANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS. AN EXPLANATION OF FACTORS BEARING ON OPERATIONAL CONTROL AND PERTINENT FEDERAL AVIATION REGULATIONS CAN BE OBTAINED FROM THE RESPONSIBLE FLIGHT STANDARDS OFFICE.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed effective as of the date first above written.

LESSOR:	**LESSEE**:
The Bank of New York Mellon	**Robin Vince**
By: /s/ Alejandro Perez	By: /s/ Robin Vince
Name: Alejandro Perez	Name: Robin Vince
Title: Chief Administrative Officer	Title: Chief Executive Officer

FORM OF PERFORMANCE SHARE UNIT AGREEMENT

THE BANK OF NEW YORK MELLON CORPORATION
LONG-TERM INCENTIVE PLAN
FORM OF NOTICE OF AWARD – PERFORMANCE SHARE UNITS – EXECUTIVE COMMITTEE US

Subject to the terms and conditions of The Bank of New York Mellon Corporation 2023 Long-Term Incentive Plan (the "**Plan**"), this Notice of Award - Performance Share Units – Executive Committee US (the "**Award Notice**"), and the Terms and Conditions of Performance Share Units – Executive Committee US (the "**Terms and Conditions**"), The Bank of New York Mellon Corporation (the "**Corporation**") grants you performance share units ("**PSUs**") as reflected below and on the Corporation's equity award website (the "**Equity Website**"). Each PSU represents the opportunity to receive one (1) share of the Corporation's common stock, par value $.01 ("**Common Stock**"), upon satisfaction of the terms and conditions as set forth in the Award Notice and the Terms and Conditions (collectively, the "**Award Agreement**"), subject to the terms of the Plan. The purpose of the award is to incentivize you to align your interests with that of the Corporation and to reward your future contribution to the performance of the Corporation's business.

Participant	[PARTICIPANT NAME]
Grant Date	[GRANT DATE]
Number of PSUs **The "Grant Amount" of "PSUs" (assuming achievement of 100% earnout)**	[NUMBER OF SHARES GRANTED]

Vesting Schedule – Please refer to Appendix. The vesting date may be delayed if and to the extent the Risk Adjustment Process set forth in Exhibit A is not completed by such date or achievement of performance as set forth on Attachment A have not been determined by such date, in each case, subject to Section 4.1 of the Terms and Conditions.
Risk Adjustment Process - Unvested PSUs are subject to forfeiture based upon the Risk Adjustment Process set forth in Exhibit A.

THE CORPORATION'S GRANT OF PSUs AS REFLECTED HEREIN IS CONTINGENT UPON YOUR ACKNOWLEDGEMENT AND ACCEPTANCE OF THE AWARD AGREEMENT AND THE PLAN ELECTRONICALLY ON THE EQUITY WEBSITE ON OR BEFORE [GRANT ACCEPT BY DATE] (THE "ACCEPTANCE DEADLINE"). IF YOU FAIL TO DO SO, THE CORPORATION'S GRANT OF PSUs AS REFLECTED HEREIN SHALL BE NULL AND VOID, AND SHALL NOT BE RE-INSTATED.

BY ELECTRONICALLY ACKNOWLEDGING AND ACCEPTING THE CORPORATION'S GRANT OF PSUS, YOU AFFIRMATIVELY AND EXPRESSLY AGREE:

(1) SUCH ACKNOWLEDGEMENT AND ACCEPTANCE CONSTITUTES YOUR ELECTRONIC SIGNATURE IN EXECUTION OF THE AWARD AGREEMENT

(2) TO BE BOUND BY THE PROVISIONS OF THE AWARD AGREEMENT AND THE PLAN INCLUDING WITHOUT LIMITATION ANY LOCATION SPECIFIC SPECIAL TERMS AND CONDITIONS SET FORTH IN THE ADDENDUM, AS DEFINED IN THE TERMS AND CONDITIONS

(3) YOU (A) HAVE REVIEWED THE AWARD AGREEMENT AND THE PLAN IN THEIR ENTIRETIES; (B) WERE GIVEN A REASONABLE TIME TO COMPLETE SUCH REVIEW; (C) HAVE BEEN ADVISED BY THE CORPORATION TO CONSULT WITH YOUR OWN ATTORNEY BEFORE ENTERING INTO THE AWARD AGREEMENT; (D) HAVE HAD AN OPPORTUNITY TO OBTAIN PROFESSIONAL LEGAL/TAX/INVESTMENT ADVICE PRIOR TO ACCEPTING THE PSUs; AND (E) FULLY UNDERSTAND ALL OF THE PROVISIONS OF THE AWARD AGREEMENT AND THE PLAN

(4) YOU HAVE BEEN PROVIDED WITH A COPY OR ELECTRONIC ACCESS TO A COPY OF THE PLAN AND THE U.S. PROSPECTUS FOR THE PLAN

(5) TO ACCEPT AS BINDING, CONCLUSIVE AND FINAL ALL DECISIONS OR INTERPRETATIONS OF THE CORPORATION UPON ANY QUESTIONS ARISING UNDER THE AWARD AGREEMENT AND THE PLAN

PARTICIPANT ACCEPTANCE DATE: [ACCEPTANCE DATE]

****

FORM OF EXHIBIT A
Risk Adjustment/Forfeiture Decision Process

For any performance year in which you remain a covered employee (including as an MRT), your risk performance will be assessed via a Risk Culture Summary Scorecard ("**RCSS**") Rating and/or a Performance Management Platform ("PMP") Risk Goal Rating, as applicable. If, in any year, you receive an RCSS Rating or a PMP Risk Goal Rating, as applicable, of "Partially Met Expectations" or "Did Not Meet Expectations," your unvested awards (including any accrued dividend equivalents) will be subject to review by the Incentive Compensation Review Committee ("**ICRC**") or the Human Resources and Compensation Committee of the Corporation's Board of Directors (the "**HRCC**") for consideration of forfeiture, as applicable. If you are no longer a covered employee (including as an MRT) or have left the Corporation, any unvested portion of your awards (including any accrued dividend equivalents) granted while you were a covered employee (including as an MRT) will also be subject to a risk review by the ICRC/HRCC.

In that event, as part of its review, the ICRC/HRCC will ask –

- Did your rating reflect poor risk behavior by you in a prior year?
- Did you receive an award in that year?

If the answer to both questions is yes, the ICRC/HRCC asks the following questions with respect to each of the designated prior years:

- Financial Impact: How much did/will the issue cost the Company?
- Reputational Impact: How much of a regulatory impact did/will it have on the Company?

The ICRC/HRCC selects the impact answer that falls into the highest category below to determine the impact forfeiture percentage.

Criteria	Metric	None	Low	Medium	High
Financial Impact					
Reputational Impact					

As used in this Exhibit A, the term "**Company**" shall mean the Corporation and its Affiliates.

Then the ICRC/HRCC asks how much, if any, control/responsibility you had regarding the situation. The answer to the last question determines the modifier to be applied to the impact forfeiture percentage.

Criteria	None	Indirect	Direct
Your role & responsibility			

Example *[Insert Example]*

THE BANK OF NEW YORK MELLON CORPORATION

FORM OF TERMS AND CONDITIONS
OF PERFORMANCE SHARE UNITS – EXECUTIVE COMMITTEE US

The Performance Share Units (“**PSUs**”) with respect to Common Stock of The Bank of New York Mellon Corporation (the “**Corporation**”) granted to you on the Grant Date are subject to the Notice of Award - Performance Share Units – Executive Committee US (the “**Award Notice**”), these Terms and Conditions of Performance Share Units – Executive Committee US (the “**Terms and Conditions**”) and all of the terms and conditions of The Bank of New York Mellon Corporation 2023 Long-Term Incentive Plan (the “**Plan**”), which is incorporated herein by reference. In the case of a conflict between the Award Notice, these Terms and Conditions and the terms of the Plan, the provisions of the Plan shall govern. A copy of the Plan can be found on the Corporation’s equity award website (the “**Award Website**”), NetBenefits.com, under “Quick Links.” Capitalized terms used but not defined herein shall have the same meaning as provided or reflected in the Award Notice or the Plan, as applicable. For purposes of these Terms and Conditions, “**Employer**” means the Corporation or any Affiliate that employs or employed you on the applicable date.

SECTION 1: <u>Performance Share Unit Award</u>

1.1 <u>Grant of Award</u>. Subject to these Terms and Conditions and the terms of the Plan, the Corporation grants you the number of PSUs as reflected in the Award Notice. The PSUs shall vest in accordance with the Vesting Schedule and shall be subject to the Risk Adjustment Process as reflected in the Award Notice.

1.2 <u>Dividend Equivalents</u>. During the period prior to vesting, dividend equivalents shall be determined with respect to the PSUs as if reinvested as additional PSUs on the dividend payment date and shall be paid to you pursuant to Section 4 of these Terms and Conditions only if and to the extent that the underlying PSUs become vested as provided in the Award Agreement, and any remaining dividend equivalents (including any PSUs resulting from dividend equivalents) shall be forfeited. In the event that you receive any additional PSUs as an adjustment with respect to the Grant Amount, such additional PSUs will be subject to the same restrictions as if granted under the Award Agreement as of the Grant Date and paid pursuant to Section 4 of this Agreement.

1.3 <u>No Voting Rights</u>. Prior to the settlement of your PSUs pursuant to these Terms and Conditions, you shall not be entitled to vote the shares of Common Stock underlying the PSUs.

1.4 <u>Nontransferable</u>. The PSUs shall be transferable only by will or the laws of descent and distribution. Any other attempt to transfer the PSUs shall be null and void.

SECTION 2: <u>Vesting, Performance Period, Forfeiture, Termination of Employment and Disability</u>

2.1 <u>Vesting, Performance Period and Forfeiture</u>.

(a) *Vesting*. Subject to Sections 3 and 5.4 of these Terms and Conditions, PSUs (as may be adjusted from the Grant Amount by reference to the performance goals and the Risk Adjustment Process) may be earned as set forth in Attachment A for the period *[Insert Performance Period]* (the “**Performance Period**”); provided that you remain continuously employed with your Employer through the end of the Performance Period; and provided further that unvested PSUs (including any PSUs arising from dividend equivalents) are subject to forfeiture based upon the Risk Adjustment Process each year and following completion of the Performance Period as set forth on Exhibit A. Notwithstanding anything to the contrary contained in the Award Agreement and in accordance with Section 4.1, a vesting may be delayed if, on the vesting date, you are the subject of ongoing disciplinary or performance management investigations or proceedings concerning circumstances under which forfeiture or clawback of this award could apply or such other actual or potential compensation recovery processes are ongoing under which forfeiture or clawback of this award could apply. In such cases, the applicable portion of the award, if any, will vest following the completion of such investigations, proceedings and/or processes to the extent the Corporation determines that forfeiture and/or clawback does not apply.

(b) *Forfeiture upon Termination of Employment*. Subject to Sections 2.2 and 2.3 of these Terms and Conditions, if you cease to be continuously employed with your Employer through the end of the Performance Period, you shall cease vesting in your PSUs as of your Termination Date and any unvested PSUs (including any PSUs resulting from dividend equivalents) immediately shall terminate and be forfeited, except in situations where vesting would have occurred but for the fact that a determination has not yet been made as to whether a risk adjustment pursuant to Exhibit A is required, in which case vesting shall occur in accordance with the terms of the Award Agreement provided that the Committee determines the effect, if any, of a risk adjustment. As used herein, "**Termination Date**" shall mean the last day on which you are an employee of your Employer.

(c) *Forfeiture upon Termination of Employment for Cause*. Notwithstanding anything to the contrary contained in these Terms and Conditions, if your Employer terminates your employment for Cause, your PSUs, whether vested (but unsettled) or unvested, and including any dividend equivalent rights (including any PSUs resulting from dividend equivalents), immediately shall terminate and be forfeited. For purposes of these Terms and Conditions, "**Cause**" shall mean:

(i) you have been convicted of, or have entered into a pretrial diversion or entered a plea of guilty or nolo contendere (plea of no contest) to a crime or offense constituting a felony (or its equivalent under applicable laws outside of the United States), or to any other crime or offense involving moral turpitude, dishonesty, fraud, breach of trust, money laundering, or any other offense that may preclude you from being employed with a financial institution;

(ii) you are grossly negligent in the performance of your duties or have failed to perform the duties of your employment, including, without limitation, failure to comply with any lawful directive from your Employer or the Corporation, other than by reason of incapacity due to disability or from any permitted leave of absence required by law;

(iii) you have violated the Corporation's Code of Conduct or any of the policies of the Corporation or your Employer governing the conduct of business or your employment, including without limitation, those relating to discrimination and retaliation;

(iv) you have engaged in any misconduct which has the effect or potential of being injurious to the Corporation, any Affiliate or your Employer, including, but not limited to, its reputation;

(v) you have engaged in an act of fraud or dishonesty, including, but not limited to, taking or failing to take actions intending to result in personal gain; or

(vi) if you are employed outside the United States, any other circumstances (beyond those listed above) that permit the immediate termination of your employment without notice or payment in accordance with the terms of your employment agreement or Applicable Laws (as defined in Section 5.2).

The determination of whether your actions will be considered Cause for purposes of these Terms and Conditions will be determined by the Corporation or any of its Affiliates, at its or their sole discretion, as applicable. Any determinations of Cause will be considered conclusive and binding on you.

2.2 Specified Terminations of Employment.

(a) *Death*. If you cease to be continuously employed with your Employer by reason of your death prior to the date that your PSUs become fully vested, all unvested PSUs may vest as provided in Section 2.1(a) above following completion of the Performance Period and the balance of the PSUs that do not vest with respect to the Performance Period shall be deemed forfeited at the end of the Performance Period. In such case, the Corporation will issue your legal representative or your estate the vested PSUs settled in shares of Common Stock in accordance with Section 4.

[(b) *Retirement Rule.* If you cease to be continuously employed with your Employer by reason of your retirement as determined by your Employer (i) on or after your attainment of age 60, and (ii) the combination of your age and years of credited employment with your Employer (in both instances, full and partial years) on your Termination Date equals or exceeds 65 (a "**Retirement-Eligible Event**"), all unvested PSUs may vest as provided in Section 2.1(a) above following completion of the Performance Period, so long as you fully comply with the applicable covenants provided in Section 3 hereof and provided that, if requested by your Employer, you execute and do not revoke a Transition/Separation Agreement and Release acceptable to your Employer. The balance of the PSUs that do not vest with respect to the Performance Period shall be deemed forfeited at the end of the Performance Period. As a condition for continued vesting of your PSUs (including any PSUs resulting from dividend equivalent rights) following a Retirement-Eligible Event, the Corporation and/or your Employer may require you to periodically certify your compliance with the covenants set forth in Section 3 of these Terms and Conditions as more fully described in such Section. For purposes of the foregoing, partial years shall be determined based upon the number of days since your prior birthday or the number of days of credited employment since your prior employment anniversary, as the case may be. Notwithstanding the foregoing, in the case of continued vesting following a Retirement-Eligible Event, if you commence employment with a new employer that grants you a new award that replaces all or any portion of this award, any portion of this award that has been replaced by your new employer will be forfeited and will no longer vest and, where relevant, will be promptly repaid by you if the award or any portion of this award has already vested.]

(c) *Termination Providing Transition/Separation Pay.* Provided that you execute and do not revoke a Transition/Separation Agreement and Release acceptable to your Employer, if you cease to be continuously employed with your Employer by reason of a termination by your Employer (or such other termination of employment that qualifies you for transition/separation pay under a plan, program or policy of the Corporation or your Employer) and in connection with such termination you receive transition/separation pay from the Corporation or your Employer, all unvested PSUs may vest as provided in Section 2.1(a) above following completion of the Performance Period so long as you fully comply with the applicable covenants provided in Section 3 hereof. As a condition for continued vesting of your PSUs, the Corporation and/or your Employer may require you to periodically certify your compliance with the covenants set forth in Section 3 of these Terms and Conditions as more fully described in such Section. The balance of the PSUs that do not vest with respect to the Performance Period shall be deemed forfeited at the end of the Performance Period. For purposes of the foregoing, "**transition/separation pay**" means any severance, redundancy or ex-gratia compensation payment to you from the Corporation or your Employer in connection with your termination of employment that is in excess of the amount payable to you on account of any notice period to which you are entitled pursuant to the terms of your contract of employment or otherwise (or payment in lieu of such notice).

(d) *Sale of Business*. If you cease to be continuously employed with your Employer due to a sale of a business unit or your Employer and you are not otherwise entitled to transition/separation pay, all unvested PSUs may vest as provided in Section 2.1(a) above following completion of the Performance Period so long as you fully comply with the applicable covenants provided in Section 3 hereof. The balance of the PSUs that do not vest with respect to the Performance Period shall be deemed forfeited at the end of the Performance Period.

(e) *Change in Control*. If your employment is terminated by your Employer without Cause within two (2) years after a Change in Control occurring after the Grant Date, and your PSU award is assumed, substituted or replaced in connection with such Change in Control, all unvested PSUs may vest as provided in Section 2.1(a) above following completion of the Performance Period so long as you fully comply with the applicable covenants provided in Section 3 hereof. The balance of the PSUs that do not vest with respect to the Performance Period shall be deemed forfeited at the end of the Performance Period. In the event that your PSU award is not assumed, substituted or replaced in connection with a Change in Control occurring after the Grant Date including if such a Change in Control occurs following termination of employment, your unvested PSUs, including any dividend equivalent rights, will become fully vested as of the date of the Change in Control (such date then being the vesting date) and will be settled in cash, shares or a combination thereof, as determined by the Committee (except to the extent that settlement of your PSUs must remain payable on the vesting date as reflected in the Award Notice in order to comply with Section 409A or other Applicable Laws).

(f) *Termination of Employment Prior to the Grant Date*. If your Termination Date (as defined in Section 2.1(b) above) occurred prior to the Grant Date for this award, you agree that any references to you as an "employee" and "employment" in the Award Agreement means the period of time during which you were still an employee of the Corporation or any of its Affiliates.

[Additional Vesting Provisions, if any.]

2.3 Disability. If you receive current benefits under a long-term disability plan maintained by the Corporation or your Employer while any portion of your PSUs remains unvested, all unvested PSUs will remain eligible to vest as provided in Section 2.1(a) above following completion of the Performance Period so long as you are eligible to receive such benefits provided you fully comply with the applicable covenants provided in Section 3 hereof. The balance of the PSUs that do not vest with respect to the Performance Period shall be deemed forfeited at the end of the Performance Period.

SECTION 3: Notice of Resignation, Non-Solicitation, Non-Competition, Confidential Information, Non-Disparagement and Cooperation

3.1 Notice of Resignation. As consideration for this award, you will provide your Employer with 180 days' advance written notice of any voluntary termination of your employment with your

Employer or such longer period as may be set forth in any other agreement that you may have with the Corporation or your Employer or any policy of the Corporation or of your Employer.

3.2 Non-Solicitation of Clients, Contractors and Employees; Non-Competition.

To protect the Corporation's and its Affiliates' legitimate business interests, including its confidential information and goodwill, and for the good and valuable consideration offered pursuant to the Award Agreement, which is in excess of any consideration you are otherwise entitled to receive, and to the maximum extent permitted by Applicable Laws, you agree as follows:

(a) *Non-Solicitation of Clients, Contractors and Employees*. Your PSUs, whether vested (but unsettled) or unvested, and including any PSUs resulting from dividend equivalent rights, shall be immediately forfeited if, prior to one (1) year from the Termination Date or, if later, the final vesting date set forth in the Award Notice (the "**Restricted Period**"), you directly or indirectly: (i) solicit, divert or appropriate, or attempt to solicit, divert or appropriate for the benefit of any Competitive Enterprise any client or prospective client of the Corporation or an Affiliate with whom you had contact, or with respect to whom you obtained or had access to Confidential Information, or whose identity you learned, during your employment with your Employer; (ii) interfere with, disrupt or attempt to disrupt any relationship, contractual or otherwise, between the Corporation or an Affiliate and any of its respective clients or prospective clients with whom you had contact, or with respect to whom you obtained or had access to Confidential Information, or whose identity you learned, during your employment with your Employer, or otherwise cause, induce or encourage any such client to diminish or terminate its relationship with the Corporation or an Affiliate; or (iii) hire or employ any employee or contractor of the Corporation or an Affiliate, or influence, solicit or induce such an individual or entity to terminate or diminish their employment or engagement, whichever is applicable, with the Corporation or an Affiliate. For purposes of the Award Agreement, "**prospective clients**" means any person or entity with whom the Corporation or an Affiliate is or was engaged for the purposes of entering into a client or business relationship within the twelve (12) months preceding your Termination Date. During the Restricted Period, you agree to (i) advise any person or entity that seeks to employ you of the terms of these covenants; and (ii) immediately notify People Team equity administration if you are not in compliance with your obligations above.

(b) *Non-Competition*. Your PSUs, whether vested (but unsettled) or unvested, and including any PSUs resulting from dividend equivalent rights, shall be immediately forfeited if, after your separation from employment with the Corporation or its Affiliates by reason of your (i) Retirement-Eligible Event or (ii) termination providing transition/separation pay as specified in Sections 2.2(b) and 2.2(c) respectively, and before the end of the Restricted Period, you, directly or indirectly (without the prior written consent of the Corporation), (i) associate (including as a director, officer, employee, partner, consultant, investor, agent or advisor) with a Competitive Enterprise, or (ii) transact business on behalf of a Competitive Enterprise. For purposes of the Award Agreement, "**Competitive Enterprise**" means any business enterprise, person or entity: (i) that is a member of any of the Corporation's competitive peer groups as disclosed in the Corporation's proxy statement that was most recently filed with the Securities and Exchange Commission preceding the Termination Date; or (ii) that is otherwise engaged in or is undertaking efforts to engage in any actual or planned or substantially similar service offering of the Corporation or the Affiliate, product line of the Corporation or the Affiliate, or any other business of the Corporation or an Affiliate within the two (2) years preceding your Termination Date; or (iii) for whom you would otherwise be performing services through which you would disclose or inevitably disclose Confidential Information. However, nothing in the Award Agreement shall preclude you from investing your personal assets in the securities of any Competitive Enterprise if such securities are (i) traded on a national stock exchange or in the over-the-counter market and if such investment is as a passive investor and if such investment does not result in you beneficially owning, at any time, more than five (5%) of the publicly-traded equity securities of such competitor; or (ii) not traded on a national stock exchange or in the over-the-counter market and if such investment is as a passive investor and such investment does not result in you beneficially owning, at any time, more than five (5%) of any class of equity securities of such competitor. You acknowledge and agree that the Corporation's and its Affiliates' business is global in nature, and in light of your executive level role and responsibilities and your access to Confidential Information concerning the Corporation's and its Affiliates' global operations, in providing your services to your Employer you will have a material presence or influence on behalf of your Employer throughout the world. You further acknowledge and agree that, in light of current technology, your services and the business of any Competitive Enterprise can be conducted anywhere in the world.

For the sake of clarity, the foregoing non-compete restriction does not prohibit you from being employed by the government or a not-for profit organization (i.e. an organization exempt from local and national tax laws). In view of the limited scope of the non-compete obligation assumed under this Section, which does not prevent you from working in other entities that are not affected by it, you acknowledge and agree that: (i) the foregoing non-compete obligation is reasonable and necessary to protect the Corporation's and its Affiliates' legitimate business interests including its confidential information and goodwill, and (ii) the ability to continue to vest in your PSUs, including any PSUs resulting from dividend equivalent rights, following a Retirement-Eligible Event or termination providing transition/separation pay is fair and reasonable consideration for the foregoing non-compete obligation. During the Restricted Period, you further agree to (i) advise any person or entity that seeks to employ you of the terms of these covenants; and (ii) immediately notify People Team equity administration if you are not in compliance with your obligations above (i.e., if you begin to associate with or transact business on behalf of a Competitive Enterprise).

3.3 Confidential Information.

(a) Except as may be permitted in accordance with Section 3.6 below, during the course of your employment with the Corporation or any Affiliate and continuing thereafter, you will maintain in secrecy all Confidential Information of the Corporation and its Affiliates and will not, either directly or indirectly, at any time, while an employee of the Corporation or any Affiliate or thereafter, make known, divulge, reveal, furnish, make available, disclose, appropriate or use (except for use in the regular course of your duties for the Corporation or its Affiliates) any Confidential Information (as defined below) without the written consent of the Corporation. Upon the Termination Date, or any time the Corporation makes a request, you will deliver promptly to the Corporation all Confidential Information and all copies of Confidential Information, or any analyses, compilations, summaries, studies, or other documents based, in whole or in part, upon the Confidential Information and, to the extent any Confidential Information is stored on any PDA or personal computer, cloud, email account or other storage device, you will fully cooperate with the Corporation or its Affiliates to return and permanently delete all such Confidential Information from such devices. Upon the Corporation's request, you agree to provide access to any such device(s) to the Corporation or a third-party vendor selected by the Corporation to assist with such identification and removal of Confidential Information and Corporation material in a manner that includes steps to protect your personal information. Upon the Corporation's request at any time, you will certify in writing to the Corporation that no Confidential Information or any analyses, compilations, summaries, studies, or other documents based, in whole or in part, upon the Confidential Information, remains in your possession or control. You also agree that this obligation is in addition to, and not in limitation or preemption of, all other obligations of confidentiality that you may have to the Corporation or its Affiliates under the Code of Conduct, Securities Trading Policy or other rules or policies governing the conduct of their respective businesses, or general or specific legal or equitable principles.

(b) As used herein, "**Confidential Information**" means the information you have been given or to which you have access or become informed of, directly or indirectly, which the Corporation or its Affiliates possess or have access and which relates to the Corporation or its Affiliates, is not generally known to the public or in the trade or is a competitive asset and/or otherwise constitutes a "trade secret," as that term is defined by Applicable Laws, of the Corporation or its Affiliates, including without limitation, non- public: (i) planning data and marketing strategies, including marketing ideas, mailing lists, and sales and marketing plans; (ii) terms of any new products and investment strategies; (iii) information relating to other officers and employees of the Corporation or its Affiliates, including personal information, social security numbers, medical information, addresses, and telephone numbers; (iv) financial results and information about the business condition of the Corporation or its Affiliates, including results and data about Corporation conditions, operations, strategies and plans, pending projects and proposals, and potential acquisitions or divestitures; (v) terms of any investment, management or advisory agreement or other material contract; (vi) proprietary software and other product or technical information, including product formulations, new product ideas, new business developments, plans, designs, compilations, methods, processes, procedures, program devices, data or market information processing programs, hardware firmware, research and development products, and related documents and information; (vii) customer and potential customer information, including client lists, prospecting lists, information about client accounts, pricing strategies, and current or proposed transactions and contact persons at such customers and customer prospects); and (viii) material information or internal analyses concerning customers or customer prospects of the Corporation or its Affiliates or their respective operations, condition (financial or otherwise) or plans. Confidential Information does not include information which: (i) was or becomes generally available to the public other than as a result of disclosure by you or any of your agents, advisors or representatives or the wrongdoing of a third party; (ii) was within your possession prior to its being furnished to you by or on behalf of the Corporation or its Affiliates, provided that the source of the information was not bound by a confidentiality agreement with the Corporation or otherwise prohibited from transmitting the information to you by a contractual, legal or fiduciary obligation or otherwise wrongfully came into possession of such information; or (iii) was or becomes available to you on a non-confidential basis from a source other than the Corporation or its Affiliates, provided that such source is not bound by a confidentiality agreement with the Corporation or otherwise prohibited from transmitting the information to you by a contractual, legal or fiduciary obligation or otherwise wrongfully came into possession of such information.

(c) You acknowledge and agree that the Confidential Information is not generally known or available to the general public; has been developed, compiled, and/or acquired by the Corporation or its Affiliates at their great effort and expense; and includes such information as it exists in any form, including written, oral, electronic, digital or other form. You further acknowledge that disclosing, divulging, revealing or using any Confidential Information, other than on behalf of the Corporation and its Affiliates, would be highly detrimental to the Corporation and its Affiliates, and that immediate and irreparable harm to the Corporation and its Affiliates, including loss of business and financial damage, would result therefrom.

3.4 Non-Disparagement. Subject to Section 3.6 below, during the course of your employment with the Corporation or any Affiliate and continuing thereafter, you will not, directly or indirectly make, issue, authorize or publish any comments or statements (orally or in writing) to the media, including without limitation traditional vehicles and social media, to any individual or entity with whom or which the Corporation, or any of its Affiliates, has a business relationship, or to any other individual or entity, which disparages, criticizes or otherwise reflects adversely upon the Corporation, any of its Affiliates or any of their respective employees, officers or directors.

3.5 Cooperation. Upon the termination of your employment for any reason or no reason, including but not limited to resignation of employment, you will fully cooperate with the Corporation and its Affiliates upon reasonable notice and at reasonable times, in the prosecution and defense of complaints, investigations, litigation, arbitration and mediation of any complaints, claims or actions now in existence or that may be threatened or brought in the future relating to events or occurrences that transpired while employed by the Corporation or any Affiliate.

3.6 Governmental Authorities. Nothing in the Award Agreement prohibits or interferes with your right to disclose any relevant and necessary information in any action or proceeding relating to the Award Agreement or as otherwise required by law or legal process. In addition, nothing in the Award Agreement prohibits or interferes with your or your attorney's right: (a) to initiate communications directly with or report or disclose possible violations of law or regulation to, any governmental agency or entity, legislative body, or any self-regulatory organization, including but not limited to the U.S. Department of Justice ("**DOJ**"), the U.S. Securities and Exchange Commission ("**SEC**"), the U.S. Financial Industry Regulatory Authority ("**FINRA**"), the U.S. Equal Employment Opportunity Commission ("**EEOC**"), or U.S. Congress, and such reports or disclosures do not require prior notice to, or authorization from, the Corporation; (b) to participate, cooperate, or testify in any action, investigation or proceeding with, provide information to, or respond to any inquiry from any governmental agency or legislative body, any self-regulatory organization, including but not limited to the IRS, SEC, FINRA, the EEOC, DOJ, U.S. Congress ("**Governmental Authorities**"), or the Corporation's Legal or Compliance Departments and such communications do not require prior notice to, or authorization from the Corporation. However, with respect to such communications, reports, participation, cooperation or testimony to the Governmental Authorities, as set forth above in clauses (a) and (b) of this Section, you may not disclose privileged communications with the Corporation's counsel. To the extent permitted by law, upon receipt of a subpoena, court order or other legal process compelling the disclosure of any information, you will give prompt written notice to the Corporation so as to provide the Corporation ample opportunity to protect its interests in confidentiality to the fullest extent possible unless the subpoena, court order or other legal process pertains to an action described above in clauses (a) or (b) of this Section, in which event no such notice is required. Notwithstanding any confidentiality and non-disclosure obligations you may have, you are hereby advised as follows pursuant to the U.S. Federal Defend Trade Secrets Act of 2016: "An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that (A) is made (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. An individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding, if the individual (A) files any document containing the trade secret under seal; and (B) does not disclose the trade secret, except pursuant to court order."

3.7 Periodic Certification of Compliance. In connection with your separation from employment with the Corporation or its Affiliates, upon request by your Employer, you agree to periodically certify your compliance with the covenants set forth in this Section 3 through the end of the Restricted Period. If you fail to provide any such certification(s) as requested by your Employer, the

PSUs whether vested (but unsettled) or unvested, and including any PSUs resulting from dividend equivalent rights, shall be immediately forfeited.

3.8 Existing Obligations. The terms of the Award Agreement shall not in any way (a) limit your obligations pursuant to any other agreements with the Corporation or any of its Affiliates or other corporate plans or policies applicable to you; or (b) limit the Corporation's or your Employer's rights to exercise any remedies it may have under Applicable Laws or under the terms of such other agreements, plans or policies.

3.9 Failure to Comply with Covenants. If you fail to comply with any of the foregoing applicable covenants, the PSUs, whether vested (but unsettled) or unvested, and including any PSUs resulting from dividend equivalent rights, shall be immediately forfeited and may be subject to repayment as provided in Section 5.4 of these Terms and Conditions. The Corporation and any Affiliate that employs or employed you on the applicable date has the right to enforce Section 3 of these Terms and Conditions.

SECTION 4: Settlement

4.1 Time of Settlement.

(a) *Time of Settlement*. Vested PSUs shall be settled within two and one-half (2 ½) months following the end of the Performance Period, contingent upon the Committee's determination of the earnout achieved and subject to the individual per-employee limitations included in the Plan; *provided,* if you are a "specified employee" under Section 409A of the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), upon separation from service and if such settlement is deferred compensation conditioned upon a separation from service and not compensation you could receive without separating from service, then settlement shall not be made until the first day following the six (6) month anniversary of your separation from service (or upon your death, if earlier).

(b) *Acceleration Due to Conflicts of Interest or Ethics Laws (Governmental Service).* Notwithstanding Section 4.1(a), the Corporation may accelerate the vesting and settlement of all or part of your outstanding PSUs if each of the following conditions are satisfied: (i) you cease to be continuously employed with your Employer by reason of an event described in Section 2.2(b), (c), (d), or (e); (ii) pursuant to such section, you continue to vest in your PSUs following your Termination Date; (iii) following your Termination Date, you become employed by a Governmental Employer; and (iv) you present the Corporation with satisfactory evidence demonstrating that as a result of such employment with a Governmental Employer, the divestiture of your PSUs is reasonably necessary to avoid the violation of United States federal, state or local conflicts of interest or ethics law applicable to you; provided that, no accelerated distribution shall occur pursuant to this Section 4.1(b) unless the Corporation determines that such acceleration is consistent with Treasury Regulation Section 1.409A-3(j)(4)(iii)(B). In the event that the Corporation determines to accelerate the vesting and settlement of your PSUs in accordance with this Section 4.1(b), the number of PSUs which shall be vested and settled shall be equal to the lesser of (I) the number of PSUs that would have vested in accordance with the applicable subsection of Section 2.2 if Performance Goals were achieved resulting in a final earnout percentage of 100% (target), (II) the number of PSUs that would have vested in accordance with the applicable subsection of Section 2.2 if the Performance Period ended with the last Corporation quarter ending simultaneously with or before your commencement of employment at a Governmental Employer for which the respective Form 10-K or Form 10-Q has been filed with the SEC (or such other date as determined by the Corporation in its discretion for which performance results are readily ascertainable), subject to any adjustments as determined by the Corporation in its discretion in light of the truncated Performance Period, or (III) such other amount as determined by the Corporation in its sole discretion. In the event that vesting and settlement of the PSUs are accelerated pursuant to this Section 4.1(b), you shall remain subject to these Terms and Conditions as if the PSUs had remained outstanding through the original vesting date and had been settled in accordance with Section 4.1(a), including, but not limited to, for purposes of (A) determining the duration of the Restricted Period set forth in Section 3.2 (so that the Restricted Period shall be determined based on the originally scheduled vesting date without regard to any acceleration) and (B) determining whether the PSUs have been settled for purposes of Section 3.9 (so that the PSUs shall not be deemed to have been vested or settled until the date on which they would have been vested or settled (as applicable) without regard to acceleration under this Section 4.1(b)). In the event that the settlement of the PSUs is accelerated in accordance with this Section 4.1(b), upon such settlement, you shall cease to have any further rights with respect to your PSUs, and for the avoidance of doubt, any PSUs which are not settled shall be deemed immediately forfeited. As a condition for acceleration pursuant to this Section 4.1(b), the Corporation may require that you sign an agreement satisfactory to the Corporation addressing the circumstances of such acceleration and acknowledging these Terms and Conditions. For purposes of this Section 4.1(b), "Governmental Employer" means a United States federal, state or local governmental agency, branch, department, or entity and any court or other tribunal.

4.2 Form of Settlement. PSUs, including any PSUs resulting from dividend equivalents, shall be settled in the form of Common Stock delivered in book-entry form, except as determined by the Committee as provided in Section 2.2(e). Notwithstanding the foregoing, and except as determined by the Committee as provided in Section 2.2(e), the Corporation may, in its sole discretion, (a) settle any vested PSUs in the form of a cash payment, or (b) settle any vested PSUs in the form of Common Stock but require an immediate sale of such shares of Common Stock (in which case, these Terms and Conditions shall give the Corporation the authority to issue sales instructions on your behalf).

SECTION 5: Other Terms and Conditions

5.1 No Right to Employment. Neither the award of PSUs nor anything else contained in these Terms and Conditions nor the Plan shall be deemed to limit or restrict the right of your Employer to terminate your employment at any time, for any reason, with or without Cause.

5.2 Compliance with Laws. Notwithstanding any other provision of these Terms and Conditions, you agree to take any action, and consent to the taking of any action by the Corporation and your Employer with respect to the PSUs awarded hereunder necessary to achieve compliance with applicable laws, regulations or relevant regulatory requirements or interpretations in effect from time to time ("**Applicable Laws**"). Any determination by the Corporation in this regard shall be final, binding and conclusive. The Corporation shall in no event be obligated to register any securities pursuant to the U.S. Securities Act of 1933 (as the same shall be in effect from time to time) or other applicable foreign securities laws, or to take any other affirmative action in order to cause the delivery of shares in book-entry form or otherwise therefore to comply with any Applicable Laws. For the avoidance of doubt, you understand and agree that if any payment or other obligation under or arising from these Terms and Conditions, including without limitation dividend equivalent rights, or the Plan is in conflict with or is restricted by any Applicable Laws, the Corporation may reduce, revoke, cancel, clawback or impose different terms and conditions to the extent it deems necessary or appropriate, in its sole discretion, to effect such compliance. If the Corporation determines that it is necessary or appropriate for any payments under these Terms and Conditions to be delayed in order to avoid additional tax, interest and or penalties under Section 409A of the Code, then the payments would not be made before the date which is the first day following the six (6) month anniversary of the date of your termination of employment (or upon earlier death).

5.3 Tax Withholding. Regardless of any action the Corporation or your Employer take with respect to any or all income tax (including U.S. federal, state and local taxes or non-U.S. taxes), social insurance, payroll tax, payment on account or other tax-related withholding ("**Tax-Related Items**"), you acknowledge that the ultimate liability for all Tax-Related Items legally due by you is and remains your responsibility and that the Corporation and your Employer (a) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the PSUs, including the grant of the PSUs, the vesting of the PSUs, the subsequent sale of any shares of Common Stock acquired pursuant to the PSUs and the receipt of any dividends or dividend equivalents (including any PSUs resulting from dividend equivalents), and (b) do not commit to structure the terms of the grant or any aspect of the PSUs to reduce or eliminate your liability for Tax-Related Items. Further, if you are or become subject to taxation in more than one country you acknowledge that the Corporation and/or your Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one country.

Prior to the delivery of shares of Common Stock upon the vesting of your PSUs, if your country of residence (and/or the country of employment, if different) requires withholding or payment of Tax-Related Items, the Corporation shall be authorized to withhold a sufficient number of whole shares of Common Stock otherwise issuable upon the vesting of the PSUs that have an aggregate Fair Market Value sufficient to pay the Tax-Related Items required to be withheld with respect to the shares of Common Stock. The cash equivalent of the shares of Common Stock withheld will be used to settle the obligation to withhold the Tax-Related Items. In the event that withholding in shares of Common Stock is prohibited or problematic under Applicable Laws or otherwise may trigger adverse consequences to the Corporation or your Employer, your Employer is authorized to withhold the Tax-Related Items required to be withheld with respect to the shares of Common Stock in cash from your regular salary and/or wages or any other amounts payable to you. In the event the withholding requirements are not satisfied through the withholding of shares of Common Stock by the Corporation or through your regular salary and/or wages or other amounts payable to you by your Employer, no shares of Common Stock will be issued to you (or your estate) upon vesting of the PSUs unless and until satisfactory arrangements have been made by you with respect to the payment of any Tax-Related Items that the Corporation or your Employer determines, in its sole discretion, must be withheld or collected with respect to such PSUs. By accepting this grant of PSUs, you expressly consent to the withholding of shares of Common Stock and/or withholding from your regular salary and/or wages or other amounts payable to you as provided for hereunder. All other Tax-Related Items related to the PSUs and any shares of Common Stock delivered in payment thereof are your sole responsibility. Without limiting the Corporation's or your Employer's authority to satisfy their withholding obligations for Tax-Related Items as set forth herein, by accepting this grant of PSUs, you authorize the Corporation and/or your Employer to withhold shares of Common Stock otherwise deliverable to you upon vesting of your PSUs to satisfy Tax-Related Items, regardless of whether the Corporation and/or your Employer have an obligation to withhold such Tax-Related Items.

The Corporation or your Employer may withhold or account for Tax-Related Items by considering applicable statutory or other withholding rates, including minimum or maximum rates applicable in your jurisdiction(s). In the event of over-withholding, you may receive a refund of any over-withheld amount in cash (with no entitlement to the equivalent in Common Stock). In the event of under-withholding, you may be required to pay any additional Tax-Related Items directly to the applicable tax authority or to the Corporation and/or your Employer. If the obligation for Tax-Related Items is satisfied by withholding in shares of Common Stock, you shall be deemed to have been issued the full number of shares of Common

Stock subject to the vested PSUs, notwithstanding that a number of the shares of Common Stock are held back solely for the purpose of paying the Tax-Related Items.

5.4 Forfeiture and Repayment. If, directly or indirectly:

(a) during the course of your employment with your Employer, you violate any obligations set forth in the Award Agreement (including without limitation those obligations set forth in Section 3 of these Terms and Conditions) or engage in conduct or it is discovered that you engaged in conduct that is adverse to the interests of the Corporation or its Affiliates, including but not limited to failures to comply with the Corporation's or any of its Affiliate's rules or regulations, fraud, or conduct contributing to any financial restatements or irregularities;

(b) during the course of your employment with your Employer, you engage (other than for the benefit of the Corporation or its Affiliates) in solicitation and/or diversion of customers or employees;

(c) during the course of your employment with your Employer, you engage in competition with the Corporation or its Affiliates;

(d) following termination of your employment with your Employer for any reason, with or without Cause, you violate any post-termination obligations or duties owed to the Corporation or its Affiliates under any agreement with the Corporation or its Affiliates, including without limitation, any employment, confidentiality, non-solicitation, non-competition or other agreement restricting post-employment conduct (including without limitation those obligations set forth in Section 3 of these Terms and Conditions); or

(e) any compensation that the Corporation or its Affiliates has promised or paid to you is required to be forfeited and/or repaid to the Corporation or its Affiliates pursuant to applicable regulatory requirements;

then the Corporation may cancel all or any portion of the PSUs and/or require repayment of any sums (including, in the case of shares of Common Stock, the value of those shares of Common Stock) or other amounts which were acquired pursuant to the PSUs (including without limitation any dividends paid on the shares of Common Stock and dividend equivalents). The Corporation shall have sole discretion to determine what constitutes grounds for forfeiture and/or repayment under this Section 5.4, and, in such event, the portion of the PSUs that shall be cancelled and the sums or amounts that shall be repaid. For purposes of the foregoing, you expressly and explicitly authorize the Corporation to issue instructions, on your behalf, to any brokerage firm and/or third party administrator engaged by the Corporation to hold the shares of Common Stock and other amounts acquired pursuant to the PSUs to re-convey, transfer or otherwise return such shares and/or other amounts to the Corporation.

For the avoidance of doubt, the Corporation will also cancel all or any portion of the PSUs and/or require repayment of any shares of Common Stock (or the value thereof) and other amounts which were acquired pursuant to the PSUs (including without limitation any dividends paid on the shares of Common Stock and dividend equivalents) as required by Applicable Laws and/or the Corporation's Policy for the Recovery of Erroneously Awarded Incentive-Based Compensation (the "**Recovery Policy**"), if applicable. To the extent that you are subject to the Recovery Policy, you agree that, notwithstanding the terms of any indemnification arrangement or insurance policy, the Corporation shall not indemnify you against the loss of erroneously awarded Incentive-Based Compensation (as defined in the Recovery Policy), including any payment or reimbursement for the cost of insurance obtained by you to fund amounts recoverable under the Recovery Policy. In order to satisfy any recoupment obligation arising under any clawback or recovery policy of the Corporation or otherwise under Applicable Laws, you expressly and explicitly authorize the Corporation to issue instructions, on your behalf, to any brokerage firm or stock plan service provider engaged by the Corporation to hold any shares of Common Stock or other amounts acquired pursuant to the PSUs to re-convey, transfer or otherwise return the shares of Common Stock and/or other amounts to the Corporation upon the Corporation's enforcement of any clawback or recovery policy or Applicable Laws.

5.5 Governing Law and Choice of Forum. The Award Agreement shall be construed and enforced in accordance with the laws of the State of New York, other than any choice of law provisions calling for the application of laws of another jurisdiction. For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this grant or the Award Agreement, the parties hereby submit to and consent to the exclusive jurisdiction of the State of New York and agree that such litigation shall be conducted only in the courts of New York County, New York, or the federal courts for the United States for the Southern District of New York, and no other courts, where this grant is made and/or to be performed and agree to such other choice of forum provisions as are included in the Plan.

5.6 Nature of Plan. By participating in the Plan, you acknowledge, understand and agree that:

(a) The Plan is discretionary in nature and limited in duration, and may be amended, cancelled, or terminated by the Corporation, in its sole discretion, at any time.

(b) The grant of PSUs under the Plan is a one-time benefit and does not create any contractual or other right to receive PSUs or benefits in lieu of such awards in the future. Future awards, if any, will be at the sole discretion of the Corporation, including, but not limited to, the form and timing of the award, the number of shares of Common Stock subject to the award, the vesting provisions applicable to the award and the purchase price (if any).

(c) Your participation in the Plan is voluntary, and the value of your PSUs is an extraordinary item of compensation and is outside the scope of your employment (and your employment contract, if any). As such, your PSUs are not part of normal or expected compensation for purposes of calculating any severance, resignation, redundancy, dismissal, termination or end of service payments, bonuses, long-service awards, pension or retirement benefits, or similar payments.

(d) No claim or entitlement to compensation or damages shall arise from forfeiture of the PSUs or recoupment of any shares of Common Stock acquired under the Plan resulting from (i) the termination of your employment or other service relationship (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any) and/or (ii) the application of any recoupment policy or any recovery or clawback policy otherwise required by law. **In consideration of the grant of the PSUs, you expressly agree not to institute any such claim against the Corporation, any of its Affiliates or your Employer.**

5.7 ***Data Privacy. By accepting the PSUs, you declare that you agree with the data processing practices described herein and consent to the collection, processing and use of your Personal Data (as defined below) by the Corporation and the transfer of your Personal Data to the recipients mentioned herein, including recipients located in countries which do not adduce an***

adequate level of protection from a European (or other non-U.S.) data protection law perspective, for the purposes described herein.

(a) <u>Declaration of Consent</u>. You understand that you need to review the following information about the processing of your personal data by or on behalf of the Corporation, your Employer and/or any of its Affiliates, as described herein, and any other PSU grant materials (the "Personal Data") and declare your consent. With regard to the processing of your Personal Data in connection with the Plan, you understand that the Corporation is the controller of the Personal Data.

(b) <u>Data Processing and Legal Basis</u>. The Corporation collects, uses and otherwise processes your Personal Data for the purposes of allocating shares and implementing, administering and managing the Plan. You understand that this Personal Data may include, without limitation, your name, home address and telephone number, email address, personal bank account details, date of birth, social insurance number, passport number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of Common Stock or directorships held in the Corporation or its Affiliates, details of all PSUs or any other entitlement to shares of Common Stock or equivalent benefits awarded, canceled, purchased, vested, unvested or outstanding in your favor. The Corporation's legal basis for the processing of your Personal Data is your consent.

(c) <u>Stock Plan Administration Service Providers</u>. You understand that the Corporation may transfer your Personal Data, or parts thereof, to Fidelity Stock Plan Services LLC and certain of its affiliated companies ("Fidelity"), an independent service provider based in the United States which assists the Corporation with the implementation, administration and management of the Plan. In the future, the Corporation may select a different service provider and share your Personal Data with such different service provider that serves the Corporation in a similar manner. You understand and acknowledge that the Corporation's service provider may open an account for you to receive and trade shares acquired under the Plan and that you will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of your ability to participate in the Plan.

(d) <u>International Data Transfers.</u> You understand that the Corporation and, as of the date hereof, certain third parties assisting in the implementation, administration and management of the Plan, such as the Corporation's service providers, are based in the United States. If you are located outside the United States, you understand and acknowledge that your country has enacted data privacy laws that are different from the laws of the United States. Transfers of personal data from the EU to the United States can be made on the basis of Standard Contractual Clauses approved by the European Commission or other appropriate safeguards permissible under the Applicable Laws. If you are located in the EU or EEA, the Corporation may receive, process and transfer your Personal Data onward to third-party service providers solely on the basis of appropriate data transfer agreements or other appropriate safeguards permissible under Applicable Laws. If applicable, you understand that you can ask for a copy of the appropriate data processing agreements underlying the transfer of your Personal Data by contacting your local People Team representative. The Corporation's legal basis for the transfer of your Personal Data is your consent.

(e) <u>Data Retention.</u> You understand that the Corporation will use your Personal Data only as long as is necessary to implement, administer and manage your participation in the Plan, or to comply with Applicable Laws, including under tax and securities laws. In the latter case, you understand and acknowledge that the Corporation's legal basis for the processing of your Personal Data would be compliance with the Applicable Laws or the pursuit by the Corporation of respective

legitimate interests not outweighed by your interests, rights or freedoms. When the Corporation no longer needs your Personal Data for any of the above purposes, you understand the Corporation will remove it from its systems.

(f) <u>Voluntariness and Consequences of Denial/Withdrawal of Consent</u>. You understand that your participation in the Plan and your grant of consent is purely voluntary. You may deny or later withdraw your consent at any time, with future effect and for any or no reason. If you deny or later withdraw your consent, the Corporation can no longer offer you participation in the Plan or offer other awards to you or administer or maintain such awards and you would no longer be able to participate in the Plan. You further understand that denial or withdrawal of your consent would not affect your status or salary as an employee or your career and that you would merely forfeit the opportunities associated with the Plan.

(g) <u>Data Subject Rights.</u> You understand that data subject rights regarding the processing of personal data vary depending on the Applicable Laws and that, depending on where you are based and subject to the conditions set out in the Applicable Laws, you may have, without limitation, the rights to (i) inquire whether and what kind of Personal Data the Corporation holds about you and how it is processed, and to access or request copies of such Personal Data, (ii) request the correction or supplementation of Personal Data about you that is inaccurate, incomplete or out-of-date in light of the purposes underlying the processing, (iii) obtain the erasure of Personal Data no longer necessary for the purposes underlying the processing, processed based on withdrawn consent, processed for legitimate interests that, in the context of your objection, do not prove to be compelling, or processed in non-compliance with applicable legal requirements, (iv) request the Corporation to restrict the processing of your Personal Data in certain situations where you feel its processing is inappropriate, (v) object, in certain circumstances, to the processing of Personal Data for legitimate interests, and to (vi) request portability of your Personal Data that you have actively or passively provided to the Corporation (which does not include data derived or inferred from the collected data), where the processing of such Personal Data is based on consent or your employment or service contract and is carried out by automated means. In case of concerns, you understand that you may also have the right to lodge a complaint with the competent local data protection authority. Further, to receive clarification of, or to exercise any of your rights, you should contact your local People Team representative.

5.8 <u>Insider Trading/Market Abuse Laws</u>. You may be subject to insider trading restrictions and/or market abuse laws based on the exchange on which the shares of Common Stock are listed and in applicable jurisdictions including the United States and your country or your broker's country, if different, which may affect your ability to accept, acquire, sell or otherwise dispose of shares of Common Stock, rights to shares of Common Stock (e.g., PSUs) or rights linked to the value of shares of Common Stock under the Plan during such times as you are considered to have "inside information" regarding the Corporation (as defined by the laws in the applicable jurisdictions). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders you placed before you possessed inside information. Furthermore, you could be prohibited from (a) disclosing the inside information to any third party and (b) "tipping" third parties or causing them otherwise to buy or sell securities (third parties include fellow employees). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable insider trading policy of the Corporation. You acknowledge that it is your responsibility to comply with any applicable restrictions, and you should speak to your personal advisor on this matter.

5.9 Electronic Delivery and Acceptance. The Corporation may, in its sole discretion, deliver any documents related to current or future participation in the Plan by electronic means. You hereby consent to receive such documents by electronic delivery and agree to participate in the Plan through an on-line or electronic system established and maintained by the Corporation or a third party designated by the Corporation.

5.10 Severability. The provisions of these Terms and Conditions are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable. Alternatively, the Corporation, in its sole discretion, shall have the power and authority to revise or strike such provision to the minimum extent necessary to render it valid and enforceable to the full extent permitted under Applicable Laws.

5.11 Construction/Blue Pencil. The headings contained in these Terms and Conditions are for convenience only and do not constitute part of and shall not be used to interpret these Terms and Conditions. The language in all parts of these Terms and Conditions shall be construed according to its fair meaning and not strictly for or against you or the Corporation because that party or that party's legal representative drafted it. Notwithstanding any provision to the contrary herein, you agree that the covenants and post-employment restrictions contained in these Terms and Conditions are reasonable under the circumstances, valid in duration and scope, and necessary to protect the Corporation's Confidential Information. It is the desire and intent of the parties, and you agree, that the covenants and post-employment restrictions contained in these Terms and Conditions shall be enforced to the fullest extent permissible under applicable laws and public policies. Accordingly, if any term or provision of the covenants or post-employment restrictions contained in these Terms and Conditions or any portion thereof is declared illegal or unenforceable by any court of competent jurisdiction, such court shall have the right, power and authority to excise or modify such provision or provisions of these covenants so as to render such provision or portion thereof enforceable, and to the extent such provision or portion thereof cannot be rendered enforceable, these Terms and Conditions shall be considered divisible as to such provision, which shall become null and void, leaving the remainder in full force and effect.

5.12 Liability for Breach. You shall indemnify the Corporation and hold it harmless from and against any and all damages or liabilities incurred by the Corporation (including liabilities for attorneys' fees and disbursements) arising out of any breach by you of these Terms and Conditions, including, without limitation, any attempted transfer of PSUs in violation of Section 1.4 of these Terms and Conditions.

5.13 Waiver. You acknowledge that a waiver by the Corporation of any provision of these Terms and Conditions shall not operate or be construed as a waiver of any other provision of these Terms and Conditions, or of any subsequent breach of these Terms and Conditions.

5.14 Addendum. The grant of your PSUs shall be subject to any special terms and conditions set forth in any Addendum to these Terms and Conditions (the "**Addendum**") for your state of residence (and your state of employment, if different). If you relocate your residency or employment to one of the states included in the Addendum, the special terms and conditions for such state will apply to you, to the extent the Corporation determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Addendum shall constitute part of the Award Agreement.

5.15 Additional Requirements. The Corporation reserves the right to impose other requirements on the PSUs, any payment made pursuant to the PSUs, and your participation in the Plan, to the extent the Corporation determines, in its sole discretion, that such other requirements are necessary or advisable for legal or administrative reasons. Such requirements may include (but are not limited to) requiring you to sign any agreements or undertakings that may be necessary to accomplish the foregoing.

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Attachment A
<u>Performance Goals</u>

[Complete as appropriate]

THE BANK OF NEW YORK MELLON CORPORATION

FORM OF ADDENDUM TO
TERMS AND CONDITIONS
OF PERFORMANCE SHARE UNITS

This Addendum includes additional terms and conditions that govern the PSUs granted to you if you reside in or are employed in one of the locations listed herein. These terms and conditions are in addition to, or, if so indicated, in place of, the terms and conditions set forth in the main body of the Award Agreement. All capitalized terms as contained in this Addendum shall have the same meaning as set forth in the Award Notice, the Terms and Conditions and the Plan. If you transfer your residence and/or employment to one of the locations included in this Addendum, the special terms and conditions for such location will apply to you to the extent the Corporation determines, in its sole discretion, that the application of such terms and conditions is necessary or advisable for legal or administrative reasons (or the Corporation may establish alternative terms and conditions as may be necessary or advisable to accommodate your transfer).

CALIFORNIA

1. Non-Solicitation of Clients, Contractors and Employees; Non-Competition. The following provision shall replace Section 3.2 of the Terms and Conditions in its entirety:

3.2 Non-Solicitation of Clients, Contractors and Employees; Non-Competition.

(a) *Non-Solicitation of Clients, Contractors and Employees*. You are prohibited, without prior authorization, from using or disclosing the Corporation's or its Affiliates' trade secrets at any time, including without limitation to (i) solicit or induce or attempt to solicit or induce any current or prospective client of the Corporation or an Affiliate known to you, to initiate or continue a client relationship with you other than with the Corporation or Affiliate, or to terminate or reduce its client relationship with the Corporation or Affiliate, or (ii) solicit any employee or contractor to terminate or reduce their employment or engagement, whichever is applicable, with the Corporation or Affiliate. You understand and acknowledge that your obligations under this provision will continue indefinitely unless and until any such trade secrets have become, through no fault of yours or through the wrongful conduct of a third party, generally known to the public. You understand and acknowledge that your obligations under this Section will survive termination of employment regardless of reason.

(b) *Non-Competition*. Intentionally Omitted.

2. Governing Law and Choice of Forum. The following provision shall be appended to Section 5.5 of the Terms and Conditions:

Notwithstanding the foregoing, for purposes of Section 3.2 of these Terms and Conditions, the Award Agreement shall be construed and enforced in accordance with the laws of the State of California, other than any choice of law provisions calling for the application of laws of another jurisdiction. For purposes of litigating any dispute that arises between the parties directly from Section 3.2, the parties hereby submit to and consent to the exclusive jurisdiction of the State of California and agree that such litigation shall be conducted only in a California state or federal court.

MASSACHUSETTS

1. Non-Competition. The following provision shall be appended to Section 3.2(b) of the Terms and Conditions:

For the sake of clarity, the foregoing non-compete restriction does not prohibit you from being employed by the government or a not-for profit organization (i.e. an organization exempt from local and national tax laws). In view of the limited scope of the non-compete obligation assumed under this Section, which does not prevent you from working in other entities that are not affected by it, you acknowledge and agree that: (i) the foregoing non-compete obligation is reasonable and necessary to protect the Corporation's legitimate business interests including its confidential information and goodwill, and (ii) the continued vesting in your PSUs, including any PSUs resulting from dividend equivalent rights, following a Retirement-Eligible Event or termination providing transition/separation pay is fair and reasonable consideration for the foregoing non-compete obligation. During the Restricted Period, you further agree to (i) advise any person or entity that seeks to employ you of the terms of these covenants; and (ii) immediately notify People Team equity administration if you are not in compliance with your obligations above (i.e., if you begin to associate with or transact business on behalf of a Competitive Enterprise). You have seven business days from the date you electronically acknowledge and accept the terms of the Award Agreement to rescind your acceptance of the Award Agreement. You acknowledge that you have been provided at least ten business days before this Award Agreement is to be effective. You may rescind your acceptance of the Award Agreement by sending written notice to People Team equity administration at [*Insert Contact Information]*.

Exhibit 10.29

FORM OF RESTRICTED STOCK UNIT AGREEMENT

THE BANK OF NEW YORK MELLON CORPORATION
LONG-TERM INCENTIVE PLAN
FORM OF NOTICE OF AWARD - RESTRICTED STOCK UNITS – EXECUTIVE COMMITTEE US

Subject to the terms and conditions of The Bank of New York Mellon Corporation 2023 Long-Term Incentive Plan (the "**Plan**"), this Notice of Award - Restricted Stock Units – Executive Committee US (the "**Award Notice**"), and the Terms and Conditions of Restricted Stock Units – Executive Committee US (the "**Terms and Conditions**"), The Bank of New York Mellon Corporation (the "**Corporation**") grants you restricted stock units ("**RSUs**") as reflected below and on the Corporation's equity award website (the "**Equity Website**"). Each RSU represents the opportunity to receive one (1) share of the Corporation's common stock, par value $.01 ("**Common Stock**"), upon satisfaction of the terms and conditions as set forth in the Award Notice and the Terms and Conditions (collectively, the "**Award Agreement**"), subject to the terms of the Plan.

<table>
<tr><td>Participant</td><td>[PARTICIPANT NAME]</td></tr>
<tr><td>Grant Date</td><td>[GRANT DATE]</td></tr>
<tr><td>Number of RSUs</td><td>[NUMBER OF SHARES GRANTED]</td></tr>
<tr><td colspan="2">Vesting Schedule – Please refer to Appendix. Each date upon which all or a portion of your RSU award is scheduled to vest is referred to as a "Vesting Date."

If the Risk Adjustment Process is applicable to your award (as indicated in the box below), a Vesting Date may be delayed if and to the extent the Risk Adjustment Process set forth in <u>Exhibit A</u> is not completed by such date subject to Section 4.1 of the Terms and Conditions.</td></tr>
<tr><td>Risk Adjustment Process - To the extent applicable as indicated in the box to the right, unvested RSUs are subject to forfeiture based upon the Risk Adjustment Process set forth in <u>Exhibit A</u>. Is the Risk Adjustment Process applicable to your award?</td><td>[Yes / No]</td></tr>
<tr><td>Retirement Rule – To the extent applicable as indicated in the box to the right, your RSUs are subject to continued vesting if you satisfy certain retirement provisions as set forth in Section 2.2(b) of the Terms and Conditions. Is Section 2.2(b) of the Terms and Conditions applicable to your award?</td><td>[Yes/ No]</td></tr>
</table>

THE CORPORATION'S GRANT OF RSUs AS REFLECTED HEREIN IS CONTINGENT UPON YOUR ACKNOWLEDGEMENT AND ACCEPTANCE OF THE AWARD AGREEMENT AND THE PLAN ELECTRONICALLY ON THE EQUITY WEBSITE ON OR BEFORE [GRANT ACCEPT BY DATE] (THE "ACCEPTANCE DEADLINE"). IF YOU FAIL TO DO SO, THE CORPORATION'S GRANT OF RSUs AS REFLECTED HEREIN SHALL BE NULL AND VOID, AND SHALL NOT BE RE-INSTATED.

BY ELECTRONICALLY ACKNOWLEDGING AND ACCEPTING THE CORPORATION'S GRANT OF RSUS, YOU AFFIRMATIVELY AND EXPRESSLY AGREE:

(1) SUCH ACKNOWLEDGEMENT AND ACCEPTANCE CONSTITUTES YOUR ELECTRONIC SIGNATURE IN EXECUTION OF THE AWARD AGREEMENT

(2) TO BE BOUND BY THE PROVISIONS OF THE AWARD AGREEMENT AND THE PLAN INCLUDING WITHOUT LIMITATION ANY LOCATION SPECIFIC SPECIAL TERMS AND

CONDITIONS SET FORTH IN THE ADDENDUM, AS DEFINED IN THE TERMS AND CONDITIONS

(3) YOU (A) HAVE REVIEWED THE AWARD AGREEMENT AND THE PLAN IN THEIR ENTIRETIES; (B) WERE GIVEN A REASONABLE TIME TO COMPLETE SUCH REVIEW; (C) HAVE BEEN ADVISED BY THE CORPORATION TO CONSULT WITH YOUR OWN ATTORNEY BEFORE ENTERING INTO THE AWARD AGREEMENT; (D) HAVE HAD AN OPPORTUNITY TO OBTAIN PROFESSIONAL LEGAL/TAX/INVESTMENT ADVICE PRIOR TO ACCEPTING THE RSUs; AND (E) FULLY UNDERSTAND ALL OF THE PROVISIONS OF THE AWARD AGREEMENT AND THE PLAN

(4) YOU HAVE BEEN PROVIDED WITH A COPY OR ELECTRONIC ACCESS TO A COPY OF THE PLAN AND THE U.S. PROSPECTUS FOR THE PLAN

(5) TO ACCEPT AS BINDING, CONCLUSIVE AND FINAL ALL DECISIONS OR INTERPRETATIONS OF THE CORPORATION UPON ANY QUESTIONS ARISING UNDER THE AWARD AGREEMENT AND THE PLAN

PARTICIPANT ACCEPTANCE DATE: [ACCEPTANCE DATE]

****

FORM OF EXHIBIT A
Risk Adjustment/Forfeiture Decision Process

For any performance year in which you remain a covered employee (including as an MRT), your risk performance will be assessed via a Risk Culture Summary Scorecard ("**RCSS**") Rating and/or a Performance Management Platform ("PMP") Risk Goal Rating, as applicable. If, in any year, you receive an RCSS Rating or a PMP Risk Goal Rating, as applicable, of "Partially Met Expectations" or "Did Not Meet Expectations," your unvested awards (including any accrued dividend equivalents) will be subject to review by the Incentive Compensation Review Committee ("**ICRC**") or the Human Resources and Compensation Committee of the Corporation's Board of Directors (the "**HRCC**") for consideration of forfeiture, as applicable. If you are no longer a covered employee (including as an MRT) or have left the Corporation, any unvested portion of your awards (including any accrued dividend equivalents) granted while you were a covered employee (including as an MRT) will also be subject to a risk review by the ICRC/HRCC.

In that event, as part of its review, the ICRC/HRCC will ask –

- Did your rating reflect poor risk behavior by you in a prior year?
- Did you receive an award in that year?

If the answer to both questions is yes, the ICRC/HRCC asks the following questions with respect to each of the designated prior years:

- Financial Impact: How much did/will the issue cost the Company?
- Reputational Impact: How much of a regulatory impact did/will it have on the Company?

The ICRC/HRCC selects the impact answer that falls into the highest category below to determine the impact forfeiture percentage.

Criteria	Metric	None	Low	Medium	High
Financial Impact					
Reputational Impact					

As used in this Exhibit A, the term "**Company**" shall mean the Corporation and its Affiliates.

Then the ICRC/HRCC asks how much, if any, control/responsibility you had regarding the situation. The answer to the last question determines the modifier to be applied to the impact forfeiture percentage.

Criteria	None	Indirect	Direct
Your role & responsibility			

Example *[Insert Example]*

THE BANK OF NEW YORK MELLON CORPORATION

FORM OF TERMS AND CONDITIONS
OF RESTRICTED STOCK UNITS – EXECUTIVE COMMITTEE US

The Restricted Stock Units ("**RSUs**") with respect to Common Stock of The Bank of New York Mellon Corporation (the "**Corporation**") granted to you on the Grant Date are subject to the Notice of Award - Restricted Stock Units – Executive Committee US (the "**Award Notice**"), these Terms and Conditions of Restricted Stock Units – Executive Committee US (the "**Terms and Conditions**") and all of the terms and conditions of The Bank of New York Mellon Corporation 2023 Long-Term Incentive Plan (the "**Plan**"), which is incorporated herein by reference. In the case of a conflict between the Award Notice, these Terms and Conditions and the terms of the Plan, the provisions of the Plan shall govern. A copy of the Plan can be found on the Corporation's equity award website (the "**Award Website**"), NetBenefits.com, under "Quick Links." Capitalized terms used but not defined herein shall have the same meaning as provided or reflected in the Award Notice or the Plan, as applicable. For purposes of these Terms and Conditions, "**Employer**" means the Corporation or any Affiliate that employs or employed you on the applicable date.

SECTION 1: Restricted Stock Unit Award

1.1 Grant of Award. Subject to these Terms and Conditions and the terms of the Plan, the Corporation grants you the number of RSUs as reflected in the Award Notice. The RSUs shall vest in accordance with the Vesting Schedule and shall be subject to the Risk Adjustment Process (if any) as reflected in the Award Notice.

1.2 Dividend Equivalents. Upon the payment of any dividend on the Common Stock occurring during the period preceding the settlement of your RSUs pursuant to these Terms and Conditions, your Employer will accrue an amount in cash equal to the value of the dividends you otherwise would have received had you actually been the shareholder of record of the number of shares of Common Stock underlying your RSUs, which dividend equivalents will also be subject to the Risk Adjustment Process if applicable to your award (as indicated in the Award Notice). Such dividend equivalents will be paid in cash without interest pursuant to Section 4 of these Terms and Conditions if and to the extent that the underlying RSUs become vested as provided in the Award Agreement.

1.3 No Voting Rights. Prior to the settlement of your RSUs pursuant to these Terms and Conditions, you shall not be entitled to vote the shares of Common Stock underlying the RSUs.

1.4 Nontransferable. The RSUs shall be transferable only by will or the laws of descent and distribution. Any other attempt to transfer the RSUs shall be null and void.

SECTION 2: Vesting, Forfeiture, Termination of Employment and Disability

2.1 Vesting and Forfeiture.

(a) *Vesting*. Subject to Sections 3 and 5.4 of these Terms and Conditions, if you remain continuously employed with your Employer through the close of business on the applicable Vesting Date reflected in the Award Notice, the number of RSUs corresponding to such Vesting Date will vest and the Corporation will issue you the underlying shares of Common Stock in accordance with Section 4 of these Terms and Conditions. Notwithstanding anything to the contrary contained in the Award Agreement and in accordance with Section 4.1, a vesting may be delayed if, on the Vesting Date, you are the subject of ongoing disciplinary or performance management investigations or proceedings concerning circumstances under which forfeiture or clawback of this award could apply or such other actual or potential compensation recovery processes are ongoing under which forfeiture or clawback of this award could apply. In such cases, the applicable portion of the award, if any, will vest following the completion of such investigations, proceedings and/or processes to the extent the Corporation determines that forfeiture and/or clawback does not apply.

(b) *Forfeiture upon Termination of Employment*. Subject to Sections 2.2 and 2.3 of these Terms and Conditions, if you cease to be continuously employed with your Employer prior to the date that your RSUs become fully vested, you shall cease vesting in your RSUs as of your Termination Date and any unvested RSUs, including any dividend equivalent rights, immediately shall terminate and be forfeited; provided, however, if the Risk Adjustment Process applies to your award (as indicated in the Award Notice), in situations where vesting would have otherwise occurred but for the fact that a determination has not yet been made as to whether a risk adjustment pursuant to Exhibit A is required, vesting shall occur in accordance with the terms of the Award Agreement provided that the Committee determines the effect, if any of a risk adjustment. As used herein, "**Termination Date**" shall mean the last day on which you are an employee of your Employer.

(c) *Forfeiture upon Termination of Employment for Cause*. Notwithstanding anything to the contrary contained in these Terms and Conditions, if your Employer terminates your employment for Cause, your RSUs, whether vested (but unsettled) or unvested, and including any dividend equivalent rights, immediately shall terminate and be forfeited. For purposes of these Terms and Conditions, "**Cause**" shall mean:

(i) you have been convicted of, or have entered into a pretrial diversion or entered a plea of guilty or nolo contendere (plea of no contest) to a crime or offense constituting a felony (or its equivalent under applicable laws outside of the United States), or to any other crime or offense involving moral turpitude, dishonesty, fraud, breach of trust, money laundering, or any other offense that may preclude you from being employed with a financial institution;

(ii) you are grossly negligent in the performance of your duties or have failed to perform the duties of your employment, including, without limitation, failure to comply with any lawful directive from your Employer or the Corporation, other than by reason of incapacity due to disability or from any permitted leave of absence required by law;

(iii) you have violated the Corporation's Code of Conduct or any of the policies of the Corporation or your Employer governing the conduct of business or your employment, including without limitation, those relating to discrimination and retaliation;

(iv) you have engaged in any misconduct which has the effect or potential of being injurious to the Corporation, any Affiliate or your Employer, including, but not limited to, its reputation;

(v) you have engaged in an act of fraud or dishonesty, including, but not limited to, taking or failing to take actions intending to result in personal gain; or

(vi) if you are employed outside the United States, any other circumstances (beyond those listed above) that permit the immediate termination of your employment without notice or payment in accordance with the terms of your employment agreement or Applicable Laws (as defined in Section 5.2).

The determination of whether your actions will be considered Cause for purposes of these Terms and Conditions will be determined by the Corporation or any of its Affiliates, at its or their sole discretion, as applicable. Any determinations of Cause will be considered conclusive and binding on you.

2.2 Specified Terminations of Employment.

(a) *Death*. If you cease to be continuously employed with your Employer by reason of your death prior to the date that your RSUs become fully vested (or if your death occurs following termination of employment during a period in which you have outstanding RSUs), your unvested RSUs including any dividend equivalent rights, will become fully vested as of your date of death (such date then being the final Vesting Date) and the Corporation will issue your legal representative or your estate the underlying shares of Common Stock in accordance with Section 4.

[(b) *Retirement Rule.* If you cease to be continuously employed with your Employer by reason of your retirement as determined by your Employer (i) on or after your attainment of age 60 and (ii) the combination of your age and years of credited employment with your Employer (in both instances, full and partial years) on your Termination Date equals or exceeds 65 (a "**Retirement-Eligible Event**"), you will continue to vest in your RSUs, including any dividend equivalent rights, in accordance with the Vesting Schedule set forth in the Award Notice so long as you fully comply with the applicable covenants provided in Section 3 hereof and provided that, if requested by your Employer (to the extent not prohibited by Applicable Laws), you execute and do not revoke a Transition/Separation Agreement and Release acceptable to your Employer. As a condition for continued vesting of your RSUs, including any dividend equivalent rights, following a Retirement-Eligible Event, the Corporation and/or your Employer may require you to periodically certify your compliance with the covenants set forth in Section 3 of these Terms and Conditions as more fully described in such Section. For purposes of the foregoing, partial years shall be determined based upon the number of days since your prior birthday or the number of days of credited employment since your prior employment anniversary, as the case may be. Notwithstanding the foregoing, (x) this subsection (b) will not apply to your award if the Award Notice provides that Section 2.2(b) is not applicable; and (y) in the case of continued vesting following a Retirement-Eligible Event, if you commence employment with a new employer that grants you a new award that replaces all or any portion of this award, any portion of this award that has been replaced by your new employer will be forfeited and will no longer vest and, where relevant, will be promptly repaid by you if the award or any portion of this award has already vested.]

(c) *Termination Providing Transition/Separation Pay.* Provided that you execute and do not revoke a Transition/Separation Agreement and Release acceptable to your Employer, if you cease to be continuously employed with your Employer by reason of a termination by your Employer (or such other termination of employment that qualifies you for transition/separation pay under a plan, program or policy of the Corporation or your Employer) and in connection with such termination you receive transition/separation pay from the Corporation or your Employer, you will continue to vest in your RSUs, including any dividend equivalent rights, in accordance with the Vesting Schedule set forth in the Award Notice so long as you fully comply with the applicable covenants provided in Section 3 hereof. As a condition for continued vesting of your RSUs, including any dividend equivalent rights, the Corporation and/or your Employer may require you to periodically certify your compliance with the covenants set forth in Section 3 of these Terms and Conditions as more fully described in such Section. For purposes of the foregoing, "**transition/separation pay**" means any severance, redundancy or ex-gratia compensation payment to you from the Corporation or your Employer in connection with your termination of employment that is in excess of the amount payable to you on account of any notice period to which you are entitled pursuant to the terms of your contract of employment or otherwise (or payment in lieu of such notice).

(d) *Sale of Business*. If you cease to be continuously employed with your Employer due to a sale of a business unit or your Employer and you are not otherwise entitled to transition/separation pay, you will continue to vest in your RSUs, including any dividend equivalent rights, in accordance with the Vesting Schedule set forth in the Award Notice so long as you fully comply with the applicable covenants provided in Section 3 hereof.

(e) *Change in Control*. If your employment is terminated by your Employer without Cause within two (2) years after a Change in Control occurring after the Grant Date, and your RSU award is assumed, substituted or replaced in connection with such Change in Control, you will continue to vest in your RSUs, including any dividend equivalent rights, in accordance with the Vesting Schedule set forth in the Award Notice so long as you fully comply with the applicable covenants provided in Section 3 hereof. In the event that your RSU award is not assumed, substituted or replaced in connection with a Change in Control occurring after the Grant Date including if such a Change in Control occurs following termination of employment, any of your unvested RSUs, including any dividend equivalent rights, will become fully vested as of the date of the Change in Control (such date then being the final Vesting Date) and will be settled in cash, shares or a combination thereof, as determined by the Committee (except to the extent that settlement of your RSUs must remain payable on the Vesting Date(s) as reflected in the Award Notice in order to comply with Section 409A or other Applicable Laws).

(f) *Termination of Employment Prior to the Grant Date*. If your Termination Date (as defined in Section 2.1(b) above) occurred prior to the Grant Date for this award, you agree that any references to you as an "employee" and "employment" in the Award Agreement means the period of time during which you were still an employee of the Corporation or any of its Affiliates.

[Additional Vesting Provisions, if any.]

2.3 Disability. If you receive current benefits under a long-term disability plan maintained by the Corporation or your Employer while any portion of your RSUs remains unvested, you will continue to vest in your RSUs during the period you are eligible to receive such benefits, including any dividend equivalent rights, in accordance with the Vesting Schedule set forth in the Award Notice so long as you fully comply with the applicable covenants provided in Section 3 hereof.

SECTION 3: Notice of Resignation, Non-Solicitation, Non-Competition, Confidential Information, Non-Disparagement and Cooperation

3.1 Notice of Resignation. As consideration for this award, you will provide your Employer with 180 days' advance written notice of any voluntary termination of your employment with your Employer or such longer period as may be set forth in any other agreement that you may have with the Corporation or your Employer or any policy of the Corporation or of your Employer.

3.2 Non-Solicitation of Clients, Contractors and Employees; Non-Competition.

To protect the Corporation's and its Affiliates' legitimate business interests, including its confidential information and goodwill, and for the good and valuable consideration offered pursuant to the Award Agreement, which is in excess of any consideration you are otherwise entitled to receive, and to the maximum extent permitted by Applicable Laws, you agree as follows:

(a) *Non-Solicitation of Clients, Contractors and Employees*. Your RSUs, whether vested (but unsettled) or unvested, and including any dividend equivalent rights, shall be immediately forfeited if, prior to one (1) year from the Termination Date or, if later, the final Vesting Date set forth in the Award Notice (the "**Restricted Period**"), you directly or indirectly: (i) solicit, divert or appropriate, or attempt to solicit, divert or appropriate for the benefit of any Competitive Enterprise any client or prospective client of the Corporation or an Affiliate with whom you had contact, or with respect to whom you obtained or had access to Confidential Information, or whose identity you learned, during your employment with your Employer; (ii) interfere with, disrupt or attempt to disrupt any relationship, contractual or otherwise, between the Corporation or an Affiliate and any of its respective clients or prospective clients with whom you had contact, or with respect to whom you obtained or had access to Confidential Information, or whose identity you learned, during your employment with your Employer, or otherwise cause, induce or encourage any such client to diminish or terminate its relationship with the Corporation or an Affiliate; or (iii) hire or employ any employee or contractor of the Corporation or an Affiliate, or influence, solicit or induce such an individual or entity to terminate or diminish their employment or engagement, whichever is applicable, with the Corporation or an Affiliate. For purposes of the Award Agreement, "**prospective clients**" means any person or entity with whom the Corporation or an Affiliate is or was engaged for the purposes of entering into a client or business relationship within the twelve (12) months preceding your Termination Date. During the Restricted Period, you agree to (i) advise any person or entity that seeks to employ you of the terms of these covenants; and (ii) immediately notify People Team equity administration if you are not in compliance with your obligations above.

(b) *Non-Competition*. Your RSUs, whether vested (but unsettled) or unvested, and including any dividend equivalent rights, shall be immediately forfeited if, after your separation from employment with the Corporation or its Affiliates by reason of your (i) Retirement-Eligible Event or (ii) termination providing transition/separation pay as specified in Sections 2.2(b) and 2.2(c) respectively, and before the end of the Restricted Period, you, directly or indirectly (without the prior written consent of the Corporation), (i) associate (including as a director, officer, employee, partner, consultant, investor, agent or advisor) with a Competitive Enterprise, or (ii) transact business on behalf of a Competitive Enterprise. For purposes of the Award Agreement, "**Competitive Enterprise**" means any business enterprise, person or entity: (i) that is a member of any of the Corporation's competitive peer groups as disclosed in the Corporation's proxy statement that was most recently filed with the Securities and Exchange Commission preceding the Termination Date; or (ii) that is otherwise engaged in or is undertaking efforts to engage in any actual or planned or substantially similar service offering of the Corporation or the Affiliate, product line of the Corporation or the Affiliate, or any other business of the Corporation or an Affiliate within the two (2) years preceding your Termination Date; or (iii) for whom you would otherwise be performing services through which you would disclose or inevitably disclose Confidential Information. However, nothing in the Award Agreement shall preclude you from investing your personal assets in the securities of any Competitive Enterprise if such securities are (i) traded on a national stock exchange or in the over-the-counter market and if such investment is as a passive investor and if such investment does not result in you beneficially owning, at any time, more than five (5%) of the publicly-traded equity securities of such competitor; or (ii) not traded on a national stock exchange or in the over-the-counter market and if such investment is as a passive investor and such investment does not result in you beneficially owning, at any time, more than five (5%) of any class of equity securities of such competitor. You acknowledge and agree that the Corporation's and its Affiliates' business is global in nature, and in light of your executive level role and responsibilities and your access to Confidential Information concerning the Corporation's and its Affiliates' global operations, in providing your services to your Employer you will have a material presence or influence on behalf of your Employer throughout the world. You further acknowledge and agree that, in light of current technology, your services and the business of any Competitive Enterprise can be conducted anywhere in the world.

For the sake of clarity, the foregoing non-compete restriction does not prohibit you from being employed by the government or a not-for profit organization (i.e., an organization exempt from local and national tax laws). In view of the limited scope of the non-compete obligation assumed under this Section, which does not prevent you from working in other entities that are not affected by it, you acknowledge and agree that:(i) the foregoing non-compete obligation is reasonable and necessary to protect the Corporation's and its Affiliates' legitimate business interests including its confidential information and goodwill, and (ii) the continued vesting in your RSUs, including any dividend equivalent rights, following a Retirement-Eligible Event or termination providing transition/separation pay is fair and reasonable consideration for the foregoing non-compete obligation. During the Restricted Period, you further agree to (i) advise any person or entity that seeks to employ you of the terms of these covenants; and (ii) immediately notify People Team equity administration if you are not in compliance with your obligations above (i.e., if you begin to associate with or transact business on behalf of a Competitive Enterprise).

3.3 Confidential Information.

(a) Except as may be permitted in accordance with Section 3.6 below, during the course of your employment with the Corporation or any Affiliate and continuing thereafter, you will maintain in secrecy all Confidential Information of the Corporation and its Affiliates and will not, either directly or indirectly, at any time, while an employee of the Corporation or any Affiliate or thereafter, make known, divulge, reveal, furnish, make available, disclose, appropriate or use (except for use in the regular course of your duties for the Corporation or its Affiliates) any Confidential Information (as defined below) without the written consent of the Corporation. Upon the Termination Date, or any time the Corporation makes a request, you will deliver promptly to the Corporation all Confidential Information and all copies of Confidential Information, or any analyses, compilations, summaries, studies, or other documents based, in whole or in part, upon the Confidential Information and, to the extent any Confidential Information is stored on any PDA or personal computer, cloud, email account or other storage device, you will fully cooperate with the Corporation or its Affiliates to return and permanently delete all such Confidential Information from such devices. Upon the Corporation's request, you agree to provide access to any such device(s) to the Corporation or a third-party vendor selected by the Corporation to assist with such identification and removal of Confidential Information and Corporation material in a manner that includes steps to protect your personal information. Upon the Corporation's request at any time, you will certify in writing to the Corporation that no Confidential Information or any analyses, compilations, summaries, studies, or other documents based, in whole or in part, upon the Confidential Information, remains in your possession or control. You also agree that this obligation is in addition to, and not in limitation or preemption of, all other obligations of confidentiality that you may have to the Corporation or its Affiliates under the Code of Conduct, Securities Trading Policy or other rules or policies governing the conduct of their respective businesses, or general or specific legal or equitable principles.

(b) As used herein, "**Confidential Information**" means the information you have been given or to which you have access or become informed of, directly or indirectly, which the Corporation or its Affiliates possess or have access and which relates to the Corporation or its Affiliates, is not generally known to the public or in the trade or is a competitive asset and/or otherwise constitutes a "trade secret," as that term is defined by Applicable Laws, of the Corporation or its Affiliates, including without limitation, non- public: (i) planning data and marketing strategies, including marketing ideas, mailing lists, and sales and marketing plans; (ii) terms of any new products and investment strategies; (iii) information relating to other officers and employees of the Corporation or its Affiliates, including personal information, social security numbers, medical information, addresses, and telephone numbers; (iv) financial results and information about the business condition of the Corporation or its Affiliates, including results and data about Corporation conditions, operations, strategies and plans, pending projects and proposals, and potential acquisitions or divestitures; (v) terms of any investment, management or advisory agreement or other material contract; (vi) proprietary software and other product or technical information, including product formulations, new product ideas, new business developments, plans, designs, compilations, methods, processes, procedures, program devices, data or market information processing programs, hardware firmware, research and development products, and related documents and information; (vii) customer and potential customer information, including client lists, prospecting lists, information about client accounts, pricing strategies, and current or proposed transactions and contact persons at such customers and customer prospects); and (viii) material information or internal analyses concerning customers or customer prospects of the Corporation or its Affiliates or their respective operations, condition (financial or otherwise) or plans. Confidential Information does not include information which: (i) was or becomes generally available to the public other than as a result of disclosure by you or any of your agents, advisors or representatives or the wrongdoing of a third party; (ii) was within your possession prior to its being furnished to you by or on behalf of the Corporation or its Affiliates, provided that the source of the information was not bound by a confidentiality agreement with the Corporation or otherwise prohibited from transmitting the information to you by a contractual, legal or fiduciary obligation or otherwise wrongfully came into possession of such information; or (iii) was or becomes available to you on a non-confidential basis from a source other than the Corporation or its Affiliates, provided that such source is not bound by a confidentiality agreement with the Corporation or otherwise prohibited from transmitting the information to you by a contractual, legal or fiduciary obligation or otherwise wrongfully came into possession of such information.

(c) You acknowledge and agree that the Confidential Information is not generally known or available to the general public; has been developed, compiled, and/or acquired by the Corporation or its Affiliates at their great effort and expense; and includes such information as it exists in any form, including written, oral, electronic, digital or other form. You further acknowledge that disclosing, divulging, revealing or using any Confidential Information, other than on behalf of the Corporation and its Affiliates, would be highly detrimental to the Corporation and its Affiliates, and that immediate and irreparable harm to the Corporation and its Affiliates, including loss of business and financial damage, would result therefrom.

3.4 Non-Disparagement. Subject to Section 3.6 below, during the course of your employment with the Corporation or any Affiliate and continuing thereafter, you will not, directly or indirectly make, issue, authorize or publish any comments or statements (orally or in writing) to the media, including without limitation traditional vehicles and social media, to any individual or entity with whom or which the Corporation, or any of its Affiliates, has a business relationship, or to any other individual or entity, which disparages, criticizes or otherwise reflects adversely upon the Corporation, any of its Affiliates or any of their respective employees, officers or directors.

3.5 Cooperation. Upon the termination of your employment for any reason or no reason, including but not limited to resignation of employment, you will fully cooperate with the Corporation and its Affiliates upon reasonable notice and at reasonable times, in the prosecution and defense of complaints, investigations, litigation, arbitration and mediation of any complaints, claims or actions now in existence or that may be threatened or brought in the future relating to events or occurrences that transpired while employed by the Corporation or any Affiliate.

3.6 Governmental Authorities. Nothing in the Award Agreement prohibits or interferes with your right to disclose any relevant and necessary information in any action or proceeding relating to the Award Agreement or as otherwise required by law or legal process. In addition, nothing in the Award Agreement prohibits or interferes with your or your attorney's right: (a) to initiate communications directly with or report or disclose possible violations of law or regulation to, any governmental agency or entity, legislative body, or any self-regulatory organization, including but not limited to the U.S. Department of Justice ("**DOJ**"), the U.S. Securities and Exchange Commission ("**SEC**"), the U.S. Financial Industry Regulatory Authority ("**FINRA**"), the U.S. Equal Employment Opportunity Commission ("**EEOC**"), or U.S. Congress, and such reports or disclosures do not require prior notice to, or authorization from, the Corporation; (b) to participate, cooperate, or testify in any action, investigation or proceeding with, provide information to, or respond to any inquiry from any governmental agency or legislative body, any self-regulatory organization, including but not limited to the IRS, SEC, FINRA, the EEOC, DOJ, U.S. Congress ("**Governmental Authorities**"), or the Corporation's Legal or Compliance Departments and such communications do not require prior notice to, or authorization from the Corporation. However, with respect to such communications, reports, participation, cooperation or testimony to the Governmental Authorities, as set forth above in clauses (a) and (b) of this Section, you may not disclose privileged communications with the Corporation's counsel. To the extent permitted by law, upon receipt of a subpoena, court order or other legal process compelling the disclosure of any information, you will give prompt written notice to the Corporation so as to provide the Corporation ample opportunity to protect its interests in confidentiality to the fullest extent possible unless the subpoena, court order or other legal process pertains to an action described above in clauses (a) or (b) of this Section, in which event no such notice is required. Notwithstanding any confidentiality and non-disclosure obligations you may have, you are hereby advised as follows pursuant to the U.S. Federal Defend Trade Secrets Act of 2016: "An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that (A) is made (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. An individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding, if the individual (A) files any document containing the trade secret under seal; and (B) does not disclose the trade secret, except pursuant to court order."

3.7 Periodic Certification of Compliance. In connection with your separation from employment with the Corporation or its Affiliates, upon request by your Employer, you agree to periodically certify your compliance with the covenants set forth in this Section 3 through the end of the Restricted Period. If you fail to provide any such certification(s) as requested by your Employer, the RSUs whether vested (but unsettled) or unvested, and including any dividend equivalent rights, shall be immediately forfeited.

3.8 Existing Obligations. The terms of the Award Agreement shall not in any way (a) limit your obligations pursuant to any other agreements with the Corporation or any of its Affiliates or other corporate plans or policies applicable to you; or (b) limit the Corporation's or your Employer's rights to exercise any remedies it may have under Applicable Laws or under the terms of such other agreements, plans or policies.

3.9 Failure to Comply with Covenants. If you fail to comply with any of the foregoing applicable covenants, the RSUs, whether vested (but unsettled) or unvested, and including any dividend equivalent rights, shall be immediately forfeited and may be subject to repayment as provided in Section 5.4 of these Terms and Conditions. The Corporation and any Affiliate that employs or employed you on the applicable date has the right to enforce Section 3 of these Terms and Conditions.

SECTION 4: Settlement

4.1 Time of Settlement.

(a) *Time of Settlement*. Vested RSUs shall be settled as soon as administratively practicable following the applicable Vesting Date as reflected in the Award Notice or Section 2.2(a); *provided,* if you are a "specified employee" under Section 409A of the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), upon separation from service and if such settlement is deferred compensation conditioned upon a separation from service and not compensation you could receive without separating from service, then settlement shall not be made until the first day following the six (6) month anniversary of your separation from service (or upon your death, if earlier).

(b) *Acceleration Due to Conflicts of Interest or Ethics Laws (Governmental Service).* Notwithstanding Section 4.1(a), the Corporation may accelerate the vesting and settlement of all or part of your outstanding RSUs if each of the following conditions are satisfied: (i) you cease to be continuously employed with your Employer by reason of an event described in Section 2.2(b), (c), (d), or (e); (ii) pursuant to such section, you continue to vest in your RSUs following your Termination Date; (iii) following your Termination Date, you become employed by a Governmental Employer; and (iv) you present the Corporation with satisfactory evidence demonstrating that as a result of such employment with a Governmental Employer, the divestiture of your RSUs is reasonably necessary to avoid the violation of United States federal, state or local conflicts of interest or ethics law applicable to you; provided that, no accelerated distribution shall occur pursuant to this Section 4.1(b) unless the Corporation determines that such acceleration is consistent with Treasury Regulation Section 1.409A-3(j)(4)(iii)(B). In the event that vesting and settlement of the RSUs are accelerated pursuant to this Section 4.1(b), you shall remain subject to these Terms and Conditions as if the RSUs had remained outstanding through the original Vesting Dates and had been settled in accordance with Section 4.1(a), including, but not limited to, for purposes of (A) determining the duration of the Restricted Period set forth in Section 3.2 (so that the Restricted Period shall be determined based on the originally scheduled Vesting Dates without regard to any acceleration) and (B) determining whether the RSUs have been settled for purposes of Section 3.9 (so that the RSUs shall not be deemed to have been vested or settled until the date on which they would have been vested or settled (as applicable) without regard to acceleration under this Section 4.1(b)). In the event that the settlement of the RSUs is accelerated in accordance with this Section 4.1(b), upon such settlement, you shall cease to have any further rights with respect to your RSUs, and for the avoidance of doubt, any RSUs which are not settled shall be deemed immediately forfeited. As a condition for acceleration pursuant to this Section 4.1(b), the Corporation may require that you sign an agreement satisfactory to the Corporation addressing the circumstances of such acceleration and acknowledging these Terms and Conditions. For purposes of this Section 4.1(b), "**Governmental Employer"** means a United States federal, state or local governmental agency, branch, department, or entity and any court or other tribunal.

4.2 Form of Settlement. Vested RSUs shall be settled in the form of Common Stock delivered in book-entry form, except as determined by the Committee as provided in Section 2.2(e).

Notwithstanding the foregoing, and except as determined by the Committee as provided in Section 2.2(e), the Corporation may, in its sole discretion, (a) settle any vested RSUs in the form of a cash payment, or (b) settle any vested RSUs in the form of Common Stock but require an immediate sale of such shares of Common Stock (in which case, these Terms and Conditions shall give the Corporation the authority to issue sales instructions on your behalf). Accrued dividend equivalents corresponding to vested RSUs, if any, shall be settled in the form of cash, payable without interest, on the next administratively practicable pay date following the vesting of such RSUs.

SECTION 5: Other Terms and Conditions

5.1 No Right to Employment. Neither the award of RSUs nor anything else contained in these Terms and Conditions nor the Plan shall be deemed to limit or restrict the right of your Employer to terminate your employment at any time, for any reason, with or without Cause.

5.2 Compliance with Laws. Notwithstanding any other provision of these Terms and Conditions, you agree to take any action, and consent to the taking of any action by the Corporation and your Employer with respect to the RSUs awarded hereunder necessary to achieve compliance with applicable laws, regulations or relevant regulatory requirements or interpretations in effect from time to time ("**Applicable Laws**"). Any determination by the Corporation in this regard shall be final, binding and conclusive. The Corporation shall in no event be obligated to register any securities pursuant to the U.S. Securities Act of 1933 (as the same shall be in effect from time to time) or other applicable foreign securities laws, or to take any other affirmative action in order to cause the delivery of shares in book-entry form or otherwise therefore to comply with any Applicable Laws. For the avoidance of doubt, you understand and agree that if any payment or other obligation under or arising from these Terms and Conditions, including without limitation dividend equivalent rights, or the Plan is in conflict with or is restricted by any Applicable Laws, the Corporation may reduce, revoke, cancel, clawback or impose different terms and conditions to the extent it deems necessary or appropriate, in its sole discretion, to effect such compliance. If the Corporation determines that it is necessary or appropriate for any payments under these Terms and Conditions to be delayed in order to avoid additional tax, interest and or penalties under Section 409A of the Code, then the payments would not be made before the date which is the first day following the six (6) month anniversary of the date of your termination of employment (or upon earlier death).

5.3 Tax Withholding. Regardless of any action the Corporation or your Employer take with respect to any or all income tax (including U.S. federal, state and local taxes or non-U.S. taxes), social insurance, payroll tax, payment on account or other tax-related withholding ("**Tax-Related Items**"), you acknowledge that the ultimate liability for all Tax-Related Items legally due by you is and remains your responsibility and that the Corporation and your Employer (a) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the RSUs, including the grant of the RSUs, the vesting of the RSUs, the subsequent sale of any shares of Common Stock acquired pursuant to the RSUs and the receipt of any dividends or dividend equivalents, and (b) do not commit to structure the terms of the grant or any aspect of the RSUs to reduce or eliminate your liability for Tax-Related Items. Further, if you are or become subject to taxation in more than one country, you acknowledge that the Corporation and/or your Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one country.

Prior to the delivery of shares of Common Stock upon the vesting of your RSUs, if your country of residence (and/or the country of employment, if different) requires withholding or payment of Tax-

Related Items, the Corporation shall be authorized to withhold a sufficient number of whole shares of Common Stock otherwise issuable upon the vesting of the RSUs that have an aggregate Fair Market Value sufficient to pay the Tax-Related Items required to be withheld with respect to the shares of Common Stock. The cash equivalent of the shares of Common Stock withheld will be used to settle the obligation to withhold the Tax-Related Items. In the event that withholding in shares of Common Stock is prohibited or problematic under Applicable Laws or otherwise may trigger adverse consequences to the Corporation or your Employer, your Employer is authorized to withhold the Tax-Related Items required to be withheld with respect to the shares of Common Stock in cash from your regular salary and/or wages or any other amounts payable to you. In the event the withholding requirements are not satisfied through the withholding of shares of Common Stock by the Corporation or through your regular salary and/or wages or other amounts payable to you by your Employer, no shares of Common Stock will be issued to you (or your estate) upon vesting of the RSUs unless and until satisfactory arrangements have been made by you with respect to the payment of any Tax-Related Items that the Corporation or your Employer determines, in its sole discretion, must be withheld or collected with respect to such RSUs. By accepting this grant of RSUs, you expressly consent to the withholding of shares of Common Stock and/or withholding from your regular salary and/or wages or other amounts payable to you as provided for hereunder. All other Tax-Related Items related to the RSUs and any shares of Common Stock delivered in payment thereof are your sole responsibility. Without limiting the Corporation's or your Employer's authority to satisfy their withholding obligations for Tax-Related Items as set forth herein, by accepting this grant of RSUs, you authorize the Corporation and/or your Employer to withhold shares of Common Stock otherwise deliverable to you upon vesting of your RSUs to satisfy Tax-Related Items, regardless of whether the Corporation and/or your Employer have an obligation to withhold such Tax-Related Items.

The Corporation or your Employer may withhold or account for Tax-Related Items by considering applicable statutory or other withholding rates, including minimum or maximum rates applicable in your jurisdiction(s). In the event of over-withholding, you may receive a refund of any over-withheld amount in cash (with no entitlement to the equivalent in Common Stock). In the event of under-withholding, you may be required to pay any additional Tax-Related Items directly to the applicable tax authority or to the Corporation and/or your Employer. If the obligation for Tax-Related Items is satisfied by withholding in shares of Common Stock, you shall be deemed to have been issued the full number of shares of Common Stock subject to the vested RSUs, notwithstanding that a number of the shares of Common Stock are held back solely for the purpose of paying the Tax-Related Items.

[5.4 Forfeiture and Repayment. If, directly or indirectly:

(a) during the course of your employment with your Employer, you violate any obligations set forth in the Award Agreement (including without limitation those obligations set forth in Section 3 of these Terms and Conditions) or engage in conduct or it is discovered that you engaged in conduct that is adverse to the interests of the Corporation or its Affiliates, including but not limited to failures to comply with the Corporation's or any of its Affiliate's rules or regulations, fraud, or conduct contributing to any financial restatements or irregularities;

(b) during the course of your employment with your Employer, you engage (other than for the benefit of the Corporation or its Affiliates) in solicitation and/or diversion of customers or employees;

(c) during the course of your employment with your Employer, you engage in competition with the Corporation or its Affiliates;

(d) following termination of your employment with your Employer for any reason, with or without Cause, you violate any post-termination obligations or duties owed to the Corporation or its Affiliates under any agreement with the Corporation or its Affiliates, including without limitation, any employment, confidentiality, non-solicitation, non-competition or other agreement restricting post-employment conduct (including without limitation those obligations set forth in Section 3 of these Terms and Conditions); or

(e) any compensation that the Corporation or its Affiliates has promised or paid to you is required to be forfeited and/or repaid to the Corporation or its Affiliates pursuant to applicable regulatory requirements;

then the Corporation may cancel all or any portion of the RSUs and/or require repayment of any sums (including, in the case of shares of Common Stock, the value of those shares of Common Stock) or other amounts which were acquired pursuant to the RSUs (including without limitation any dividends paid on the shares of Common Stock and dividend equivalents). The Corporation shall have sole discretion to determine what constitutes grounds for forfeiture and/or repayment under this Section 5.4, and, in such event, the portion of the RSUs that shall be cancelled and the sums or amounts that shall be repaid. For purposes of the foregoing, you expressly and explicitly authorize the Corporation to issue instructions, on your behalf, to any brokerage firm and/or third party administrator engaged by the Corporation to hold the shares of Common Stock and other amounts acquired pursuant to the RSUs to re-convey, transfer or otherwise return such shares and/or other amounts to the Corporation.

For the avoidance of doubt, the Corporation will also cancel all or any portion of the RSUs and/or require repayment of any shares of Common Stock (or the value thereof) and other amounts which were acquired pursuant to the RSUs (including without limitation any dividends paid on the shares of Common Stock and dividend equivalents) as required by Applicable Laws and/or the Corporation's Policy for the Recovery of Erroneously Awarded Incentive-Based Compensation (the "**Recovery Policy**"), if applicable. To the extent that you are subject to the Recovery Policy, you agree that, notwithstanding the terms of any indemnification arrangement or insurance policy, the Corporation shall not indemnify you against the loss of erroneously awarded Incentive-Based Compensation (as defined in the Recovery Policy), including any payment or reimbursement for the cost of insurance obtained by you to fund amounts recoverable under the Recovery Policy. In order to satisfy any recoupment obligation arising under any clawback or recovery policy of the Corporation or otherwise under Applicable Laws, you expressly and explicitly authorize the Corporation to issue instructions, on your behalf, to any brokerage firm or stock plan service provider engaged by the Corporation to hold any shares of Common Stock or other amounts acquired pursuant to the RSUs to re-convey, transfer or otherwise return the shares of Common Stock and/or other amounts to the Corporation upon the Corporation's enforcement of any clawback or recovery policy or Applicable Laws.]

5.5 Governing Law and Choice of Forum. The Award Agreement shall be construed and enforced in accordance with the laws of the State of New York, other than any choice of law provisions calling for the application of laws of another jurisdiction. For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this grant or the Award Agreement, the parties hereby submit to and consent to the exclusive jurisdiction of the State of New York and agree that such litigation shall be conducted only in the courts of New York County, New York, or the federal courts for the United States for the Southern District of New York, and no other courts, where this grant is made and/or to be performed and agree to such other choice of forum provisions as are included in the Plan.

5.6 Nature of Plan. By participating in the Plan, you acknowledge, understand and agree that:

(a) The Plan is discretionary in nature and limited in duration, and may be amended, cancelled, or terminated by the Corporation, in its sole discretion, at any time.

(b) The grant of RSUs under the Plan is a one-time benefit and does not create any contractual or other right to receive RSUs or benefits in lieu of such awards in the future. Future awards, if any, will be at the sole discretion of the Corporation, including, but not limited to, the form and timing of the award, the number of shares of Common Stock subject to the award, the vesting provisions applicable to the award and the purchase price (if any).

(c) Your participation in the Plan is voluntary, and the value of your RSUs is an extraordinary item of compensation and is outside the scope of your employment (and your employment contract, if any). As such, your RSUs are not part of normal or expected compensation for purposes of calculating any severance, resignation, redundancy, dismissal, termination or end of service payments, bonuses, long-service awards, pension or retirement benefits, or similar payments.

(d) No claim or entitlement to compensation or damages shall arise from forfeiture of the RSUs or recoupment of any shares of Common Stock acquired under the Plan resulting from (i) the termination of your employment or other service relationship (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any) and/or (ii) the application of any recoupment policy or any recovery or clawback policy otherwise required by law. **In consideration of the grant of the RSUs, you expressly agree not to institute any such claim against the Corporation, any of its Affiliates or your Employer.**

5.7 ***Data Privacy. By accepting the RSUs, you declare that you agree with the data processing practices described herein and consent to the collection, processing and use of your Personal Data (as defined below) by the Corporation and the transfer of your Personal Data to the recipients mentioned herein, including recipients located in countries which do not adduce an adequate level of protection from a European (or other non-U.S.) data protection law perspective, for the purposes described herein.***

(a) Declaration of Consent. You understand that you need to review the following information about the processing of your personal data by or on behalf of the Corporation, your Employer and/or any of its Affiliates, as described herein, and any other RSU grant materials (the "Personal Data") and declare your consent. With regard to the processing of your Personal Data in connection with the Plan, you understand that the Corporation is the controller of the Personal Data.

(b) Data Processing and Legal Basis. The Corporation collects, uses and otherwise processes your Personal Data for the purposes of allocating shares and implementing, administering and managing the Plan. You understand that this Personal Data may include, without limitation, your name, home address and telephone number, email address, personal bank account details, date of birth, social insurance number, passport number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of Common Stock or directorships held in the Corporation or its Affiliates, details of all RSUs or any other entitlement to shares of Common Stock or equivalent benefits awarded, canceled, purchased, vested, unvested or outstanding in your favor. The Corporation's legal basis for the processing of your Personal Data is your consent.

(c) Stock Plan Administration Service Providers. You understand that the Corporation may transfer your Personal Data, or parts thereof, to Fidelity Stock Plan Services LLC and certain of its affiliated companies ("Fidelity"), an independent service provider based in the United States which assists the Corporation with the implementation, administration and management of the Plan. In the future, the Corporation may select a different service provider and share your Personal Data with such different service provider that serves the Corporation in a similar manner. You understand and acknowledge that the Corporation's service provider may open an account for you to receive and trade shares acquired under the Plan and that you will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of your ability to participate in the Plan.

(d) International Data Transfers. You understand that the Corporation and, as of the date hereof, certain third parties assisting in the implementation, administration and management of the Plan, such as the Corporation's service providers, are based in the United States. If you are located outside the United States, you understand and acknowledge that your country has enacted data privacy laws that are different from the laws of the United States. Transfers of personal data from the EU to the United States can be made on the basis of Standard Contractual Clauses approved by the European Commission or other appropriate safeguards permissible under the Applicable Laws. If you are located in the EU or EEA, the Corporation may receive, process and transfer your Personal Data onward to third-party service providers solely on the basis of appropriate data transfer agreements or other appropriate safeguards permissible under Applicable Laws. If applicable, you understand that you can ask for a copy of the appropriate data processing agreements underlying the transfer of your Personal Data by contacting your local People Team representative. The Corporation's legal basis for the transfer of your Personal Data is your consent.

(e) Data Retention. You understand that the Corporation will use your Personal Data only as long as is necessary to implement, administer and manage your participation in the Plan, or to comply with Applicable Laws, including under tax and securities laws. In the latter case, you understand and acknowledge that the Corporation's legal basis for the processing of your Personal Data would be compliance with the Applicable Laws or the pursuit by the Corporation of respective legitimate interests not outweighed by your interests, rights or freedoms. When the Corporation no longer needs your Personal Data for any of the above purposes, you understand the Corporation will remove it from its systems.

(f) Voluntariness and Consequences of Denial/Withdrawal of Consent. You understand that your participation in the Plan and your grant of consent is purely voluntary. You may deny or later withdraw your consent at any time, with future effect and for any or no reason. If you deny or later withdraw your consent, the Corporation can no longer offer you participation in the Plan or offer other awards to you or administer or maintain such awards and you would no longer be able to participate in the Plan. You further understand that denial or withdrawal of your consent would not affect your status or salary as an employee or your career and that you would merely forfeit the opportunities associated with the Plan.

(g) Data Subject Rights. You understand that data subject rights regarding the processing of personal data vary depending on the Applicable Laws and that, depending on where you are based and subject to the conditions set out in the Applicable Laws, you may have, without limitation, the rights to (i) inquire whether and what kind of Personal Data the Corporation holds about you and how it is processed, and to access or request copies of such Personal Data, (ii) request the correction or supplementation of Personal Data about you that is inaccurate, incomplete or out-of-date in light of

the purposes underlying the processing, (iii) obtain the erasure of Personal Data no longer necessary for the purposes underlying the processing, processed based on withdrawn consent, processed for legitimate interests that, in the context of your objection, do not prove to be compelling, or processed in non-compliance with applicable legal requirements, (iv) request the Corporation to restrict the processing of your Personal Data in certain situations where you feel its processing is inappropriate, (v) object, in certain circumstances, to the processing of Personal Data for legitimate interests, and to (vi) request portability of your Personal Data that you have actively or passively provided to the Corporation (which does not include data derived or inferred from the collected data), where the processing of such Personal Data is based on consent or your employment or service contract and is carried out by automated means. In case of concerns, you understand that you may also have the right to lodge a complaint with the competent local data protection authority. Further, to receive clarification of, or to exercise any of your rights, you should contact your local People Team representative.

5.8 Insider Trading/Market Abuse Laws. You may be subject to insider trading restrictions and/or market abuse laws based on the exchange on which the shares of Common Stock are listed and in applicable jurisdictions including the United States and your country or your broker's country, if different, which may affect your ability to accept, acquire, sell or otherwise dispose of shares of Common Stock, rights to shares of Common Stock (e.g., RSUs) or rights linked to the value of shares of Common Stock under the Plan during such times as you are considered to have "inside information" regarding the Corporation (as defined by the laws in the applicable jurisdictions). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders you placed before you possessed inside information. Furthermore, you could be prohibited from (a) disclosing the inside information to any third party and (b) "tipping" third parties or causing them otherwise to buy or sell securities (third parties include fellow employees). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable insider trading policy of the Corporation. You acknowledge that it is your responsibility to comply with any applicable restrictions, and you should speak to your personal advisor on this matter.

5.9 Electronic Delivery and Acceptance. The Corporation may, in its sole discretion, deliver any documents related to current or future participation in the Plan by electronic means. You hereby consent to receive such documents by electronic delivery and agree to participate in the Plan through an on-line or electronic system established and maintained by the Corporation or a third party designated by the Corporation.

5.10 Severability. The provisions of these Terms and Conditions are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable. Alternatively, the Corporation, in its sole discretion, shall have the power and authority to revise or strike such provision to the minimum extent necessary to render it valid and enforceable to the full extent permitted under Applicable Laws.

5.11 Construction/Blue Pencil. The headings contained in these Terms and Conditions are for convenience only and do not constitute part of and shall not be used to interpret these Terms and Conditions. The language in all parts of these Terms and Conditions shall be construed according to its fair meaning and not strictly for or against you or the Corporation because that party or that party's legal representative drafted it. Notwithstanding any provision to the contrary herein, you agree that the covenants and post-employment restrictions contained in these Terms and Conditions are reasonable under the circumstances, valid in duration and scope, and necessary to protect the Corporation's Confidential Information. It is the desire and intent of the parties, and you agree, that the covenants and post-employment restrictions contained in these Terms and Conditions shall be enforced to the fullest extent permissible under applicable laws and public policies. Accordingly, if any term or provision of the covenants or post-employment restrictions contained in these Terms and Conditions or any portion thereof is declared illegal or unenforceable by any court of competent jurisdiction, such court shall have the right, power and authority to excise or modify such provision or provisions of these covenants so as to render such provision or portion thereof enforceable, and to the extent such provision or portion thereof cannot be rendered enforceable, these Terms and Conditions shall be considered divisible as to such provision, which shall become null and void, leaving the remainder in full force and effect.

5.12 Liability for Breach. You shall indemnify the Corporation and hold it harmless from and against any and all damages or liabilities incurred by the Corporation (including liabilities for attorneys' fees and disbursements) arising out of any breach by you of these Terms and Conditions, including, without limitation, any attempted transfer of RSUs in violation of Section 1.4 of these Terms and Conditions.

5.13 Waiver. You acknowledge that a waiver by the Corporation of any provision of these Terms and Conditions shall not operate or be construed as a waiver of any other provision of these Terms and Conditions, or of any subsequent breach of these Terms and Conditions.

5.14 Addendum. The grant of your RSUs shall be subject to any special terms and conditions set forth in any Addendum to these Terms and Conditions (the "**Addendum**") for your state of residence (and your state of employment, if different). If you relocate your residency or employment to one of the states included in the Addendum, the special terms and conditions for such state will apply to you, to the extent the Corporation determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Addendum shall constitute part of the Award Agreement.

5.15 Additional Requirements. The Corporation reserves the right to impose other requirements on the RSUs, any payment made pursuant to the RSUs, and your participation in the Plan, to the extent the Corporation determines, in its sole discretion, that such other requirements are necessary or advisable for legal or administrative reasons. Such requirements may include (but are not limited to) requiring you to sign any agreements or undertakings that may be necessary to accomplish the foregoing.

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THE BANK OF NEW YORK MELLON CORPORATION

FORM OF ADDENDUM TO TERMS AND CONDITIONS OF RESTRICTED STOCK UNITS

This Addendum includes additional terms and conditions that govern the RSUs granted to you if you reside in or are employed in one of the locations listed herein. These terms and conditions are in addition to, or, if so indicated, in place of, the terms and conditions set forth in the main body of the Award Agreement. All capitalized terms as contained in this Addendum shall have the same meaning as set forth in the Award Notice, the Terms and Conditions and the Plan. If you transfer your residence and/or employment to one of the locations included in this Addendum, the special terms and conditions for such location will apply to you to the extent the Corporation determines, in its sole discretion, that the application of such terms and conditions is necessary or advisable for legal or administrative reasons (or the Corporation may establish alternative terms and conditions as may be necessary or advisable to accommodate your transfer).

CALIFORNIA

1. Non-Solicitation of Clients, Contractors and Employees; Non-Competition. The following provision shall replace Section 3.2 of the Terms and Conditions in its entirety:

3.2 Non-Solicitation of Clients, Contractors and Employees; Non-Competition.

(a) *Non-Solicitation of Clients, Contractors and Employees*. You are prohibited, without prior authorization, from using or disclosing the Corporation's or its Affiliates' trade secrets at any time, including without limitation to (i) solicit or induce or attempt to solicit or induce any current or prospective client of the Corporation or an Affiliate known to you, to initiate or continue a client relationship with you other than with the Corporation or Affiliate, or to terminate or reduce its client relationship with the Corporation or Affiliate, or (ii) solicit any employee or contractor to terminate or reduce their employment or engagement, whichever is applicable, with the Corporation or Affiliate. You understand and acknowledge that your obligations under this provision will continue indefinitely unless and until any such trade secrets have become, through no fault of yours or through the wrongful conduct of a third party, generally known to the public. You understand and acknowledge that your obligations under this Section will survive termination of employment regardless of reason.

(b) *Non-Competition*. Intentionally Omitted.

2. Governing Law and Choice of Forum. The following provision shall be appended to Section 5.5 of the Terms and Conditions:

Notwithstanding the foregoing, for purposes of Section 3.2 of these Terms and Conditions, the Award Agreement shall be construed and enforced in accordance with the laws of the State of California, other than any choice of law provisions calling for the application of laws of another jurisdiction. For purposes of litigating any dispute that arises between the parties directly from Section 3.2, the parties hereby submit to and consent to the exclusive jurisdiction of the State of California and agree that such litigation shall be conducted only in a California state or federal court.

MASSACHUSETTS

1. Non-Competition. The following provision shall be appended to Section 3.2(b) of the Terms and Conditions:

For the sake of clarity, the foregoing non-compete restriction does not prohibit you from being employed by the government or a not-for profit organization (i.e. an organization exempt from local and national tax laws). In view of the limited scope of the non-compete obligation assumed under this Section, which does not prevent you from working in other entities that are not affected by it, you acknowledge and agree that: (i) the foregoing non-compete obligation is reasonable and necessary to protect the Corporation's legitimate business interests including its confidential information and goodwill, and (ii) the continued vesting in your RSUs, including any dividend equivalent rights, following a Retirement-Eligible Event or termination providing transition/separation pay is fair and reasonable consideration for the foregoing non-compete obligation. During the Restricted Period, you further agree to (i) advise any person or entity that seeks to employ you of the terms of these covenants; and (ii) immediately notify People Team equity administration if you are not in compliance with your obligations above (i.e., if you begin to associate with or transact business on behalf of a Competitive Enterprise). You have seven business days from the date you electronically acknowledge and accept the terms of the Award Agreement to rescind your acceptance of the Award Agreement. You acknowledge that you have been provided at least ten business days before this Award Agreement is to be effective. You may rescind your acceptance of the Award Agreement by sending written notice to People Team equity administration at [Insert Contact Information].

Exhibit 13.1

FINANCIAL SECTION

THE BANK OF NEW YORK MELLON CORPORATION
2024 Annual Report
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The Bank of New York Mellon Corporation (and its subsidiaries)

Financial Summary

(dollars in millions, except per share amounts and unless otherwise noted)	**2024**	2023	2022
Selected income statement information:			
Fee and other revenue *(a)*	**$ 14,307**	$ 13,352	$ 13,025
Net interest income	**4,312**	4,345	3,504
Total revenue *(a)*	**18,619**	17,697	16,529
Provision for credit losses	**70**	119	39
Noninterest expense	**12,701**	13,295	13,010
Income before income taxes *(a)*	**5,848**	4,283	3,480
Provision for income taxes	**1,305**	979	937
Net income *(a)*	**4,543**	3,304	2,543
Net (income) loss attributable to noncontrolling interests related to consolidated investment management funds	**(13)**	(2)	13
Preferred stock dividends	**(194)**	(235)	(211)
Net income applicable to common shareholders of The Bank of New York Mellon Corporation *(a)*	**$ 4,336**	$ 3,067	$ 2,345
Earnings per share applicable to common shareholders of The Bank of New York Mellon Corporation: ***(a)***			
Basic	**$ 5.84**	$ 3.91	$ 2.89
Diluted	**$ 5.80**	$ 3.89	$ 2.88
Average common shares and equivalents outstanding *(in thousands)*:			
Basic	**742,588**	784,069	811,068
Diluted	**748,101**	787,798	814,795
At Dec. 31			
Assets under custody and/or administration ("AUC/A") *(in trillions) (b)*	**$ 52.1**	$ 47.8	$ 44.3
Assets under management ("AUM") *(in trillions) (c)*	**2.0**	2.0	1.8
Selected ratios:			
Return on common equity *(a)*	**11.9%**	8.6%	6.5%
Return on tangible common equity – Non-GAAP *(a)(d)*	**22.8**	16.8	13.4
Pre-tax operating margin *(a)*	**31**	24	21
Net interest margin	**1.22**	1.25	0.97
Cash dividends per common share	**$ 1.78**	$ 1.58	$ 1.42
Common dividend payout ratio *(a)*	**31%**	41%	50%
Common dividend yield	**2.3%**	3.0%	3.1%
At Dec. 31			
Closing stock price per common share	**$ 76.83**	$ 52.05	$ 45.52
Market capitalization	**$ 55,139**	$ 39,524	$ 36,800
Book value per common share *(a)*	**$ 51.52**	$ 47.97	$ 44.25
Tangible book value per common share – Non-GAAP *(a)(d)*	**$ 27.05**	$ 25.25	$ 22.96
Full-time employees *(e)*	**51,800**	53,400	51,700
Common shares outstanding *(in thousands)*	**717,680**	759,344	808,445
Regulatory capital ratios *(f)*			
Common Equity Tier 1 ("CET1") ratio	**11.2%**	11.5%	11.1%
Tier 1 capital ratio	**13.7**	14.2	14.1
Total capital ratio	**14.8**	14.9	14.9
Tier 1 leverage ratio	**5.7**	6.0	5.7
Supplementary leverage ratio ("SLR")	**6.5**	7.3	6.8

(a) *Results for the year ended Dec. 31, 2023 and Dec. 31, 2022 were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (Accounting Standards Update ("ASU") 2023-02). See Note 2 of the Notes to Consolidated Financial Statements for additional information.*

(b) *Consists of AUC/A primarily from the Asset Servicing line of business and, to a lesser extent, the Clearance and Collateral Management, Issuer Services, Pershing and Wealth Management lines of business. Includes the AUC/A of CIBC Mellon Trust Company ("CIBC Mellon"), a joint venture with the Canadian Imperial Bank of Commerce, of $1.8 trillion at Dec. 31, 2024, $1.7 trillion at Dec. 31, 2023 and $1.5 trillion at Dec. 31, 2022.*

(c) *Represents assets managed in the Investment and Wealth Management business segment.*

(d) *Return on tangible common equity and tangible book value per common share, both Non-GAAP measures, exclude goodwill and intangible assets, net of deferred tax liabilities. See "Supplemental Information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 115 for the reconciliation of these Non-GAAP measures.*

(e) *Beginning in 2024, the number of full-time employees excludes interns.*

(f) *For our CET1, Tier 1 and Total capital ratios, our effective capital ratios under U.S. capital rules are the lower of the ratios as calculated under the Standardized and Advanced Approaches. For additional information on our regulatory capital ratios, see "Capital" beginning on page 39.*

General

In this Annual Report, references to "our," "we," "us," "BNY," the "Company" and similar terms refer to The Bank of New York Mellon Corporation and its consolidated subsidiaries. The term "Parent" refers to The Bank of New York Mellon Corporation but not its subsidiaries.

The following should be read in conjunction with the Consolidated Financial Statements included in this report. BNY's actual results of future operations may differ from those estimated or anticipated in certain forward-looking statements contained herein due to the factors described under the headings "Forward-looking Statements" and "Risk Factors," both of which investors should read.

Certain business terms used in this Annual Report are defined in the Glossary.

This Annual Report generally discusses 2024 and 2023 items and comparisons between 2024 and 2023. Discussions of 2022 items and comparisons between 2023 and 2022 that are not included in this Annual Report can be found in our 2023 Annual Report, which was filed as an exhibit to our Form 10-K for the year ended Dec. 31, 2023.

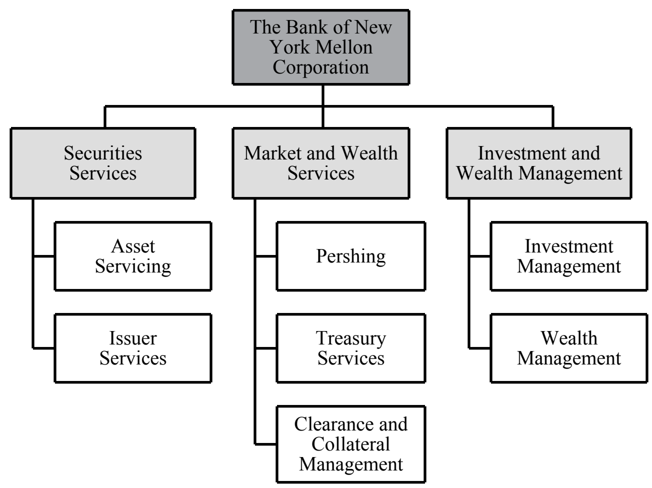
Overview

BNY is a global financial services company that helps make money work for the world – managing it, moving it and keeping it safe. For more than 240 years BNY has partnered alongside clients, putting its expertise and platforms to work to help them achieve their ambitions. Today BNY helps over 90% of Fortune 100 companies and nearly all the top 100 banks globally to access the money they need. BNY supports governments in funding local projects and works with over 90% of the top 100 pension plans to safeguard investments for millions of individuals, and so much more. As of Dec. 31, 2024, BNY oversees $52.1 trillion in assets under custody and/or administration and $2.0 trillion in assets under management.

BNY is the corporate brand of The Bank of New York Mellon Corporation (NYSE: BK). Headquartered in New York City, BNY employs over 50,000 people globally and has been named among Fortune's World's Most Admired Companies and Fast Company's Best Workplaces for Innovators. Additional information is available on www.bny.com. Follow on LinkedIn or visit the BNY Newsroom for the latest company news.

BNY has three business segments, Securities Services, Market and Wealth Services and Investment and Wealth Management, which offer a comprehensive set of capabilities and deep expertise across the investment life cycle, enabling the Company to provide solutions to buy-side and sell-side market participants, as well as leading institutional and wealth management clients globally.

The diagram below presents our three business segments and lines of business, with the remaining operations in the Other segment.



For additional information on our business segments, see "Review of business segments" and Note 24 of the Notes to Consolidated Financial Statements.

Summary of financial highlights

We reported net income applicable to common shareholders of $4.3 billion, or $5.80 per diluted common share, in 2024, including the negative impact of notable items. Notable items in 2024 include severance expense, litigation reserves and the net impact of adjustments for the Federal Deposit Insurance Corporation ("FDIC") special assessment. Excluding notable items, net income applicable to common shareholders was $4.5 billion (Non-GAAP), or $6.03 (Non-GAAP) per diluted common share, in 2024. In 2023, net income applicable to common shareholders was $3.1 billion, or $3.89 per diluted common share, including the negative impact of notable items. Notable items in 2023 include the initial estimate for the FDIC special assessment, severance expense, the reduction in the fair value of a contingent consideration receivable, litigation reserves and net losses on disposals. Excluding notable items, net income applicable to common shareholders was $4.0 billion (Non-GAAP), or $5.07 (Non-GAAP) per diluted common share, in 2023.

The highlights below are based on 2024 compared with 2023, unless otherwise noted.

- Total revenue increased 5%, primarily reflecting:
  - Fee revenue increased 6%, primarily reflecting higher market values, net new business, higher client activity and foreign exchange revenue, partially offset by the mix of AUM flows. (See "Fee and other revenue" beginning on page 5.)
  - Investment and other revenue increased primarily reflecting the reduction in the fair value of a contingent consideration receivable in 2023 and higher client activity in our fixed income and equity trading business. (See "Fee and other revenue" beginning on page 5.)
  - Net interest income decreased 1%, primarily reflecting changes in deposit mix, partially offset by higher investment securities portfolio yields and balance sheet growth. (See "Net interest income" beginning on page 8.)
- The provision for credit losses was $70 million, primarily driven by reserve increases related to commercial real estate exposure and changes in the macroeconomic forecast. (See "Consolidated balance sheet review – Allowance for credit losses" beginning on page 33.)
- Noninterest expense decreased 4%, primarily reflecting the net impact of adjustments for the FDIC special assessment and efficiency savings, partially offset by higher investments, employee merit increases and revenue-related expenses. Excluding notable items, noninterest expense increased 1% (Non-GAAP). (See "Noninterest expense" on page 11.)
- Effective tax rate of 22.3% in 2024. (See "Income taxes" on page 11.)
- Return on common equity ("ROE") was 11.9% for 2024. Excluding notable items, the adjusted ROE was 12.4% (Non-GAAP) for 2024.
- Return on tangible common equity ("ROTCE") was 22.8% (Non-GAAP) for 2024. Excluding notable items, the adjusted ROTCE was 23.8% (Non-GAAP) for 2024.

See "Supplemental Information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 115 for reconciliations of the Non-GAAP measures.

Metrics

- AUC/A totaled $52.1 trillion at Dec. 31, 2024 compared with $47.8 trillion at Dec. 31, 2023. The 9% increase primarily reflects higher market values, client inflows and net new business, partially offset by the unfavorable impact of a stronger U.S. dollar. (See "Fee and other revenue" beginning on page 5.)
- AUM totaled $2.03 trillion at Dec. 31, 2024 compared with $1.97 trillion at Dec. 31, 2023. The 3% increase primarily reflects higher market values, partially offset by the unfavorable impact of a stronger U.S. dollar. (See "Review of business segments – Investment and Wealth Management business segment" beginning on page 17.)

Capital and liquidity

- Our CET1 ratio calculated under the Standardized Approach was 11.2% at Dec. 31, 2024 and 11.5% at Dec. 31, 2023 under the Advanced Approaches. The decrease was primarily driven by capital returned through common stock repurchases and dividends and higher risk-weighted assets ("RWAs"), partially offset by capital generated through earnings. (See "Capital" beginning on page 39.)
- Our Tier 1 leverage ratio was 5.7% at Dec. 31, 2024, compared with 6.0% at Dec. 31, 2023. The decrease was driven by higher average assets, partially offset by an increase in capital. (See "Capital" beginning on page 39.)

Fee and other revenue

Fee and other revenue *(dollars in millions, unless otherwise noted)*	**2024**	2023	2022	**2024 vs. 2023**	2023 vs. 2022
Investment services fees	**$ 9,419**	$ 8,843	$ 8,529	**7%**	4%
Investment management and performance fees *(a)*	**3,139**	3,058	3,299	**3**	(7)
Foreign exchange revenue	**688**	631	822	**9**	(23)
Financing-related fees	**216**	192	175	**13**	10
Distribution and servicing fees	**158**	148	130	**7**	14
Total fee revenue	**13,620**	12,872	12,955	**6**	(1)
Investment and other revenue *(b)*	**687**	480	70	**N/M**	N/M
Total fee and other revenue *(b)*	**$ 14,307**	$ 13,352	$ 13,025	**7%**	3%
Fee revenue as a percentage of total revenue	**73%**	73%	78%		
AUC/A at period end *(in trillions) (c)*	**$ 52.1**	$ 47.8	$ 44.3	**9%**	8%
AUM at period end *(in billions) (d)*	**$ 2,029**	$ 1,974	$ 1,836	**3%**	8%

(a) Excludes seed capital gains (losses) related to consolidated investment management funds.
(b) Results for the years ended Dec. 31, 2023 and Dec. 31, 2022 were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 of the Notes to Consolidated Financial Statements for additional information.
(c) Consists of AUC/A primarily from the Asset Servicing line of business and, to a lesser extent, the Clearance and Collateral Management, Issuer Services, Pershing and Wealth Management lines of business. Includes the AUC/A of CIBC Mellon of $1.8 trillion at Dec. 31, 2024, $1.7 trillion at Dec. 31, 2023 and $1.5 trillion at Dec. 31, 2022.
(d) Represents assets managed in the Investment and Wealth Management business segment.
N/M – Not meaningful.

Fee revenue increased 6% compared with 2023, primarily reflecting higher investment services fees, investment management and performance fees and foreign exchange revenue.

Investment and other revenue increased $207 million in 2024 compared with 2023, primarily reflecting the reduction in the fair value of a contingent consideration receivable in 2023 and higher client activity in our fixed income and equity trading business.

Investment services fees

Investment services fees increased 7% compared with 2023, primarily reflecting higher market values, net new business and higher client activity.

AUC/A totaled $52.1 trillion at Dec. 31, 2024, an increase of 9% compared with Dec. 31, 2023, primarily reflecting higher market values, client inflows and net new business, partially offset by the unfavorable impact of a stronger U.S. dollar. AUC/A consisted of 37% equity securities and 63% fixed-income securities at Dec. 31, 2024 and 35% equity securities and 65% fixed-income securities at Dec. 31, 2023.

See “Securities Services business segment” and “Market and Wealth Services business segment” in “Review of business segments” for additional details.

Investment management and performance fees

Investment management and performance fees increased 3% compared with 2023, primarily reflecting higher market values, partially offset by the mix of AUM flows and lower performance fees. Performance fees were $51 million in 2024 and $81 million in 2023. On a constant currency basis (Non-GAAP), investment management and performance fees increased 2% compared with 2023. See “Supplemental Information – Explanation of GAAP and Non-GAAP financial measures” beginning on page 115 for the reconciliation of Non-GAAP measures.

AUM was $2.0 trillion at Dec. 31, 2024, an increase of 3% compared with Dec. 31, 2023, primarily reflecting higher market values, partially offset by the unfavorable impact of a stronger U.S. dollar.

See “Investment and Wealth Management business segment” in “Review of business segments” for additional details regarding the drivers of investment management and performance fees, AUM and AUM flows.

Foreign exchange revenue

Foreign exchange revenue is primarily driven by the volume of client transactions and the spread realized on these transactions, both of which are impacted by market volatility, the impact of foreign currency hedging activities and foreign currency remeasurement gain (loss). In 2024, foreign exchange revenue increased 9% compared with 2023, primarily reflecting higher volumes. Foreign exchange revenue is primarily reported in the Securities Services business segment and, to a lesser extent, the Market and Wealth Services and Investment and Wealth Management business segments and the Other segment.

Financing-related fees

Financing-related fees, which are primarily reported in the Market and Wealth Services and Securities Services business segments, include capital market fees, loan commitment fees and credit-related fees. Financing-related fees increased 13% in 2024 compared with 2023, primarily reflecting higher underwriting fees.

Distribution and servicing fees

Distribution and servicing fees earned from mutual funds are primarily based on average assets in the funds and the sales of funds that we manage or administer, and are primarily reported in the Investment Management line of business. These fees, which include 12b-1 fees, fluctuate with the overall level of net sales, the relative mix of sales between share classes, the funds' market values and money market fee waivers.

Distribution and servicing fees were $158 million in 2024 compared with $148 million in 2023, driven by higher money market balances. The impact of distribution and servicing fees on income in any one period is partially offset by distribution and servicing expense paid to other financial intermediaries to cover their costs for distribution and servicing of mutual funds. Distribution and servicing expense is recorded as noninterest expense on the income statement.

Investment and other revenue

Investment and other revenue includes income or loss from consolidated investment management funds, seed capital gains or losses, other trading revenue or loss, renewable energy investments gains or losses, income from corporate and bank-owned life insurance contracts, other investment gains or losses, gains or losses from disposals, expense reimbursements from our CIBC Mellon joint venture, other income or loss and net securities gains or losses. The income or loss from consolidated investment management funds should be considered together with the net income or loss attributable to noncontrolling interests, which reflects the portion of the consolidated funds for which we do not have an economic interest and is reflected below net income as a separate line item on the consolidated income statement. Other trading revenue or loss primarily includes the impact of market-risk hedging activity related to our seed capital investments in investment management funds, non-foreign currency derivative and fixed income trading, and other hedging activity. Other investment gains or losses includes fair value changes of non-readily marketable strategic equity, private equity and other investments. Expense reimbursements from our CIBC Mellon joint venture relate to expenses incurred by BNY on behalf of the CIBC Mellon joint venture. Other income includes various miscellaneous revenues.

The following table provides the components of investment and other revenue.

Investment and other revenue *(dollars in millions)*	**2024**	2023	2022
Income (loss) from consolidated investment management funds	**$ 46**	$ 30	$ (42)
Seed capital gains (losses) *(a)*	**20**	29	(37)
Other trading revenue	**314**	231	149
Renewable energy investment gains (losses) *(b)*	**25**	28	(12)
Corporate/bank-owned life insurance	**137**	118	128
Other investment gains *(c)*	**67**	47	159
Disposal (losses) gains	**—**	(6)	26
Expense reimbursements from joint venture	**118**	117	108
Other income (loss)	**45**	(46)	34
Net securities (losses)	**(85)**	(68)	(443) *(d)*
Total investment and other revenue *(b)*	**$ 687**	$ 480	$ 70

(a) Includes gains (losses) on investments in BNY funds which hedge deferred incentive awards.
(b) Results for the years ended Dec. 31, 2023 and Dec. 31, 2022 were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 of the Notes to Consolidated Financial Statements for additional information.
(c) Includes strategic equity, private equity and other investments.
(d) Includes a net loss of $449 million related to the repositioning of the securities portfolio.

Investment and other revenue was $687 million in 2024 compared with $480 million in 2023. The increase primarily reflects the reduction in the fair value of a contingent consideration receivable in 2023 and higher client activity in our fixed income and equity trading business.

Net interest income

Net interest income *(dollars in millions)*	**2024**	2023	2022	**2024 vs. 2023**	2023 vs. 2022
Net interest income	**$ 4,312**	$ 4,345	$ 3,504	**(1)%**	24%
Add: Tax equivalent adjustment	**2**	2	11	**N/M**	N/M
Net interest income on a fully taxable equivalent (“FTE”) basis – Non-GAAP *(a)*	**$ 4,314**	$ 4,347	$ 3,515	**(1)%**	24%
Average interest-earning assets	**$ 353,744**	$ 348,160	$ 362,180	**2%**	(4)%
Net interest margin	**1.22%**	1.25%	0.97%	**(3) bps**	28 bps
Net interest margin (FTE) – Non-GAAP *(a)*	**1.22%**	1.25%	0.97%	**(3) bps**	28 bps

(a) Net interest income (FTE) – Non-GAAP and net interest margin (FTE) – Non-GAAP include the tax equivalent adjustments on tax-exempt income, which allows for comparisons of amounts arising from both taxable and tax-exempt sources and is consistent with industry practice. The adjustment to an FTE basis has no impact on net income.

N/M – Not meaningful.

bps – basis points.

Net interest income decreased 1% compared with 2023, primarily reflecting changes in deposit mix, partially offset by higher investment securities portfolio yields and balance sheet growth.

Net interest margin decreased 3 basis points compared with 2023. The decrease primarily reflects the factors mentioned above.

Average interest-earning assets increased 2% compared with 2023. The increase primarily reflects higher federal funds sold and securities purchased under resale agreements, loan balances and securities, partially offset by lower interest-bearing deposits with the Federal Reserve and other central banks and interest-bearing deposits with banks.

Average non-U.S. dollar deposits comprised approximately 25% of our average total deposits in 2024 and 2023. Approximately 50% of the average non-U.S. dollar deposits in 2024 and 45% in 2023 were euro-denominated.

Net interest income in 2025 will largely depend on the level and mix of client deposits and investment securities portfolio reinvestment yields. Based on market implied forward interest rates as of Dec. 31, 2024, we expect net interest income for 2025 to increase when compared with 2024.

Average balances and interest rates	**2024**			2023		
(dollars in millions)	**Average balance**	**Interest**	**Average rate**	Average balance	Interest	Average rate
Assets						
Interest-earning assets:						
Interest-bearing deposits with the Federal Reserve and other central banks:						
Domestic offices	**$ 59,432**	**$ 3,148**	**5.30%**	$ 59,492	$ 3,085	5.19%
Foreign offices	**40,554**	**1,467**	**3.62**	44,412	1,456	3.28
Total interest-bearing deposits with the Federal Reserve and other central banks	**99,986**	**4,615**	**4.62**	103,904	4,541	4.37
Interest-bearing deposits with banks	**10,991**	**434**	**3.94**	13,620	523	3.84
Federal funds sold and securities purchased under resale agreements *(a)*	**31,306**	**10,915**	**34.86**	26,077	7,141	27.38
Loans:						
Domestic offices	**63,108**	**4,107**	**6.51**	59,487	3,663	6.16
Foreign offices	**5,033**	**287**	**5.70**	4,609	253	5.49
Total loans *(b)*	**68,141**	**4,394**	**6.45**	64,096	3,916	6.11
Securities:						
U.S. government obligations	**27,826**	**1,022**	**3.67**	33,434	1,021	3.05
U.S. government agency obligations	**62,855**	**2,058**	**3.27**	60,586	1,695	2.80
Other securities:						
Domestic offices	**17,560**	**951**	**5.42**	17,168	803	4.68
Foreign offices	**29,620**	**911**	**3.07**	23,505	695	2.96
Total other securities	**47,180**	**1,862**	**3.95**	40,673	1,498	3.68
Total investment securities	**137,861**	**4,942**	**3.58**	134,693	4,214	3.13
Trading securities (primarily domestic) *(c)*	**5,459**	**309**	**5.66**	5,770	315	5.46
Total securities *(c)*	**143,320**	**5,251**	**3.66**	140,463	4,529	3.22
Total interest-earning assets *(c)*	**$ 353,744**	**$ 25,609**	**7.24%**	$ 348,160	$20,650	5.93%
Noninterest-earning assets	**59,590**			58,582		
Total assets	**$ 413,334**			$ 406,742		
Liabilities and equity						
Interest-bearing liabilities:						
Interest-bearing deposits:						
Domestic offices	**$ 141,279**	**$ 5,791**	**4.10%**	$ 123,513	$ 4,703	3.81%
Foreign offices	**92,926**	**2,856**	**3.07**	88,829	2,421	2.73
Total interest-bearing deposits	**234,205**	**8,647**	**3.69**	212,342	7,124	3.35
Federal funds purchased and securities sold under repurchase agreements *(a)*	**17,007**	**9,974**	**58.64**	20,540	6,699	32.62
Trading liabilities	**1,768**	**88**	**4.98**	3,396	156	4.60
Other borrowed funds:						
Domestic offices	**136**	**13**	**9.32**	676	44	6.49
Foreign offices	**303**	**5**	**1.77**	426	3	0.74
Total other borrowed funds	**439**	**18**	**4.10**	1,102	47	4.27
Commercial paper	**1,197**	**62**	**5.18**	5	—	4.81
Payables to customers and broker-dealers	**12,726**	**640**	**5.03**	14,449	566	3.91
Long-term debt	**31,816**	**1,866**	**5.87**	31,021	1,711	5.51
Total interest-bearing liabilities	**$ 299,158**	**$ 21,295**	**7.12%**	$ 282,855	$16,303	5.76%
Total noninterest-bearing deposits	**49,521**			59,227		
Other noninterest-bearing liabilities	**23,694**			24,011		
Total liabilities	**372,373**			366,093		
Total The Bank of New York Mellon Corporation shareholders' equity	**40,756**			40,588		
Noncontrolling interests	**205**			61		
Total liabilities and equity	**$ 413,334**			$ 406,742		
Net interest income (FTE) – Non-GAAP *(c)(d)*		**$ 4,314**			$ 4,347	
Net interest margin (FTE) – Non-GAAP *(c)(d)*			**1.22%**			1.25%
Less: Tax equivalent adjustment		**2**			2	
Net interest income – GAAP		**$ 4,312**			$ 4,345	
Net interest margin – GAAP			**1.22%**			1.25%
Percentage of assets attributable to foreign offices	**23%**			24%		
Percentage of liabilities attributable to foreign offices	**28%**			27%		

(a) *Includes the average impact of offsetting under enforceable netting agreements of approximately $176 billion in 2024 and $111 billion in 2023. On a Non-GAAP basis, excluding the impact of offsetting, the yield on federal funds sold and securities purchased under resale agreements would have been 5.28% for 2024 and 5.22% for 2023, and the rate on federal funds purchased and securities sold under repurchase agreements would have been 5.18% for 2024 and 5.10% for 2023. We believe providing the rates excluding the impact of netting is useful to investors as it is more reflective of the actual rates earned and paid.*

(b) *Interest income includes fees of $3 million in 2024 and $1 million in 2023. Nonaccrual loans are included in average loans; the associated income, which was recognized on a cash basis, is included in interest income.*

(c) *Average rates were calculated on an FTE basis, at tax rates of approximately 21% for both 2024 and 2023.*

(d) *See "Net interest income" on page 8 for the reconciliation of this Non-GAAP measure.*

Average balances and interest rates	2022		
(dollars in millions)	Average balance	Interest	Average rate
Assets			
Interest-earning assets:			
Interest-bearing deposits with the Federal Reserve and other central banks:			
Domestic offices	$ 46,270	$ 810	1.75%
Foreign offices	51,172	209	0.41
Total interest-bearing deposits with the Federal Reserve and other central banks	97,442	1,019	1.05
Interest-bearing deposits with banks	16,826	221	1.31
Federal funds sold and securities purchased under resale agreements *(a)*	24,953	1,200	4.81
Loans:			
Domestic offices	62,640	1,878	3.00
Foreign offices	5,185	121	2.33
Total loans *(b)*	67,825	1,999	2.95
Securities:			
U.S. government obligations	40,583	607	1.49
U.S. government agency obligations	64,041	1,157	1.81
Other securities:			
Domestic offices *(c)*	18,979	629	3.31
Foreign offices	26,283	154	0.59
Total other securities *(c)*	45,262	783	1.73
Total investment securities *(c)*	149,886	2,547	1.70
Trading securities (primarily domestic) *(c)*	5,248	143	2.73
Total securities *(c)*	155,134	2,690	1.73
Total interest-earning assets *(c)*	$ 362,180	$ 7,129	1.97%
Noninterest-earning assets	64,507		
Total assets	$ 426,687		
Liabilities and equity			
Interest-bearing liabilities:			
Interest-bearing deposits:			
Domestic offices	$ 111,491	$ 980	0.88%
Foreign offices	101,916	607	0.60
Total interest-bearing deposits	213,407	1,587	0.74
Federal funds purchased and securities sold under repurchase agreements *(a)*	12,940	934	7.21
Trading liabilities	3,432	68	1.98
Other borrowed funds:			
Domestic offices	181	7	4.12
Foreign offices	324	2	0.51
Total other borrowed funds	505	9	1.80
Commercial paper	5	—	2.06
Payables to customers and broker-dealers	17,111	156	0.91
Long-term debt	27,448	860	3.13
Total interest-bearing liabilities	$ 274,848	$ 3,614	1.31%
Total noninterest-bearing deposits	85,652		
Other noninterest-bearing liabilities	25,172		
Total liabilities	385,672		
Total The Bank of New York Mellon Corporation shareholders' equity	40,905		
Noncontrolling interests	110		
Total liabilities and equity	$ 426,687		
Net interest income (FTE) – Non-GAAP *(c)(d)*		$ 3,515	
Net interest margin (FTE) – Non-GAAP *(c)(d)*			0.97%
Less: Tax equivalent adjustment		11	
Net interest income – GAAP		$ 3,504	
Net interest margin – GAAP			0.97%
Percentage of assets attributable to foreign offices	26%		
Percentage of liabilities attributable to foreign offices	30%		

(a) Includes the average impact of offsetting under enforceable netting agreements of approximately $43 billion in 2022. On a Non-GAAP basis, excluding the impact of offsetting, the yield on federal funds sold and securities purchased under resale agreements would have been 1.77%, and the rate on federal funds purchased and securities sold under repurchase agreements would have been 1.67% for 2022. We believe providing the rates excluding the impact of netting is useful to investors as it is more reflective of the actual rates earned and paid.

(b) Interest income includes fees of $2 million in 2022. Nonaccrual loans are included in average loans; the associated income, which was recognized on a cash basis, is included in interest income.

(c) Average rates were calculated on an FTE basis, at tax rates of approximately 21% in 2022.

(d) See "Net interest income" on page 8 for the reconciliation of this Non-GAAP measure.

Noninterest expense

Noninterest expense *(dollars in millions)*	2024	2023	2022	2024 vs. 2023	2023 vs. 2022
Staff	**$ 7,130**	$ 7,095	$ 6,800	**—%**	4%
Software and equipment	**1,962**	1,817	1,657	**8**	10
Professional, legal and other purchased services	**1,503**	1,527	1,527	**(2)**	—
Net occupancy	**537**	542	514	**(1)**	5
Sub-custodian and clearing	**498**	475	485	**5**	(2)
Distribution and servicing	**361**	353	343	**2**	3
Business development	**188**	183	152	**3**	20
Bank assessment charges	**36**	788	126	**N/M**	N/M
Goodwill impairment	**—**	—	680	**N/M**	N/M
Amortization of intangible assets	**50**	57	67	**(12)**	(15)
Other	**436**	458	659	**(5)**	(31)
Total noninterest expense	**$ 12,701**	$ 13,295	$ 13,010	**(4)%**	2%
Full-time employees at year-end *(a)*	**51,800**	53,400	51,700	**(3)%**	3%

(a) Beginning in 2024, the number of full-time employees excludes interns.
N/M – Not meaningful.

Total noninterest expense decreased 4% compared with 2023, primarily reflecting the net impact of adjustments for the FDIC special assessment and efficiency savings, partially offset by higher investments, employee merit increases and revenue-related expenses. Excluding notable items, noninterest expense increased 1% (Non-GAAP). See “Supervision and Regulation – FDIC Deposit Insurance” beginning on page 67 for information on the FDIC special assessment. See “Supplemental Information – Explanation of GAAP and Non-GAAP financial measures” beginning on page 115 for the reconciliation of the Non-GAAP measure.

We expect total noninterest expense for 2025 to increase slightly compared with 2024, primarily reflecting incremental investments and higher revenue-related expenses, partially offset by the benefit of efficiency savings.

Income taxes

BNY recorded an income tax provision of $1.3 billion (22.3% effective tax rate) in 2024. The income tax provision was $979 million (22.9% effective tax rate) in 2023.

On Jan. 1, 2024, we adopted ASU 2023-02, *Investments—Equity Method and Joint Ventures (Topic 323): Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method*, on a retrospective basis. See Note 2 of the Notes to Consolidated Financial Statements for additional information on the new accounting guidance.

For additional information on income taxes, see Note 12 of the Notes to Consolidated Financial Statements.

Review of business segments

We have an internal information system that produces performance data along product and service lines for our three principal business segments: Securities Services, Market and Wealth Services and Investment and Wealth Management, and the Other segment.

Business segment accounting principles

Our business segment data has been determined on an internal management basis of accounting, rather than the generally accepted accounting principles (“GAAP”) used for consolidated financial reporting. These measurement principles are designed so that reported results of the businesses will track their economic performance.

Our business segments are consistent with the structure used by the President and Chief Executive Officer, our Chief Operating Decision Maker (“CODM”), to make key operating decisions and assess performance. Our CODM evaluates the business segments’ operating performance primarily based on fee and other revenue, total revenue, income before income taxes, and pre-tax operating margin. The significant expense information regularly provided to and reviewed by the CODM is total noninterest expense. The CODM considers this information when evaluating the performance of each business segment and making decisions about allocating capital and other resources to each business segment.

For information on the accounting principles of our business segments, the primary products and services in each line of business, the primary types of revenue by line of business and how our business segments are presented and analyzed, see Note 24 of the Notes to Consolidated Financial Statements.

Business segment results are subject to reclassification when organizational changes are made, or for refinements in revenue and expense allocation methodologies. Refinements are typically reflected on a prospective basis. In 2024, we made certain realignments of similar products and services within our lines of business consistent with the firm's ongoing transition to a platforms operating model uniting related capabilities and enabling streamlining of internal processes to drive growth, efficiency, resiliency, and enhanced risk management. The largest change was the movement of Institutional Solutions from Pershing to Clearance and Collateral Management, both in the Market and Wealth Services business segment. We made other smaller changes that moved activity from Asset Servicing in the Securities Services business segment to Treasury Services in the Market and Wealth Services business segment, and from Wealth Management in the Investment and Wealth Management business segment and Pershing in the Market and Wealth Services business segment to Investment Management in the Investment and Wealth Management business segment. The Other segment was not impacted by the changes. Business segment results for 2023 and 2022 have been revised to reflect these changes.

The results of our business segments may be influenced by client and other activities that vary by quarter. In the first quarter, staff expense typically increases, reflecting the vesting of long-term stock awards for retirement-eligible employees. The timing of our annual employee merit increases also impacts staff expense. In 2024, the merit increase was effective in March and in 2023, the merit increase was effective in April, thus partially impacting the full-year staff expense variances. In the third quarter, volume-related fees may decline due to reduced client activity. In the fourth quarter, we typically incur higher business development and marketing expenses. In our Investment and Wealth Management business segment, performance fees are typically higher in the fourth and first quarters, as those quarters represent the end of the measurement period for many of the performance fee-eligible relationships.

The results of our business segments may also be impacted by the translation of financial results denominated in foreign currencies to the U.S. dollar. We are primarily impacted by activities denominated in the British pound and the euro. On a consolidated basis and in our Securities Services and Market and Wealth Services business segments, we typically have more foreign currency-denominated expenses than revenues. However, our Investment and Wealth Management business segment typically has more foreign currency-denominated revenues than expenses. Overall, currency fluctuations impact the year-over-year growth rate in the Investment and Wealth Management business segment more than the Securities Services and Market and Wealth Services business segments. However, currency fluctuations, in isolation, are not expected to significantly impact net income on a consolidated basis.

Fee revenue in the Investment and Wealth Management business segment, and to a lesser extent, the Securities Services and Market and Wealth Services business segments, is impacted by global market fluctuations. At Dec. 31, 2024, we estimated that a 5% change in global equity markets, spread evenly throughout the year, would impact fee revenue by less than 1% and diluted earnings per common share by \$0.05 to \$0.08.

See Note 24 of the Notes to Consolidated Financial Statements for the consolidating schedules which show the contribution of our business segments to our overall profitability.

Securities Services business segment

(dollars in millions, unless otherwise noted)	**2024**	2023	2022	**2024 vs. 2023**	2023 vs. 2022
Revenue:					
Investment services fees:					
Asset Servicing	**$ 4,094**	$ 3,872	$ 3,888	**6%**	—%
Issuer Services	**1,163**	1,121	1,009	**4**	11
Total investment services fees	**5,257**	4,993	4,897	**5**	2
Foreign exchange revenue	**552**	488	584	**13**	(16)
Other fees *(a)*	**234**	215	202	**9**	6
Total fee revenue	**6,043**	5,696	5,683	**6**	—
Investment and other revenue	**405**	333	291	**N/M**	N/M
Total fee and other revenue	**6,448**	6,029	5,974	**7**	1
Net interest income	**2,468**	2,569	2,028	**(4)**	27
Total revenue	**8,916**	8,598	8,002	**4**	7
Provision for credit losses	**38**	99	8	**N/M**	N/M
Noninterest expense (excluding amortization of intangible assets)	**6,286**	6,327	6,248	**(1)**	1
Amortization of intangible assets	**28**	31	33	**(10)**	(6)
Total noninterest expense	**6,314**	6,358	6,281	**(1)**	1
Income before income taxes	**$ 2,564**	$ 2,141	$ 1,713	**20%**	25%
Pre-tax operating margin	**29%**	25%	21%		
Securities lending revenue *(b)*	**$ 191**	$ 189	$ 182	**1%**	4%
Total revenue by line of business:					
Asset Servicing	**$ 6,872**	$ 6,612	$ 6,293	**4%**	5%
Issuer Services	**2,044**	1,986	1,709	**3**	16
Total revenue by line of business	**$ 8,916**	$ 8,598	$ 8,002	**4%**	7%
Selected average balances:					
Average loans	**$ 11,235**	$ 11,207	$ 11,245	**—%**	—%
Average deposits	**$ 178,643**	$ 168,411	$ 183,990	**6%**	(8)%
Selected metrics:					
AUC/A at period end *(in trillions) (c)*	**$ 37.7**	$ 34.2	$ 31.4	**10%**	9%
Market value of securities on loan at period end *(in billions) (d)*	**$ 488**	$ 450	$ 449	**8%**	—%
Issuer Services:					
Total debt serviced at period end *(in trillions)*	**$ 14.1**	$ 14.0	$ 12.6	**1%**	11%
Number of sponsored Depositary Receipts programs at period end	**499**	543	589	**(8)%**	(8)%

(a) Other fees primarily includes financing-related fees.
(b) Included in investment services fees reported in the Asset Servicing line of business.
(c) Consists of AUC/A primarily from the Asset Servicing line of business and, to a lesser extent, the Issuer Services line of business. Includes the AUC/A of CIBC Mellon of $1.8 trillion at Dec. 31, 2024, $1.7 trillion at Dec. 31, 2023 and $1.5 trillion at Dec. 31, 2022.
(d) Represents the total amount of securities on loan in our agency securities lending program. Excludes securities for which BNY acts as agent on behalf of CIBC Mellon clients, which totaled $60 billion at Dec. 31, 2024, $63 billion at Dec. 31, 2023 and $68 billion at Dec. 31, 2022.
N/M – Not meaningful.

Business segment description

The Securities Services business segment consists of two distinct lines of business, Asset Servicing and Issuer Services, which provide business solutions across the transaction lifecycle to our global asset owner and asset manager clients. We are one of the leading global investment services providers with $37.7 trillion of AUC/A at Dec. 31, 2024. For information on the drivers of the Securities Services fee revenue, see Note 10 of the Notes to Consolidated Financial Statements.

The Asset Servicing business provides a comprehensive suite of solutions. We are one of the largest global custody, fund administrator and front-to-back outsourcing partners. We offer services for the safekeeping of assets in capital markets globally as well as fund accounting services, exchange-traded funds servicing, transfer agency, trust and depository, front-to-back capabilities and data and analytics solutions for our clients. We deliver foreign exchange, and securities lending and financing solutions, on both an agency and principal basis. Our agency securities lending program is one of the largest lenders of U.S. and non-U.S. securities, servicing a lendable asset pool of approximately $5.4 trillion in 34 separate markets. Our market-leading liquidity services portal enables cash investments for institutional clients and includes fund research and analytics.

Our Digital Asset Custody platform offers custody and administration services for Bitcoin and Ether for select U.S. institutional clients. Our Digital Assets Funds Services provides accounting and administration, transfer agency and ETF services to digital asset funds. We continue to develop our digital asset capabilities working closely with clients to address their evolving digital asset needs. As of and for the year ended Dec. 31, 2024, our Digital Asset Custody platform and related initiatives had a de minimis impact on our assets, liabilities, revenues and expenses.

The Issuer Services business includes Corporate Trust and Depositary Receipts. Our Corporate Trust business delivers a full range of issuer and related investor services, including trustee, paying agency, fiduciary, escrow and other financial services. We are a leading provider to the debt capital markets, providing customized and market-driven solutions to investors, bondholders and lenders. Our Depositary Receipts business drives global investing by providing servicing and value-added solutions that enable, facilitate and enhance cross-border trading, clearing, settlement and ownership. We are one of the largest providers of depositary receipts services in the world, partnering with leading companies from more than 50 countries.

Review of financial results

AUC/A of $37.7 trillion increased 10% compared with Dec. 31, 2023, primarily reflecting higher market values, client inflows and net new business, partially offset by the unfavorable impact of a stronger U.S. dollar.

Total revenue of $8.9 billion increased 4% compared with 2023. The drivers of total revenue by line of business are indicated below.

Asset Servicing revenue of $6.9 billion increased 4% compared with 2023, primarily reflecting higher market values, net new business, higher client activity, including in our fixed income and trading business, and higher foreign exchange revenue, partially offset by lower net interest income.

Issuer Services revenue of $2.0 billion increased 3% compared with 2023, primarily reflecting Corporate Trust fees driven by net new business, partially offset by lower Depositary Receipts revenue.

Market and regulatory trends are driving investable assets toward lower fee asset management products at reduced margins for our clients. These dynamics are also negatively impacting our investment services fees. However, at the same time, these trends are providing additional outsourcing opportunities as clients and other market participants seek to comply with regulations and reduce their operating costs.

Noninterest expense of $6.3 billion decreased 1% compared with 2023, primarily reflecting efficiency savings, partially offset by higher investments and employee merit increases.

Market and Wealth Services business segment

(dollars in millions, unless otherwise noted)	**2024**	2023	2022	**2024 vs. 2023**	2023 vs. 2022
Revenue:					
Investment services fees:					
Pershing	**$ 1,947**	$ 1,885	$ 1,793	**3%**	5%
Treasury Services	**792**	717	719	**10**	—
Clearance and Collateral Management	**1,385**	1,212	1,086	**14**	12
Total investment services fees	**4,124**	3,814	3,598	**8**	6
Foreign exchange revenue	**97**	81	88	**20**	(8)
Other fees *(a)*	**235**	202	163	**16**	24
Total fee revenue	**4,456**	4,097	3,849	**9**	6
Investment and other revenue	**79**	63	40	**N/M**	N/M
Total fee and other revenue	**4,535**	4,160	3,889	**9**	7
Net interest income	**1,729**	1,710	1,410	**1**	21
Total revenue	**6,264**	5,870	5,299	**7**	11
Provision for credit losses	**19**	41	7	**N/M**	N/M
Noninterest expense (excluding amortization of intangible assets)	**3,349**	3,199	2,928	**5**	9
Amortization of intangible assets	**4**	6	8	**(33)**	(25)
Total noninterest expense	**3,353**	3,205	2,936	**5**	9
Income before income taxes	**$ 2,892**	$ 2,624	$ 2,356	**10%**	11%
Pre-tax operating margin	**46%**	45%	44%		
Total revenue by line of business:					
Pershing	**$ 2,687**	$ 2,616	$ 2,330	**3%**	12%
Treasury Services	**1,737**	1,637	1,514	**6**	8
Clearance and Collateral Management	**1,840**	1,617	1,455	**14**	11
Total revenue by line of business	**$ 6,264**	$ 5,870	$ 5,299	**7%**	11%
Selected average balances:					
Average loans	**$ 41,533**	$ 37,502	$ 41,300	**11%**	(9)%
Average deposits	**$ 90,185**	$ 85,785	$ 91,749	**5%**	(7)%
Selected metrics:					
AUC/A at period end *(in trillions) (b)*	**$ 14.1**	$ 13.3	$ 12.7	**6%**	5%
Pershing:					
AUC/A at period end *(in trillions)*	**$ 2.7**	$ 2.5	$ 2.3	**8%**	9%
Net new assets (U.S. platform) *(in billions) (c)*	**$ (6)**	$ 22	$ 121	**N/M**	N/M
Daily average revenue trades (“DARTs”) (U.S. platform) *(in thousands)*	**269**	234	254	**15%**	(8)%
Average active clearing accounts *(in thousands)*	**8,098**	7,946	7,483	**2%**	6%
Treasury Services:					
Average daily U.S. dollar payment volumes	**242,997**	236,696	239,630	**3%**	(1)%
Clearance and Collateral Management:					
Average tri-party collateral management balances *(in billions)*	**$ 5,383**	$ 5,658	$ 5,285	**(5)%**	7%

(a) Other fees primarily include financing-related fees.

(b) Consists of AUC/A from the Clearance and Collateral Management and Pershing businesses.

(c) Net new assets represent net flows of assets (e.g., net cash deposits and net securities transfers, including dividends and interest) in customer accounts in Pershing LLC, a U.S. broker-dealer.

N/M – Not meaningful.

Business segment description

The Market and Wealth Services business segment consists of three distinct lines of business, Pershing, Treasury Services and Clearance and Collateral Management, which provide business services and technology solutions to entities including financial institutions, corporations, foundations and endowments, public funds and government agencies. For information on the drivers of the Market and Wealth Services fee revenue, see Note 10 of the Notes to Consolidated Financial Statements.

Pershing provides execution, clearing, custody, business and technology solutions, delivering operational support to broker-dealers, wealth managers and registered investment advisors ("RIAs") globally.

Our Treasury Services business is a leading provider of global payments, liquidity management and trade finance services for financial institutions, corporations and the public sector.

Our Clearance and Collateral Management business clears and settles equity and fixed-income transactions globally and serves as custodian for tri-party repo collateral worldwide. We are the primary provider of U.S. government securities clearance and a provider of non-U.S. government securities clearance. Our collateral services include collateral management, administration and segregation. We offer innovative solutions and industry expertise which help financial institutions and institutional investors with their financing, risk and balance sheet challenges. We are a leading provider of tri-party collateral management services with an average of $5.4 trillion serviced globally including approximately $4.2 trillion of the U.S. tri-party repo market in 2024.

Review of financial results

AUC/A of $14.1 trillion increased 6% compared with Dec. 31, 2023, primarily reflecting net client inflows in the Clearance and Collateral Management business and higher market values.

Total revenue of $6.3 billion increased 7% compared with 2023. The drivers of total revenue by line of business are indicated below.

Pershing revenue of $2.7 billion increased 3% compared with 2023, primarily reflecting higher market values and client activity, partially offset by lost business in the prior year and lower net interest income. Net new assets of $(6) billion in 2024 reflects the deconversion of business lost in the prior year.

Treasury Services revenue of $1.7 billion increased 6% compared with 2023, primarily reflecting net new business, higher client activity and higher net interest income.

Clearance and Collateral Management revenue of $1.8 billion increased 14% compared with 2023, primarily reflecting higher collateral management fees, clearance volumes and net interest income.

Noninterest expense of $3.4 billion increased 5% compared with 2023, primarily reflecting higher investments, employee merit increases and higher revenue-related expenses, partially offset by efficiency savings.

Investment and Wealth Management business segment

(dollars in millions)	**2024**	2023	2022	**2024 vs. 2023**	2023 vs. 2022
Revenue:					
Investment management fees	**$ 3,093**	$ 2,981	$ 3,228	**4%**	(8)%
Performance fees	**51**	81	75	**N/M**	N/M
Investment management and performance fees *(a)*	**3,144**	3,062	3,303	**3**	(7)
Distribution and servicing fees	**275**	241	192	**14**	26
Other fees *(b)*	**(256)**	(214)	(133)	**N/M**	N/M
Total fee revenue	**3,163**	3,089	3,362	**2**	(8)
Investment and other revenue *(c)*	**50**	(102)	(27)	**N/M**	N/M
Total fee and other revenue *(c)*	**3,213**	2,987	3,335	**8**	(10)
Net interest income	**176**	168	228	**5**	(26)
Total revenue	**3,389**	3,155	3,563	**7**	(11)
Provision for credit losses	**4**	(4)	1	**N/M**	N/M
Noninterest expense (excluding goodwill impairment and amortization of intangible assets)	**2,762**	2,756	2,809	**—**	(2)
Goodwill impairment	**—**	—	680	**N/M**	N/M
Amortization of intangible assets	**18**	20	26	**(10)**	(23)
Total noninterest expense	**2,780**	2,776	3,515	**—**	(21)
Income before income taxes	**$ 605**	$ 383	$ 47	**58%** *(d)*	715% *(d)*
Pre-tax operating margin	**18%**	12%	1%		
Adjusted pre-tax operating margin – Non-GAAP *(e)*	**20%**	14% *(f)*	2% *(f)*		
<u>Total revenue by line of business</u>:					
Investment Management	**$ 2,279**	$ 2,097	$ 2,423	**9%**	(13)%
Wealth Management	**1,110**	1,058	1,140	**5**	(7)
Total revenue by line of business	**$ 3,389**	$ 3,155	$ 3,563	**7%**	(11)%
<u>Selected average balances</u>:					
Average loans	**$ 13,610**	$ 13,718	$ 14,055	**(1)%**	(2)%
Average deposits	**$ 10,589**	$ 14,280	$ 19,214	**(26)%**	(26)%

(a) On a constant currency basis, investment management and performance fees increased 2% (Non-GAAP) compared with 2023. See "Supplemental Information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 115 for the reconciliation of this Non-GAAP measure.

(b) Other fees primarily includes investment services fees.

(c) Investment and other revenue and total fee and other revenue are net of income (loss) attributable to noncontrolling interests related to consolidated investment management funds.

(d) Excluding notable items, income before income taxes increased 14% (Non-GAAP) in 2024 compared with 2023 and decreased 28% (Non-GAAP) in 2023 compared with 2022. See "Supplemental Information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 115 for the reconciliation of these Non-GAAP measures.

(e) Net of distribution and servicing expense. See "Supplemental Information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 115 for the reconciliation of these Non-GAAP measures.

(f) Excluding notable items and net of distribution and servicing expense, the adjusted pre-tax operating margin was 19% (Non-GAAP) in 2023 and 23% (Non-GAAP) in 2022. See "Supplemental Information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 115 for the reconciliation of these Non-GAAP measures.

N/M – Not meaningful.

AUM trends *(in billions)*	**2024**	2023	2022
AUM by product type *(a)***:**			
Equity	**$ 162**	$ 145	$ 135
Fixed income	**221**	205	198
Index	**491**	459	395
Liability-driven investments	**548**	605	570
Multi-asset and alternative investments	**171**	170	153
Cash	**436**	390	385
Total AUM	**$ 2,029**	$ 1,974	$ 1,836
Changes in AUM *(a)***:**			
Beginning balance of AUM	**$ 1,974**	$ 1,836	$ 2,434
Net inflows (outflows):			
Long-term strategies:			
Equity	**(15)**	(12)	(18)
Fixed income	**18**	(4)	(21)
Liability-driven investments	**2**	12	78
Multi-asset and alternative investments	**(15)**	(9)	(11)
Total long-term active strategies (outflows) inflows	**(10)**	(13)	28
Index	**(42)**	(12)	2
Total long-term strategies (outflows) inflows	**(52)**	(25)	30
Short-term strategies:			
Cash	**45**	5	(12)
Total net (outflows) inflows	**(7)**	(20)	18
Net market impact	**69**	121	(471)
Net currency impact	**(25)**	37	(113)
Other/Divestiture *(b)*	**18**	—	(32)
Ending balance of AUM	**$ 2,029**	$ 1,974	$ 1,836
Wealth Management client assets *(c)*	**$ 327**	$ 312	$ 269

(a) Represents assets managed in the Investment and Wealth Management business segment.
(b) Activity in 2024 reflects the realignment of similar products and services within our lines of business. Activity in 2022 reflects the divestiture of BNY Alcentra Group Holdings, Inc.
(c) Includes AUM and AUC/A in the Wealth Management line of business.

Business segment description

Our Investment and Wealth Management business segment consists of two distinct lines of business, Investment Management and Wealth Management, which have a combined AUM of $2.0 trillion as of Dec. 31, 2024.

Investment Management is a leading global asset manager and consists of seven specialist investment firms and a global distribution platform to deliver a diversified range of investment capabilities to institutional and retail clients globally.

Our Investment Management model provides specialist expertise from seven investment firms offering solutions across major asset classes, backed by the strength, scale and proven stewardship of BNY. Each investment firm has its own individual culture, investment philosophy and proprietary investment process. This approach brings our clients clear, independent thinking from highly experienced investment professionals.

The investment firms offer a broad range of actively managed equity, fixed income, multi-asset and liability-driven investments, along with passive products and cash management. Our six majority-owned investment firms are: ARX, Dreyfus, Insight Investment, Mellon, Newton Investment Management and Walter Scott. BNY owns a noncontrolling interest in Siguler Guff.

Investment Management has multiple global distribution entities, which are responsible for distributing the investment solutions developed and managed by the investment firms, as well as the management and distribution of our U.S. mutual funds, ETFs and certain offshore money market funds.

Wealth Management provides investment management, custody, wealth and estate planning, private banking services, investment servicing and information management. Wealth Management has $327 billion in client assets as of Dec. 31, 2024, and more than 30 offices in the U.S. and internationally.

Wealth Management clients include individuals, families and institutions. Institutions include family offices, charitable gift programs and endowments and foundations. We work with clients to build, manage and sustain wealth across generations and market cycles.

The wealth business differentiates itself with a comprehensive wealth management framework called Active Wealth that seeks to empower clients to build and sustain long-term wealth.

The results of the Investment and Wealth Management business segment are driven by a blend of daily, monthly and quarterly AUM by product type. The overall level of AUM for a given period is determined by:

- the beginning level of AUM;

- the net flows of new assets during the period resulting from new business wins and existing client inflows, reduced by the loss of clients and existing client outflows; and
- the impact of market price appreciation or depreciation, foreign exchange rates and investment firm acquisitions or divestitures.

The mix of AUM is a result of the historical growth rates of equity and fixed income markets and the cumulative net flows of our investment firms as a result of client asset allocation decisions. Actively managed equity, multi-asset and alternative assets typically generate higher percentage fees than fixed-income and liability-driven investments and cash. Also, actively managed assets typically generate higher management fees than indexed or passively managed assets of the same type. Market and regulatory trends have resulted in increased demand for lower fee asset management products and for performance-based fees.

Investment management fees are dependent on the overall level and mix of AUM and the management fees expressed in basis points (one-hundredth of one percent) charged for managing those assets. Management fees are typically subject to fee schedules based on the overall level of assets managed for a single client or by individual asset class and style. This is most common for institutional clients where we typically manage substantial assets for individual accounts.

Performance fees are generally calculated as a percentage of a portfolio's performance in excess of a benchmark index or a peer group's performance.

A key driver of growth in investment management and performance fees is the amount of net new AUM flows. Overall market conditions are also key drivers, with a significant long-term economic driver being growth of global financial assets.

Net interest income is determined by loan and deposit volumes and the interest rate spread between customer rates and internal funds transfer rates on loans and deposits. Expenses in the Investment and Wealth Management business segment are mainly driven by staff and distribution and servicing expenses.

Review of financial results

AUM of $2.0 trillion increased 3% compared with Dec. 31, 2023, primarily reflecting higher market values, partially offset by the unfavorable impact of a stronger U.S. dollar.

Net long-term strategy outflows were $52 billion in 2024, driven by outflows of index, equity and multi-asset and alternative investments, partially offset by inflows of fixed income and liability-driven investments. Short-term strategy inflows were $45 billion in 2024.

Total revenue of $3.4 billion increased 7% compared with 2023. The drivers of total revenue by line of business are indicated below.

Investment Management revenue of $2.3 billion increased 9% compared with 2023, primarily reflecting higher market values and the reduction in the fair value of a contingent consideration receivable in 2023, partially offset by the mix of AUM flows and lower performance fees.

Wealth Management revenue of $1.1 billion increased 5% compared with 2023, primarily reflecting higher market values, partially offset by changes in product mix.

Revenue generated in the Investment and Wealth Management business segment included 30% from non-U.S. sources in 2024, compared with 32% in 2023.

Noninterest expense of $2.8 billion was flat compared with 2023, primarily reflecting employee merit increases and higher investments, offset by efficiency savings.

Other segment

(in millions)	**2024**	2023	2022
Fee revenue	**$ (42)**	$ (10)	$ 61
Investment and other revenue	**140**	184	(221)
Total fee and other revenue	**98**	174	(160)
Net interest expense	**(61)**	(102)	(162)
Total revenue	**37**	72	(322)
Provision for credit losses	**9**	(17)	23
Noninterest expense	**254**	956	278
(Loss) before income taxes	**$ (226)**	$ (867)	$ (623)
Average loans and leases	**$ 1,763**	$ 1,669	$ 1,225

Segment description

The Other segment primarily includes:

- the leasing portfolio;
- corporate treasury activities, including our securities portfolio;
- derivatives and other trading activity;
- corporate and bank-owned life insurance;
- tax credit investments and other corporate investments; and
- certain business exits.

Revenue primarily reflects:

- net interest income (expense) and lease-related gains (losses) from leasing operations;
- net interest income (expense) and derivatives and other corporate treasury activities;
- other revenue from certain business exits;
- investment and other revenue from corporate and bank-owned life insurance, gains (losses) associated with investment securities and other assets; and
- fee revenue from the elimination of the results of certain services provided between segments, which are also provided to third parties.

Expenses include:

- direct expenses supporting leasing, investing and funding activities; and
- expenses not directly attributable to Securities Services, Market and Wealth Services and Investment and Wealth Management operations.

Review of financial results

Loss before taxes was $226 million in 2024 compared with $867 million in 2023.

Investment and other revenue decreased $44 million compared with 2023, primarily reflecting investment gains recorded in 2023 and higher net securities losses.

Noninterest expense decreased $702 million compared with 2023, primarily driven by adjustments for the FDIC special assessment.

International operations

Our primary international activities consist of asset servicing in our Securities Services business segment, global payment services in our Market and Wealth Services business segment and investment management in our Investment and Wealth Management business segment.

Our clients include central banks and sovereigns, financial institutions, asset managers, insurance companies, corporations, local authorities and high-net-worth individuals and family offices. Through our global network of offices, we have developed a deep understanding of local requirements and cultural needs, and we pride ourselves on providing dedicated service through our multilingual sales, marketing and client service teams.

At Dec. 31, 2024, approximately 60% of our total employees (full-time and part-time employees) were based outside the U.S., with approximately 10,900 employees in EMEA, approximately 18,900 employees in APAC and approximately 800 employees in other global locations, primarily Brazil.

We are a leading global asset manager. Our international operations managed 47% of BNY's AUM at Dec. 31, 2024 and 51% at Dec. 31, 2023.

In Europe, we maintain capabilities to service Undertakings for Collective Investment in Transferable Securities and alternative investment funds. We offer a full range of tailored solutions for investment companies, financial institutions and institutional investors across most European markets.

We are a provider of non-U.S. government securities, fixed income and equities clearance, settling securities transactions directly in European markets, and using a high-quality and established network of local agents in non-European markets.

We have extensive experience providing trade and cash services to financial institutions and central banks outside of the U.S. In addition, we offer a broad range of servicing and fiduciary products to financial institutions, corporations and central banks. In emerging markets, we lead with custody, global payments and issuer services, introducing other products as the markets mature. For more established markets, our focus is on global investment services.

We are also a full-service global provider of foreign exchange services, actively trading in over 100 of the world's currencies. We serve clients from trading desks located in Europe, Asia and North America.

Our financial results, as well as our levels of AUC/A and AUM, are impacted by translation from foreign currencies to the U.S. dollar. We are primarily impacted by activities denominated in the British pound and the euro. If the U.S. dollar depreciates against these currencies, the translation impact is a higher level of fee revenue, net interest income, noninterest expense and AUC/A and AUM. Conversely, if the U.S. dollar appreciates, the translated levels of fee revenue, net interest income, noninterest expense and AUC/A and AUM will be lower.

Foreign exchange rates vs. U.S. dollar	**2024**	2023	2022
Spot rate (at Dec. 31):			
British pound	**$ 1.2516**	$ 1.2749	$ 1.2096
Euro	**1.0347**	1.1046	1.0708
Yearly average rate:			
British pound	**$ 1.2780**	$ 1.2432	$ 1.2375
Euro	**1.0819**	1.0813	1.0550

International clients accounted for 35% of revenues in 2024 and 36% in 2023. Net income from international operations was $2.3 billion in 2024, compared with $2.0 billion in 2023.

Revenues from EMEA were $4.3 billion in 2024, an increase of 4% compared with 2023. The increase was primarily driven by higher net interest income, collateral management fees and clearance volumes in the Market and Wealth Services business segment.

The Securities Services, Market and Wealth Services and Investment and Wealth Management business segments generated 58%, 24% and 18% of EMEA revenues, respectively. Net income from EMEA was $1.3 billion in 2024, compared with $1.1 billion in 2023.

Revenues from APAC were $1.3 billion in 2024, a decrease of 1% compared with 2023. The decrease primarily reflects lower revenue in the Market and Wealth Services and Investment and Wealth Management business segments, partially offset by higher revenue in the Securities Services business segment.

The Securities Services, Market and Wealth Services and Investment and Wealth Management business segments generated 60%, 30% and 10% of APAC revenues, respectively. Net income from APAC was $542 million in 2024, compared with $547 million in 2023.

For additional information regarding our international operations, including certain key subjective assumptions used in determining the results, see Note 25 of the Notes to Consolidated Financial Statements.

Country risk exposure

The following table presents BNY's top 10 exposures by country (excluding the U.S.) as of Dec. 31, 2024, as well as certain countries with higher-risk profiles. The exposure is presented on an internal risk management basis and has not been reduced by the allowance for credit losses. We monitor our exposure to these and other countries as part of our internal country risk management process.

The country risk exposure below reflects the Company's risk to an immediate default of the counterparty or obligor based on the country of residence of the entity which incurs the liability. If there is credit risk mitigation, the country of residence of the entity providing the risk mitigation is the country of risk. The country of risk for securities is generally based on the domicile of the issuer of the security.

Country risk exposure at Dec. 31, 2024	Interest-bearing deposits					Total
(in billions)	Central banks	Banks	Lending *(a)*	Securities *(b)*	Other *(c)*	exposure
Top 10 country exposure:						
United Kingdom ("UK")	$ 8.0	$ 0.3	$ 1.4	$ 5.5	$ 2.1	$ 17.3
Germany	11.3	0.3	0.8	3.5	0.4	16.3
Belgium	4.9	1.0	0.1	1.4	0.1	7.5
Canada	—	0.9	0.1	3.8	1.7	6.5
Luxembourg	0.1	0.1	1.5	0.1	2.5	4.3
Netherlands	1.6	—	0.2	2.1	0.2	4.1
South Korea	0.2	0.1	2.3	0.2	0.8	3.6
Ireland	0.1	0.2	0.8	—	2.0	3.1
Australia	—	1.2	0.3	0.6	0.5	2.6
France	—	—	0.1	2.1	0.2	2.4
Total Top 10 country exposure	**$ 26.2**	**$ 4.1**	**$ 7.6**	**$ 19.3**	**$ 10.5**	**$ 67.7** *(d)*
Select country exposure:						
Brazil	$ —	$ 0.1	$ 1.2	$ 0.1	$ 0.1	$ 1.5
Russia	—	0.6 *(e)*	—	—	—	0.6

(a) Lending includes loans, acceptances, issued letters of credit, net of participations, and lending-related commitments.
(b) Securities include both the available-for-sale and held-to-maturity portfolios.
(c) Other exposure includes over-the-counter ("OTC") derivative and securities financing transactions, net of collateral.
(d) The top 10 country exposure comprises approximately 65% of our total non-U.S. exposure.
(e) Represents cash balances with exposure to Russia.

Events in recent years have resulted in increased focus on Brazil. The country risk exposure to Brazil is primarily short-term trade finance loans extended to large financial institutions. We also have operations in Brazil providing investment services and investment management services.

The war in Ukraine has increased our focus on Russia. The country risk exposure to Russia consists of cash balances related to our securities services businesses and may increase in the future to the extent cash is received for the benefit of our clients that is subject to distribution restrictions. BNY has ceased new banking business in Russia and suspended investment management purchases of Russian securities. Russian securities included in our AUC/A and AUM at Dec. 31, 2024, continue to be insignificant as a percentage of the total AUC/A and AUM, respectively. We will continue to work with multinational clients that depend on our custody and recordkeeping services to manage their exposures.

We are also monitoring our exposure to Israel as part of our internal country risk management process. At Dec. 31, 2024, our total exposure to Israel was $158 million and primarily consisted of investment grade short-term interest-bearing deposits and OTC derivatives maturing within six months.

Critical accounting estimates

Our significant accounting policies are described in Note 1 of the Notes to Consolidated Financial Statements. Certain of these policies include critical accounting estimates which require management to make subjective or complex judgments about the effect of matters that are inherently uncertain and may change in subsequent periods. Our critical accounting estimates are those related to the allowance for credit losses, goodwill and other intangibles and litigation and regulatory contingencies. Management has discussed the development and selection of the critical accounting estimates with the Company's Audit Committee.

Allowance for credit losses

The allowance for credit losses covers financial assets subject to credit losses and measured at amortized cost, including loans and lending-related commitments, held-to-maturity securities, certain securities financing transactions and deposits with banks. The allowance for credit losses is intended to adjust the carrying value of these assets by an estimated amount of credit losses that we expect to incur over the life of the asset. Similarly, the allowance for credit losses on lending-related commitments and other off-balance sheet financial instruments is meant to capture the credit losses that we expect to recognize in these portfolios as of the balance sheet date.

A quantitative methodology and qualitative framework is used to estimate the allowance for credit losses.

The quantitative component of our estimate uses models and methodologies that categorize financial assets based on product type, collateral type, and other credit trends and risk characteristics, including relevant information about past events, current conditions and reasonable and supportable forecasts of future economic conditions that affect the collectability of the recorded amounts. For the quantitative component, we segment portfolios into various major components including commercial loans and lease financing, commercial real estate, financial institutions, residential mortgages, and other. The segmentation of our debt securities portfolios is by major asset class and is influenced by whether the security is structured or non-structured (i.e., direct obligation), as well as the issuer type. The components of the credit loss calculation for each major portfolio or asset class include a probability of default, loss given default and exposure at default, as applicable, and their values depend on the forecast behavior of variables in the macroeconomic environment. We utilize a multi-scenario macroeconomic forecast which includes a weighting of three scenarios: a baseline and upside and downside scenarios and allows us to develop our estimate using a wide span of economic variables.

Our baseline scenario reflects a view on likely performance of each global region and the other two scenarios are designed relative to the baseline scenario. This approach incorporates a reasonable and supportable forecast period spanning the life of the asset, and includes both an initial estimated economic outlook component as well as a reversion component for each economic input variable. The length of each of the two components depends on the underlying financial instrument, scenario, and underlying economic input variable. In general, the initial economic outlook period for each economic input variable under each scenario ranges between several months and two years. The speed at which the scenario-specific forecasts revert to long-term historical mean is based on observed historical patterns of mean reversion at the economic variable input level that are reflected in our model parameter estimates. Certain macroeconomic variables such as unemployment or home prices take longer to revert after a contraction, though specific recovery times are scenario-specific. Reversion will usually take longer the further away the scenario-specific forecast is from the historical mean. On a quarterly basis, and within a developed governance structure, we update these scenarios for current economic conditions and may adjust the scenario weighting based on our economic outlook. The Company uses judgment to assess these economic conditions and loss data in determining the best estimate of the allowance for credit losses and these estimates are subject to periodic refinement based on changes to underlying external or Company-specific historical data.

In the quantitative component of our estimate, we measure expected credit losses using an individual evaluation method if the risk characteristics of the asset is no longer consistent with the portfolio or class of asset. For these assets, we do not employ the macroeconomic model calculation but consider factors such as payment status, collateral value, the obligor's financial condition, guarantor support, the probability of collecting scheduled principal and interest payments when due, and recovery expectations if they can be reasonably estimated. For loans, we measure the expected credit loss as the difference between the amortized cost basis of the loan and the present value of the expected future cash flows from the borrower which is generally discounted at the loan's effective interest rate, or the fair value of the collateral, if the loan is collateral-dependent. We generally individually evaluate nonperforming loans as well as loans that have been modified given the risk characteristics of such loans.

Available-for-sale debt securities are recorded at fair value. When an available-for-sale debt security is in an unrealized loss position, we employ a methodology to identify and estimate the credit loss portion of the unrealized loss position. The measurement of expected credit losses is performed at the security level and is based on our best single estimate of cash flows, on a discounted basis; however, we do not specifically employ the macroeconomic forecasting models and scenarios summarized above.

The qualitative component of our estimate for the allowance for credit losses is intended to capture expected losses that may not have been fully captured in the quantitative component. Through an established governance structure, management determines the qualitative allowance each period based on an evaluation of various internal and environmental factors that include: scenario weighting and sensitivity risk, credit concentration risk, economic conditions and other considerations. We have made and may continue to make adjustments for idiosyncratic risks.

To the extent actual results differ from forecasts or management's judgment, the allowance for credit losses may be greater or less than future charge-offs and recoveries.

Our allowance for credit losses is sensitive to a number of inputs, most notably the macroeconomic forecast assumptions that are incorporated into our estimate of credit losses through the expected life of the loan portfolio, as well as credit ratings assigned to each borrower. As the macroeconomic environment and related forecasts change, the allowance for credit losses may change materially. The following sensitivity analyses do not represent management's expectations of the deterioration of our portfolios or the economic environment, but are provided as hypothetical scenarios to assess the sensitivity of the allowance for credit losses to changes in key inputs. If commercial real estate property values were increased 10% and all other credits were rated one grade better, the quantitative allowance would have decreased by $47 million, and if commercial real estate property values were decreased 10% and all other credits were rated one grade worse, the quantitative allowance would have increased by $82 million. Our multi-scenario macroeconomic forecast used in determining the Dec. 31, 2024 allowance for credit losses consisted of three scenarios. The baseline scenario reflects positive but slightly declining GDP growth through the first quarter of 2025 before moderating, stable unemployment and slightly declining commercial real estate prices through the end of 2025. The upside scenario reflects higher GDP growth through the first quarter of 2025 before moderating, declining unemployment through the end of 2025 and increasing commercial real estate prices through the end of 2025 compared with the baseline. The downside scenario contemplates negative GDP growth through the third quarter of 2025 before moderating, rapidly increasing unemployment through the third quarter of 2025 and sharply lower commercial real estate prices through the end of 2025 compared with the baseline. At Dec. 31, 2024, we placed the most weight on our baseline scenario, with the remaining weighting equally placed on the upside and downside scenarios. From a sensitivity perspective, at Dec. 31, 2024, if we had applied 100% weighting to the downside scenario, the quantitative allowance for credit losses would have been approximately $130 million higher.

See Notes 1 and 5 of the Notes to Consolidated Financial Statements for additional information regarding the allowance for credit losses.

Goodwill and other intangibles

We initially record all assets and liabilities acquired in purchase acquisitions, including goodwill, indefinite-lived intangibles and other intangibles, in accordance with Accounting Standards Codification ("ASC") 805, *Business Combinations*. Goodwill, indefinite-lived intangibles and other intangibles are subsequently accounted for in accordance with ASC 350, *Intangibles – Goodwill and Other.* The initial measurement of goodwill and intangibles requires judgment concerning estimates of the fair value of the acquired assets and liabilities. Goodwill ($16.6 billion at Dec. 31, 2024) and indefinite-lived intangible assets ($2.6 billion at Dec. 31, 2024) are not amortized but are subject to tests for impairment annually or more often if events or circumstances indicate it is more likely than not they may be impaired. Other intangible assets are amortized over their estimated useful lives and are subject to impairment if events or circumstances indicate a possible inability to realize the carrying value.

Goodwill

BNY's business segments include seven reporting units for which goodwill impairment testing is performed on an annual basis. An interim goodwill impairment test is performed when events or circumstances occur that may indicate that it is more likely than not that the fair value of any reporting unit may be less than its carrying value.

The goodwill impairment test compares the estimated fair value of the reporting unit with its carrying amount, including goodwill. If the estimated fair value of the reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not impaired. However, if the carrying amount of the reporting unit were to exceed its estimated fair value, an impairment loss would be recorded for the difference.

In each quarter of 2024, we completed an interim goodwill impairment test of the Investment Management reporting unit, which had $6.0 billion of allocated goodwill as of Dec. 31, 2024. In all cases, we determined the fair value of the Investment Management reporting unit exceeded its carrying value and no goodwill impairment was recorded.

For the Dec. 31, 2024 test, the fair value of the Investment Management reporting unit exceeded its carrying value by approximately 11%. We determined the fair value of the Investment Management reporting unit using an income approach based on management's projections as of Dec. 31, 2024. The discount rate applied to these cash flows was 10.5%.

As of Dec. 31, 2024, if the discount rate applied to the estimated cash flows was increased or decreased by 25 basis points, the fair value of the Investment Management reporting unit would decrease or increase by 4%, respectively. Similarly, if the long-term growth rate was increased or decreased by 10 basis points, the fair value of the Investment Management reporting unit would increase or decrease by approximately 1%, respectively.

In the second quarter of 2024, we performed our annual goodwill impairment test on the remaining six reporting units using an income approach to estimate the fair values of each reporting unit. Estimated cash flows used in the income approach were based on management's projections as of April 1, 2024. The discount rate applied to these cash flows was 10%.

As a result of the annual goodwill impairment test, no goodwill impairment was recognized. The fair values of the Company's remaining six reporting units were substantially in excess of the respective reporting units' carrying value.

Intangible assets

Key judgments in accounting for intangible assets include determining the useful life and classification between goodwill and indefinite-lived intangible assets or other amortizing intangible assets.

Indefinite-lived intangible assets ($2.6 billion at Dec. 31, 2024) are evaluated for impairment at least annually by comparing their fair values, estimated using discounted cash flow analyses, to their carrying values. As a result of the annual evaluation, no impairment was recognized.

Other amortizing intangible assets ($275 million at Dec. 31, 2024) are evaluated for impairment if events and circumstances indicate a possible impairment. Such evaluation of other intangible assets would be initially based on undiscounted cash flow projections.

Determining the fair value of a reporting unit or indefinite-lived intangible assets is subject to uncertainty as it is reliant on estimates of cash flows that extend far into the future, and, by their nature, are difficult to estimate over such an extended time frame. In the future, changes in the assumptions or the discount rate could produce a material non-cash goodwill or intangible asset impairment.

See Notes 1 and 7 of the Notes to Consolidated Financial Statements for additional information regarding goodwill, intangible assets and the annual and interim impairment testing.

Litigation and regulatory contingencies

Significant estimates and judgments are required in establishing an accrued liability for litigation and regulatory contingencies. For additional information on our policy, see "Legal proceedings" in Note 22 of the Notes to Consolidated Financial Statements.

Consolidated balance sheet review

One of our key risk management objectives is to maintain a balance sheet that remains strong throughout market cycles to meet the expectations of our major stakeholders, including our shareholders, clients, creditors and regulators.

We also seek to undertake overall liquidity risk, including intraday liquidity risk, that stays within our risk appetite. The objective of our balance sheet management strategy is to maintain a balance sheet that is characterized by strong liquidity and asset quality, ready access to external funding sources at competitive rates and a strong capital structure that supports our risk-taking activities and is adequate to absorb potential losses. In managing the balance sheet, appropriate consideration is given to balancing the competing needs of maintaining sufficient levels of liquidity and complying with applicable regulations and supervisory expectations while optimizing profitability.

At Dec. 31, 2024, total assets were $416 billion, compared with $410 billion at Dec. 31, 2023. The increase in total assets was primarily driven by higher federal funds sold and securities purchased under resale agreements, securities and loans, partially offset by lower interest-bearing deposits with the Federal Reserve and other central banks. Deposits totaled $290 billion at Dec. 31, 2024, compared with $284 billion at Dec. 31, 2023. The increase primarily reflects higher interest-bearing deposits in U.S. offices, partially offset by lower interest-bearing deposits in non-U.S. offices. Total interest-bearing deposit liabilities as a percentage of total interest-earning assets were 65% at Dec. 31, 2024 and 66% at Dec. 31, 2023.

At Dec. 31, 2024, available funds totaled $144 billion and include cash and due from banks, interest-bearing deposits with the Federal Reserve and other central banks, interest-bearing deposits with banks and federal funds sold and securities purchased under resale agreements. This compares with available funds of $158 billion at Dec. 31, 2023. Total available funds as a percentage of total assets were 35% at Dec. 31, 2024 and 38% at Dec. 31, 2023. For additional information on our available funds, see "Liquidity and dividends."

Securities were $137 billion, or 33% of total assets, at Dec. 31, 2024, compared with $126 billion, or 31% of total assets, at Dec. 31, 2023. The increase primarily reflects higher non-U.S. government and agency residential mortgage-backed securities ("RMBS"), partially offset by lower U.S. Treasury and U.S. government agency securities. For additional information on our securities portfolio, see "Securities" and Note 4 of the Notes to Consolidated Financial Statements.

Loans were $72 billion, or 17% of total assets, at Dec. 31, 2024, compared with $67 billion, or 16% of total assets, at Dec. 31, 2023. The increase was driven by higher loans in the financial institutions and capital call financing portfolios and higher margin loans, partially offset by lower commercial loans. For additional information on our loan portfolio, see "Loans" and Note 5 of the Notes to Consolidated Financial Statements.

Long-term debt totaled $30.9 billion at Dec. 31, 2024 and $31.3 billion at Dec. 31, 2023. The decrease primarily reflects maturities, redemptions and a decrease in the fair value of hedged long-term debt, partially offset by issuances. For additional information on long-term debt, see "Liquidity and dividends" and Note 13 of the Notes to Consolidated Financial Statements.

The Bank of New York Mellon Corporation total shareholders' equity totaled $41 billion at Dec. 31, 2024 and Dec. 31, 2023. For additional information, see "Capital" and Note 15 of the Notes to Consolidated Financial Statements.

Securities

In the discussion of our securities portfolio, we have included certain credit ratings information because the information can indicate the degree of credit risk to which we are exposed. Significant changes in ratings classifications could indicate increased credit risk for us and could be accompanied by an increase in the allowance for credit losses and/or a reduction in the fair value of our securities portfolio.

The following table shows the distribution of our total securities portfolio.

Securities portfolio	Dec. 31, 2023	2024 change in	Dec. 31, 2024		Fair value as a % of			Ratings *(c)*				
(dollars in millions)	Fair value	unrealized gain (loss)	Amortized cost *(a)*	Fair value	amortized cost *(a)*	Unrealized gain (loss)	% Floating rate *(b)*	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Not rated
Agency RMBS	$ 39,359	$ (152)	$ **46,199**	$ **42,183**	91%	$ (4,016)	26%	100%	—%	—%	—%	—%
Non-U.S. government *(d)*	20,455	269	**29,521**	**29,198**	99	(323)	24	95	2	2	1	—
U.S. Treasury	25,115	225	**25,408**	**24,793**	98	(615)	64	100	—	—	—	—
Agency commercial mortgage-backed securities (“MBS”)	10,845	107	**10,862**	**10,377**	96	(485)	43	100	—	—	—	—
Collateralized loan obligations (“CLOs”)	7,119	18	**7,625**	**7,637**	100	12	100	100	—	—	—	—
Foreign covered bonds *(e)*	6,334	111	**7,684**	**7,623**	99	(61)	40	100	—	—	—	—
U.S. government agencies	6,646	82	**5,973**	**5,636**	94	(337)	30	100	—	—	—	—
Non-agency commercial MBS	2,935	94	**2,641**	**2,487**	94	(154)	45	100	—	—	—	—
Non-agency RMBS	1,766	(10)	**1,645**	**1,492**	91	(153)	41	98	2	—	—	—
Other asset-backed securities	943	44	**654**	**615**	94	(39)	16	100	—	—	—	—
Other	11	1	**11**	**10**	91	(1)	—	—	—	—	—	100
Total securities	$121,528	$ 789	$ **138,223**	$ **132,051**	96%	$ (6,172) *(f)*	40%	99%	1%	—%	—%	—%

(a) Amortized cost includes the impact of hedged item basis adjustments, which was a net decrease of $1,650 million, and is net of the allowance for credit losses.
(b) Includes the impact of hedges.
(c) Represents ratings by Standard & Poor's (“S&P”) or the equivalent.
(d) Includes supranational securities. Primarily consists of exposure to UK, Germany, France and Canada.
(e) Primarily consists of exposure to Canada, UK, the Netherlands and Germany.
(f) At Dec. 31, 2024, includes pre-tax net unrealized losses of $1,596 million related to available-for-sale securities, net of hedges, and $4,576 million related to held-to-maturity securities. The after-tax unrealized losses, net of hedges, related to available-for-sale securities was $1,207 million and the after-tax equivalent related to held-to-maturity securities was $3,490 million.

The fair value of our securities portfolio was $132.1 billion at Dec. 31, 2024, compared with $121.5 billion at Dec. 31, 2023. The increase primarily reflects higher non-U.S. government securities and agency RMBS, partially offset by lower U.S. Treasury and U.S. government agencies securities.

At Dec. 31, 2024, the securities portfolio had a net unrealized loss, including the impact of related hedges, of $6.2 billion, compared with $7.0 billion at Dec. 31, 2023. The improvement in the net unrealized loss, including the impact of related hedges, primarily reflects securities moving closer to maturity.

The fair value of the available-for-sale securities totaled $88.0 billion at Dec. 31, 2024 or 67% of the securities portfolio. The fair value of the held-to-maturity securities totaled $44.0 billion at Dec. 31, 2024, or 33% of the securities portfolio.

The unrealized loss (after-tax) on our available-for-sale securities portfolio, net of hedges, included in accumulated other comprehensive income was $1.2 billion at Dec. 31, 2024, compared with $1.6 billion at Dec. 31, 2023. The improvement in the net unrealized loss, including the impact of hedges, was primarily driven by securities moving closer to maturity.

At Dec. 31, 2024, 99% of the securities in our portfolio were rated AAA/AA-, unchanged compared with Dec. 31, 2023.

See Note 4 of the Notes to Consolidated Financial Statements for the pre-tax net securities gains (losses) by security type. See Note 20 of the Notes to Consolidated Financial Statements for securities by level in the fair value hierarchy.

The following table presents the net premium (discount) and net amortization (accretion) related to the securities portfolio.

Net premium (discount) and net amortization (accretion) related to the securities portfolio *(a)* *(in millions)*	**2024**	2023	2022
Net purchase premium (discount) that is amortizable (accretable)	**$ (57)**	$ 821	$ 1,109
Net amortization *(b)*	**$ 26**	$ 167	$ 362

(a) Amortization of purchase premium decreases net interest income while accretion of discount increases net interest income. Both are recorded on a level yield basis.

(b) Including the impact of the accretion of discontinued hedges, there was a net accretion of $149 million in 2024, net amortization of $104 million in 2023 and net amortization of $388 million in 2022.

Equity investments

We have several equity investments recorded in other assets. These include tax credit investments, equity method investments, Federal Reserve Bank stock, other investments, seed capital and Federal Home Loan Bank stock. The following table presents the carrying values at Dec. 31, 2024 and Dec. 31, 2023.

Equity investments	Dec. 31,	
(in millions)	**2024**	2023
Tax credit investments	**$ 2,821**	$ 2,186
Equity method investments:		
CIBC Mellon	**583**	607
Siguler Guff	**228**	234
Other	**41**	32
Total equity method investments	**852**	873
Federal Reserve Bank stock	**478**	480
Other equity investments *(a)*	**679**	741
Seed capital *(b)*	**196**	232
Federal Home Loan Bank stock	**57**	7
Total equity investments	**$ 5,083**	$ 4,519

(a) Includes strategic equity, private equity and other investments.

(b) Includes investments in BNY funds that hedge deferred incentive awards.

For additional information on certain seed capital investments and our private equity investments, see "Investments valued using net asset value ("NAV") per share" in Note 8 of the Notes to Consolidated Financial Statements.

Tax credit investments

Tax credit investments include affordable housing projects and renewable energy investments. We invest in affordable housing projects primarily to satisfy the Company's requirements under the Community Reinvestment Act. We invest in renewable energy projects to receive an expected after-tax return, which consists of allocated renewable energy tax credits, tax deductions and cash distributions based on the operations of the project. On Jan. 1, 2024, we adopted ASU 2023-02, *Investments—Equity Method and Joint Ventures (Topic 323): Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method* for our renewable energy projects that met the eligibility criteria. See Note 2 of the Notes to Consolidated Financial Statements for additional information.

Loans

Total exposure – consolidated *(in billions)*	**Dec. 31, 2024** **Loans**	**Unfunded commitments**	**Total exposure**	Dec. 31, 2023 Loans	Unfunded commitments	Total exposure
Financial institutions	**$ 13.2**	**$ 35.2**	**$ 48.4**	$ 10.5	$ 29.2	$ 39.7
Commercial	**1.4**	**11.9**	**13.3**	2.1	11.4	13.5
Wealth management loans	**8.7**	**0.7**	**9.4**	9.1	0.5	9.6
Wealth management mortgages	**8.9**	**0.2**	**9.1**	9.1	0.3	9.4
Commercial real estate	**6.8**	**3.1**	**9.9**	6.8	3.4	10.2
Lease financings	**0.6**	**—**	**0.6**	0.6	—	0.6
Other residential mortgages	**1.1**	**—**	**1.1**	1.2	—	1.2
Overdrafts	**3.5**	**—**	**3.5**	3.1	—	3.1
Capital call financing	**5.2**	**3.1**	**8.3**	3.7	3.6	7.3
Other	**3.1**	**—**	**3.1**	2.7	—	2.7
Margin loans	**19.1**	**—**	**19.1**	18.0	—	18.0
Total	**$ 71.6**	**$ 54.2**	**$ 125.8**	$ 66.9	$ 48.4	$ 115.3

At Dec. 31, 2024, our total lending-related exposure was $125.8 billion, an increase of 9% compared with Dec. 31, 2023, primarily reflecting higher exposure in the financial institutions and capital call financing portfolios and higher margin loans.

Our financial institutions and commercial portfolios comprise our largest concentrated risk. These portfolios comprised 49% of our total exposure at Dec. 31, 2024 and 46% at Dec. 31, 2023. Additionally, most of our overdrafts relate to financial institutions.

Financial institutions

The financial institutions portfolio is shown below.

Financial institutions portfolio exposure *(dollars in billions)*	**Dec. 31, 2024** **Loans**	**Unfunded commitments**	**Total exposure**	**% Inv. grade**	**% due <1 yr.**	Dec. 31, 2023 Loans	Unfunded commitments	Total exposure
Securities industry	**$ 2.3**	**$ 20.3**	**$ 22.6**	**100%**	**99%**	$ 2.3	$ 14.8	$ 17.1
Banks	**8.9**	**1.4**	**10.3**	**85**	**95**	6.4	1.4	7.8
Asset managers	**1.8**	**8.4**	**10.2**	**96**	**74**	1.4	8.0	9.4
Insurance	**—**	**4.2**	**4.2**	**100**	**10**	0.1	3.9	4.0
Government	**—**	**0.4**	**0.4**	**100**	**50**	—	0.2	0.2
Other	**0.2**	**0.5**	**0.7**	**100**	**65**	0.3	0.9	1.2
Total	**$ 13.2**	**$ 35.2**	**$ 48.4**	**96%**	**84%**	$ 10.5	$ 29.2	$ 39.7

The financial institutions portfolio exposure was $48.4 billion at Dec. 31, 2024, an increase of 22% compared with Dec. 31, 2023, primarily reflecting higher exposure in the securities industry and banks portfolios.

Financial institution exposures are high-quality, with 96% of the exposures meeting the investment grade equivalent criteria of our internal credit rating classification at Dec. 31, 2024. Each customer is assigned an internal credit rating, which is mapped to an equivalent external rating agency grade based upon a number of dimensions, which are continually evaluated and may change over time. For ratings of non-U.S. counterparties, our internal credit rating is generally capped at a rating equivalent to the sovereign rating of the country where the counterparty resides, regardless of the internal credit rating assigned to the counterparty or the underlying collateral.

The exposure to financial institutions is generally short-term, with 84% of the exposures expiring within one year. At Dec. 31, 2024, 18% of the exposure to financial institutions had an expiration within 90 days, compared with 19% at Dec. 31, 2023.

In addition, 67% of the financial institutions exposure is secured at Dec. 31, 2024. For example, securities industry clients and asset managers often borrow against marketable securities held in custody.

At Dec. 31, 2024, the secured intraday credit provided to dealers in connection with their tri-party repo activity totaled $13.4 billion and was included in the securities industry portfolio. Dealers secure the outstanding intraday credit with high-quality liquid collateral having a market value in excess of the amount of the outstanding credit. Secured intraday credit facilities represent 28% of the exposure in the financial institutions portfolio and are reviewed and reapproved annually.

The asset managers portfolio exposure is high-quality, with 96% of the exposures meeting our investment grade equivalent ratings criteria as of Dec. 31, 2024. These exposures are generally short-term liquidity facilities, with the majority to regulated mutual funds.

Our banks portfolio exposure primarily relates to our global trade finance. These exposures are short-term in nature, with 95% due in less than one year. The investment grade percentage of our banks exposure was 85% at Dec. 31, 2024, compared with 84% at Dec. 31, 2023. Our non-investment grade exposures are primarily trade finance loans in Brazil.

Commercial

The commercial portfolio is presented below.

Commercial portfolio exposure	**Dec. 31, 2024**					Dec. 31, 2023		
(dollars in billions)	**Loans**	**Unfunded commitments**	**Total exposure**	**% Inv. grade**	**% due <1 yr.**	Loans	Unfunded commitments	Total exposure
Energy and utilities	**$ 0.2**	**$ 4.1**	**$ 4.3**	**95%**	**8%**	$ 0.4	$ 3.7	$ 4.1
Services and other	**0.7**	**3.5**	**4.2**	**97**	**23**	1.2	3.4	4.6
Manufacturing	**0.5**	**3.5**	**4.0**	**99**	**18**	0.5	3.6	4.1
Media and telecom	**—**	**0.8**	**0.8**	**81**	**—**	—	0.7	0.7
Total	**$ 1.4**	**$ 11.9**	**$ 13.3**	**96%**	**15%**	$ 2.1	$ 11.4	$ 13.5

The commercial portfolio exposure was $13.3 billion at Dec. 31, 2024, a decrease of 1% from Dec. 31, 2023, primarily driven by lower exposure in the services and other portfolio, partially offset by higher exposure in the energy and utilities portfolio.

Our credit strategy is to focus on investment grade clients that are active users of our non-credit services. The following table summarizes the percentage of the financial institutions and commercial portfolio exposures that are investment grade.

Investment grade percentages	Dec. 31,		
	2024	2023	2022
Financial institutions	**96%**	92%	95%
Commercial	**96%**	94%	95%

Wealth management loans

Our wealth management loan exposure was $9.4 billion at Dec. 31, 2024, compared with $9.6 billion at Dec. 31, 2023. Wealth management loans primarily consist of loans to high-net-worth individuals, a majority of which are secured by the customers' investment management accounts or custody accounts.

Wealth management mortgages

Our wealth management mortgage exposure was $9.1 billion at Dec. 31, 2024, compared with $9.4 billion at Dec. 31, 2023. Wealth management mortgages primarily consist of loans to high-net-worth individuals, which are secured by residential property. Wealth management mortgages are primarily interest-only, adjustable-rate mortgages with a weighted-average loan-to-value ratio of 61% at origination. Less than 1% of the mortgages were past due at Dec. 31, 2024.

At Dec. 31, 2024, the wealth management mortgage portfolio consisted of the following geographic concentrations: California – 21%; New York – 14%; Florida – 11%; Massachusetts – 8%; and other – 46%.

Commercial real estate

The composition of the commercial real estate portfolio by asset class, including percentage secured, is presented below.

Composition of commercial real estate portfolio by asset class	**Dec. 31, 2024**		Dec. 31, 2023	
(dollars in billions)	**Total exposure**	**Percentage secured** *(a)*	Total exposure	Percentage secured *(a)*
Residential	**$ 4.2**	**88%**	$ 4.3	88%
Office	**2.4**	**75**	2.6	74
Retail	**0.7**	**58**	0.8	63
Mixed-use	**0.7**	**32**	0.8	31
Hotels	**0.6**	**33**	0.6	40
Healthcare	**0.7**	**43**	0.5	57
Other	**0.6**	**65**	0.6	71
Total commercial real estate	**$ 9.9**	**71%**	$ 10.2	73%

(a) Represents the percentage of secured exposure in each asset class.

Our commercial real estate exposure totaled $9.9 billion at Dec. 31, 2024 and $10.2 billion at Dec. 31, 2023. Our income-producing commercial real estate facilities are focused on experienced owners and are structured with moderate leverage based on existing cash flows. Our commercial real estate lending activities also include construction and renovation facilities. Our client base consists of experienced developers and long-term holders of real estate assets. Loans are approved on the basis of existing or projected cash flows and supported by appraisals and knowledge of local market conditions. Development loans are structured with moderate leverage, and in many instances, involve some level of recourse to the developer.

At Dec. 31, 2024, the unsecured portfolio consisted of real estate investment trusts ("REITs") and real estate operating companies, which are both primarily investment grade.

At Dec. 31, 2024, our commercial real estate portfolio consisted of the following concentrations: New York metro – 34%; REITs and real estate operating companies – 29%; and other – 37%.

Lease financings

The lease financings portfolio exposure totaled $603 million at Dec. 31, 2024 and $599 million at Dec. 31, 2023. At Dec. 31, 2024, all of leasing exposure was investment grade, or investment grade equivalent, and consisted of exposures backed by well-diversified assets, primarily real estate and large-ticket transportation equipment. Assets are both domestic and foreign-based, with primary concentrations in Germany and the U.S.

Other residential mortgages

The other residential mortgages portfolio primarily consists of 1-4 family residential mortgage loans and totaled $1.1 billion at Dec. 31, 2024 and $1.2 billion at Dec. 31, 2023.

Overdrafts

Overdrafts primarily relate to custody and securities clearance clients and are generally repaid within two business days.

Capital call financing

Capital call financing includes loans to private equity funds that are secured by the fund investors' capital commitments and the funds' right to call capital.

Other loans

Other loans primarily include loans to consumers that are fully collateralized with equities, mutual funds and fixed-income securities.

Margin loans

Margin loan exposure of $19.1 billion at Dec. 31, 2024 and $18.0 billion at Dec. 31, 2023 was collateralized with marketable securities. Borrowers are required to maintain a daily collateral margin in excess of 100% of the value of the loan. Margin loans included $8 billion at Dec. 31, 2024 and $7 billion at Dec. 31, 2023 related to a term loan program that offers fully collateralized loans to broker-dealers.

Maturity of loan portfolio

The following table shows the maturity structure of our loan portfolio.

Maturity of loan portfolio at Dec. 31, 2024 *(in millions)*	Within 1 year	Between 1 and 5 years	Between 5 and 15 years	After 15 years	Total
Commercial	$ 876	$ 489	$ 55	$ —	$ 1,420
Commercial real estate	1,466	4,509	807	—	6,782
Financial institutions	11,571	1,596	—	—	13,167
Lease financings	87	163	353	—	603
Wealth management loans	8,329	194	175	—	8,698
Wealth management mortgages	—	21	361	8,568	8,950
Other residential mortgages	—	3	131	934	1,068
Overdrafts	3,519	—	—	—	3,519
Capital call financing	4,025	1,138	—	—	5,163
Other	3,062	1	—	—	3,063
Margin loans	18,637	500	—	—	19,137
Total	$ 51,572	$ 8,614	$ 1,882	$ 9,502	$ 71,570

Interest rate characteristic

The following table shows the interest rate characteristic of loans maturing after one year.

Interest rate characteristic of loan portfolio maturing > 1 year at Dec. 31, 2024 *(in millions)*	Fixed rates	Floating rates	Total
Commercial	$ 56	$ 488	$ 544
Commercial real estate	147	5,169	5,316
Financial institutions	—	1,596	1,596
Lease financings	516	—	516
Wealth management loans	110	259	369
Wealth management mortgages	3,770	5,180	8,950
Other residential mortgages	1,036	32	1,068
Capital call financing	—	1,138	1,138
Other	—	1	1
Margin Loans	—	500	500
Total	$ 5,635	$ 14,363	$ 19,998

Allowance for credit losses

Our credit strategy is to focus on investment grade clients who are active users of our non-credit services. Our primary exposure to the credit risk of a customer consists of funded loans, unfunded contractual commitments to lend, standby letters of credit and overdrafts associated with our custody and securities clearance businesses.

The following table presents the changes in our allowance for credit losses.

Allowance for credit losses activity *(dollars in millions)*	**2024**	2023
Beginning balance of allowance for credit losses	**$ 414**	$ 292
Provision for credit losses	**70**	119
Charge-offs:		
Loans:		
Commercial real estate	**(82)**	—
Wealth management mortgages	**(1)**	—
Other residential mortgages	**(1)**	(3)
Other financial instruments	**(9)**	(2)
Total charge-offs	**(93)**	(5)
Recoveries:		
Loans:		
Commercial	**—**	1
Other residential mortgages	**1**	2
Other	**—**	5
Total recoveries	**1**	8
Net (charge-offs) recoveries	**(92)**	3
Ending balance of allowance for credit losses	**$ 392**	$ 414
Allowance for loan losses	**$ 294**	$ 303
Allowance for lending-related commitments	**72**	87
Allowance for financial instruments *(a)*	**26**	24
Total allowance for credit losses	**$ 392**	$ 414
Total loans	**$ 71,570**	$ 66,879
Average loans outstanding	**$ 68,141**	$ 64,096
Net (charge-offs) recoveries of loans to average loans outstanding	**(0.14)%**	— %
Net (charge-offs) recoveries of loans to total allowance for loan losses and lending-related commitments	**(25.14)**	0.77
Allowance for loan losses as a percentage of total loans	**0.41**	0.45
Allowance for loan losses and lending-related commitments as a percentage of total loans	**0.51**	0.58
Net (charge-offs) to average loans by loan category *(b)*:		
Commercial real estate	**(1.19)%**	N/A
Net (charge-offs) during the year	**$ (82)**	N/A
Average loans outstanding	**$ 6,915**	N/A
Wealth management mortgages	**(0.01)%**	N/A
Net (charge-offs) during the year	**$ (1)**	N/A
Average loans outstanding *(b)*	**$ 9,062**	N/A
Other residential mortgages	**N/A**	(0.11)%
Net (charge-offs) during the year	**N/A**	$ (1)
Average loans outstanding *(b)*	**N/A**	$ 908

(a) Includes allowance for credit losses on federal funds sold and securities purchased under resale agreements, available-for-sale securities, held-to-maturity securities, accounts receivable, cash and due from banks and interest-bearing deposits with banks.
(b) Average loans based on month-end balances.
N/A – Not applicable.

The provision for credit losses was $70 million in 2024, primarily driven by reserve increases related to commercial real estate exposure and changes in the macroeconomic forecast.

The allowance for loan losses and allowance for lending-related commitments represent management's estimate of lifetime expected losses in our credit portfolio. This evaluation process is subject to numerous estimates and judgments. To the extent actual results differ from forecasts or management's judgment, the allowance for credit losses may be greater or less than future charge-offs.

Based on an evaluation of the allowance for credit losses as discussed in "Critical accounting estimates" and Note 1 of the Notes to Consolidated Financial Statements, we have allocated our allowance for loans and lending-related commitments as presented below.

Allocation of allowance for loan losses and lending-related commitments *(a)*	Dec. 31,			
	2024		2023	
(dollars in millions)	**$**	**%**	$	%
Commercial real estate	**$ 315**	**86%**	$ 325	83%
Commercial	**20**	**5**	27	7
Financial institutions	**19**	**5**	19	4
Wealth management mortgages	**6**	**1**	9	2
Other residential mortgages	**2**	**1**	4	1
Capital call financing	**3**	**1**	4	1
Wealth management loans	**1**	**1**	1	1
Lease financings	**—**	**—**	1	1
Total	**$ 366**	**100%**	$ 390	100%

(a) *The allowance allocated to margins loans, overdrafts and other loans was insignificant at both Dec. 31, 2024 and Dec. 31, 2023. We have rarely suffered a loss on these types of loans.*

The allocation of the allowance for credit losses is inherently judgmental, and the entire allowance for credit losses is available to absorb credit losses regardless of the nature of the losses.

Nonperforming assets

The table below presents our nonperforming assets.

Nonperforming assets	Dec. 31,	
(dollars in millions)	**2024**	2023
Nonperforming loans:		
Commercial real estate	**$ 143**	$ 189
Other residential mortgages	**19**	24
Wealth management mortgages	**15**	19
Total nonperforming loans	**177**	232
Other assets owned	**2**	5
Total nonperforming assets	**$ 179**	$ 237
Nonperforming assets ratio	**0.25%**	0.35%
Allowance for loan losses/ nonperforming loans	**166.1**	130.6
Allowance for loan losses/ nonperforming assets	**164.2**	127.8
Allowance for loan losses and lending-related commitments/nonperforming loans	**206.8**	168.1
Allowance for loan losses and lending-related commitments/nonperforming assets	**204.5**	164.6

Nonperforming assets decreased $58 million compared with Dec. 31, 2023, primarily reflecting the impact of nonperforming commercial real estate loans that were charged off in 2024.

See "Nonperforming assets" in Note 1 of the Notes to Consolidated Financial Statements for our policy for placing loans on nonaccrual status.

Deposits

We receive client deposits through the businesses in the Securities Services, Market and Wealth Services and Investment and Wealth Management segments and we rely on those deposits as a low-cost and stable source of funding.

Total deposits were $289.5 billion at Dec. 31, 2024, an increase of 2%, compared with $283.7 billion at Dec. 31, 2023. The increase primarily reflects higher interest-bearing deposits in U.S. offices, partially offset by lower interest-bearing deposits in non-U.S. offices.

Noninterest-bearing deposits were $58.3 billion at Dec. 31, 2024 and Dec. 31, 2023. Interest-bearing deposits were primarily demand deposits and totaled $231.3 billion at Dec. 31, 2024, compared with $225.4 billion at Dec. 31, 2023.

The aggregate amount of deposits by foreign customers in domestic offices was $58.8 billion at Dec. 31, 2024 and $55.1 billion at Dec. 31, 2023.

Deposits in non-U.S. offices totaled $95.6 billion at Dec. 31, 2024 and $96.6 billion at Dec. 31, 2023. These deposits were primarily overnight deposits.

Uninsured deposits are the portion of U.S. office deposits accounts that exceed the FDIC insurance limit. Uninsured deposits in U.S. office deposit accounts are generally demand deposits and totaled $168.9 billion at Dec. 31, 2024 and $168.4 billion at Dec. 31, 2023. Our uninsured U.S. office deposits accounts reflect the amounts disclosed in our regulatory reports, adjusted to exclude intercompany deposit balances.

The following table presents the amount of uninsured U.S. and Non-U.S. office time deposits disaggregated by time remaining until maturity.

Uninsured time deposits at Dec. 31, 2024 *(in millions)*	U.S.	Non-U.S.
Less than 3 months	$ 636	$ 1,062
3 to 6 months	105	6
6 to 12 months	65	25
Over 12 months	2	—
Total	**$ 808**	**$ 1,093**

Short-term borrowings

We fund ourselves primarily through deposits and, to a lesser extent, other short-term borrowings and long-term debt. Short-term borrowings consist of federal funds purchased and securities sold under repurchase agreements, payables to customers and broker-dealers, commercial paper and other borrowed funds. Certain short-term borrowings, for example, securities sold under repurchase agreements, require the delivery of securities as collateral.

Federal funds purchased and securities sold under repurchase agreements include repurchase agreement activity with the Fixed Income Clearing Corporation ("FICC"), where we record interest expense on a gross basis, but the ending and average balances reflect the impact of offsetting under enforceable netting agreements. This activity primarily relates to government securities collateralized resale and repurchase agreements executed with clients that are novated to and settle with the FICC.

Payables to customers and broker-dealers represent funds awaiting reinvestment and short sale proceeds payable on demand. Payables to customers and broker-dealers are driven by customer trading activity and market volatility.

The Bank of New York Mellon issues commercial paper that matures within 397 days from the date of issue and is not redeemable prior to maturity or subject to voluntary prepayment.

Other borrowed funds primarily include borrowings from the Federal Home Loan Bank, overdrafts of sub-custodian account balances in our Securities Services businesses, and borrowings under lines of credit by our Pershing subsidiaries. Overdrafts typically relate to timing differences for settlements.

Liquidity and dividends

BNY defines liquidity as the ability of the Parent and its subsidiaries to access funding or convert assets to cash quickly and efficiently, or to roll over or issue new debt, especially during periods of market stress, at a reasonable cost, and in order to meet its short-term (up to one year) obligations. Funding liquidity risk is the risk that BNY cannot meet its cash and collateral obligations at a reasonable cost for both expected and unexpected cash flow and collateral needs without adversely affecting daily operations or our financial condition. Funding liquidity risk can arise from funding mismatches, market constraints from the inability to convert assets into cash, the inability to hold or raise cash, low overnight deposits, deposit run-off or contingent liquidity events.

Changes in economic conditions or exposure to credit, market, operational, legal and reputational risks also can affect BNY's liquidity risk profile and are considered in our liquidity risk framework. For additional information, see "Risk Management – Liquidity Risk."

The Parent's policy is to have access to sufficient unencumbered cash and cash equivalents at each quarter-end to cover maturities and other forecasted debt redemptions, net interest payments and net tax payments for the following 18-month period, and to provide sufficient collateral to satisfy transactions subject to Section 23A of the Federal Reserve Act.

We monitor and control liquidity exposures and funding needs within and across significant legal entities, branches, currencies and business lines, taking into account, among other factors, any applicable restrictions on the transfer of liquidity among entities.

BNY also manages potential intraday liquidity risks. We monitor and manage intraday liquidity against existing and expected intraday liquid resources (such as cash balances, remaining intraday credit capacity, intraday contingency funding and available collateral) to enable BNY to meet its intraday obligations under normal and reasonably severe stressed conditions.

We define available funds for internal liquidity management purposes as cash and due from banks, interest-bearing deposits with the Federal Reserve and other central banks, interest-bearing deposits with banks and federal funds sold and securities purchased under resale agreements. The following table presents our total available funds at period end and on an average basis.

Available funds *(dollars in millions)*	**Dec. 31, 2024**	Dec. 31, 2023	Average **2024**	Average 2023	Average 2022
Cash and due from banks	**$ 4,178**	$ 4,922	**$ 5,383**	$ 5,287	$ 5,542
Interest-bearing deposits with the Federal Reserve and other central banks	**89,546**	111,550	**99,986**	103,904	97,442
Interest-bearing deposits with banks	**9,612**	12,139	**10,991**	13,620	16,826
Federal funds sold and securities purchased under resale agreements	**41,146**	28,900	**31,306**	26,077	24,953
Total available funds	**$144,482**	$ 157,511	**$147,666**	$ 148,888	$ 144,763
Total available funds as a percentage of total assets	**35%**	38%	**36%**	37%	34%

Total available funds were $144.5 billion at Dec. 31, 2024, compared with $157.5 billion at Dec. 31, 2023. The decrease was primarily due to lower interest-bearing deposits with the Federal Reserve and other central banks and interest-bearing deposits with banks, partially offset by higher federal funds sold and securities purchased under resale agreements.

Average non-core sources of funds, such as federal funds purchased and securities sold under repurchase agreements, trading liabilities, other borrowed funds and commercial paper, were $20.4 billion for 2024 and $25.0 billion for 2023. The decrease primarily reflects lower federal funds purchased and securities sold under repurchase agreements and lower trading liabilities partially offset by higher commercial paper.

Average interest-bearing domestic deposits were $141.3 billion for 2024 and $123.5 billion for 2023. Average foreign deposits, primarily from our European-based businesses included in the Securities Services and Market and Wealth Services segments, were $92.9 billion for 2024, compared with $88.8 billion for 2023. The changes primarily reflect client activity.

Average payables to customers and broker-dealers were $12.7 billion for 2024 and $14.4 billion for 2023. Payables to customers and broker-dealers are driven by customer trading activity and market volatility.

Average long-term debt was $31.8 billion for 2024 and $31.0 billion for 2023.

Average noninterest-bearing deposits decreased to $49.5 billion for 2024 from $59.2 billion for 2023, primarily reflecting client activity.

A significant reduction of client activity in our Securities Services and Market and Wealth Services business segments would reduce our access to deposits. See "Asset/liability management" for additional factors that could impact our deposit balances.

Sources of liquidity

The Parent's major sources of liquidity are access to the debt and equity markets, dividends from its subsidiaries, and cash on hand and cash otherwise made available in business-as-usual circumstances to the Parent through a committed credit facility with our intermediate holding company ("IHC").

Our ability to access the capital markets on favorable terms, or at all, is partially dependent on our credit ratings, which are as follows:

Credit ratings at Dec. 31, 2024	Moody's		S&P	Fitch		DBRS
Parent:						
Long-term senior debt	Aa3		A	AA-		AA
Subordinated debt	A2		A-	A		AA (low)
Preferred stock	Baa1		BBB	BBB+		A
Outlook – Parent	Stable		Stable	Stable		Stable
The Bank of New York Mellon:						
Long-term senior debt	Aa1		AA-	AA		AA (high)
Subordinated debt	NR		A	NR		NR
Long-term deposits	Aa1		AA-	AA+		AA (high)
Short-term deposits	P-1		A-1+	F1+		R-1 (high)
Commercial paper	P-1		A-1+	F1+		R-1 (high)
BNY Mellon, N.A.:						
Long-term senior debt	Aa1	*(a)*	AA-	AA	*(a)*	AA (high)
Long-term deposits	Aa1		AA-	AA+		AA (high)
Short-term deposits	P-1		A-1+	F1+		R-1 (high)
Outlook – Banks	Stable (multiple)	*(b)*	Stable	Stable		Stable

(a) Represents senior debt issuer default rating.
(b) Stable outlook on long-term deposits ratings. Negative outlook on long-term senior debt ratings. Negative outlook on senior unsecured rating for The Bank of New York Mellon.
NR – Not rated.

In November 2024, Moody's Ratings ("Moody's") upgraded BNY's issuer and senior unsecured ratings to Aa3 from A1. The long-term counterparty risk ratings were upgraded to Aa1 from Aa2 for The Bank of New York Mellon and for BNY Mellon, N.A. The long-term issuer and senior unsecured ratings were upgraded to Aa1 from Aa2 for The Bank of New York Mellon, and the long-term issuer rating was upgraded to Aa1 from Aa2 for BNY Mellon, N.A. Moody's affirmed all other long-term and short-term ratings and assessments for BNY, The Bank of New York Mellon and BNY Mellon N.A. The outlooks on BNY's issuer and senior unsecured ratings have been changed to stable from positive following the upgrade of these ratings.

Long-term debt totaled $30.9 billion at Dec. 31, 2024 and $31.3 billion at Dec. 31, 2023. Maturities and redemptions of $6.0 billion and a decrease in the fair value of hedged long-term debt were partially offset by issuances of $5.8 billion. The Parent has $3.3 billion of long-term debt that will mature in 2025.

The following table presents the long-term debt issued in 2024.

Debt issuances *(in millions)*	**2024**
5.060% fixed-to-floating callable senior notes due 2032	**$ 1,100**
5.188% fixed-to-floating callable senior notes due 2035	**1,000**
4.975% fixed-to-floating callable senior notes due 2030	**1,000**
5.225% fixed-to-floating callable senior notes due 2035	**750**
4.890% fixed-to-floating callable senior notes due 2028	**600**
5.606% fixed-to-floating callable senior notes due 2039	**500**
SOFR + 45 bps callable senior bank notes due 2026	**500**
SOFR + 83 bps callable senior notes due 2028	**300**
Total debt issuances	**$ 5,750**

In February 2025, the Parent issued $1.25 billion of fixed-to-floating rate callable senior notes maturing in 2031. The annual fixed interest rate is 4.942% from issuance to, but excluding, Feb. 11, 2030, and then an annual interest rate of the compounded secured overnight financing rate ("SOFR") plus 88.7 basis points.

The Bank of New York Mellon may issue notes and CDs. At Dec. 31, 2024 and Dec. 31, 2023, $1.0 billion and $1.3 billion, respectively, of notes were outstanding. At Dec. 31, 2024 and Dec. 31, 2023,

$1.1 billion and $397 million of CDs were outstanding, respectively.

The Bank of New York Mellon also issues commercial paper that matures within 397 days from the date of issue and is not redeemable prior to maturity or subject to voluntary prepayment. There was $301 million of commercial paper outstanding at Dec. 31, 2024. There was no commercial paper outstanding at Dec. 31, 2023. The average commercial paper outstanding was $1.2 billion and $5 million for 2024 and 2023, respectively.

Subsequent to Dec. 31, 2024, our U.S. bank subsidiaries could declare dividends to the Parent of approximately $82 million, without the need for a regulatory waiver. In addition, at Dec. 31, 2024, non-bank subsidiaries of the Parent had liquid assets of approximately $3.8 billion. Restrictions on our ability to obtain funds from our subsidiaries are discussed in more detail in "Supervision and Regulation – Capital Planning and Stress Testing – Payment of Dividends, Stock Repurchases and Other Capital Distributions" and in Note 19 of the Notes to Consolidated Financial Statements.

Pershing LLC has one uncommitted line of credit in place for liquidity purposes which is guaranteed by the Parent for $300 million. Average borrowings under this line were less than $1 million in 2024. Pershing Limited, an indirect UK-based subsidiary of BNY, has two separate uncommitted lines of credit amounting to $247 million in aggregate. Average borrowings under these lines were less than $1 million, in aggregate, in 2024.

The double leverage ratio is the ratio of our equity investment in subsidiaries divided by our consolidated Parent company equity, which includes our noncumulative perpetual preferred stock. In short, the double leverage ratio measures the extent to which equity in subsidiaries is financed by Parent company debt. As the double leverage ratio increases, this can reflect greater demands on a company's cash flows in order to service interest payments and debt maturities. BNY's double leverage ratio is managed in a range considering the high level of unencumbered available liquid assets held in its principal subsidiaries (such as central bank deposit placements and government securities), the Company's cash-generating fee-based business model, with fee revenue representing 73% of total revenue in 2024, and the dividend capacity of our banking subsidiaries. Our double leverage ratio was 119.7% at Dec. 31, 2024 and 120.5% at Dec. 31, 2023, and within the range targeted by management.

Uses of funds

The Parent's major uses of funds are repurchases of common stock, payment of dividends, principal and interest payments on its borrowings, acquisitions and additional investments in its subsidiaries.

In 2024, we paid $1.5 billion in dividends on our common and preferred stock. Our common stock dividend payout ratio was 31% for 2024.

In 2024, we repurchased 48.9 million common shares at an average price of $62.70 per common share for a total cost of $3.1 billion.

Liquidity coverage ratio ("LCR")

U.S. regulators have established an LCR that requires certain banking organizations, including BNY, to maintain a minimum amount of unencumbered high-quality liquid assets ("HQLA") sufficient to withstand the net cash outflow under a hypothetical standardized acute liquidity stress scenario for a 30-day time horizon.

The following table presents BNY's consolidated HQLA at Dec. 31, 2024, and the average HQLA and average LCR for the fourth quarter of 2024.

Consolidated HQLA and LCR *(dollars in billions)*	**Dec. 31, 2024**	Sept. 30, 2024
Cash *(a)*	**$ 89**	$ 102
Securities *(b)*	**93**	97
Total consolidated HQLA *(c)*	**$ 182**	$ 199
Total consolidated HQLA – average *(c)*	**$ 187**	$ 193
Average consolidated LCR	**115%**	116%

(a) Primarily includes cash on deposit with central banks.
(b) Primarily includes securities of U.S. government-sponsored enterprises, U.S. Treasury, sovereigns and U.S. agencies.
(c) Consolidated HQLA presented before adjustments. After haircuts and the impact of trapped liquidity, consolidated HQLA totaled $129 billion at Dec. 31, 2024 and $135 billion at Sept. 30, 2024, and averaged $128 billion for the fourth quarter of 2024 and $131 billion for the third quarter of 2024.

BNY and each of our affected domestic bank subsidiaries were compliant with the U.S. LCR requirements of at least 100% throughout 2024.

Net stable funding ratio ("NSFR")

The NSFR is a liquidity requirement applicable to large U.S. banking organizations, including BNY. The NSFR is expressed as a ratio of the available stable funding to the required stable funding amount over a one-year horizon. Our average consolidated NSFR was 132% for the fourth quarter of 2024 and third quarter of 2024.

BNY and each of our affected domestic bank subsidiaries were compliant with the NSFR requirement of at least 100% throughout the fourth quarter of 2024.

Statement of cash flows

The following summarizes the activity reflected on the consolidated statement of cash flows. While this information may be helpful to highlight certain macro trends and business strategies, the cash flow analysis may not be as relevant when analyzing changes in our net earnings and net assets. We believe that in addition to the traditional cash flow analysis, the discussion related to liquidity and dividends and asset/liability management herein may provide more useful context in evaluating our liquidity position and related activity.

Net cash provided by operating activities was $687 million in 2024, compared with $5.9 billion in 2023. In 2024, net cash provided by operating activities primarily resulted from earnings, partially offset by changes in trading assets and liabilities. In 2023, net cash provided by operating activities primarily resulted from earnings and changes in accruals and other, net.

Net cash used for investing activities was $9.5 billion in 2024, compared with $5.8 billion in 2023. In 2024, net cash used for investing activities primarily reflects changes in federal funds sold and securities purchased under resale agreements, a net increase in the securities portfolio and the net change in loans, partially offset by changes in interest-bearing deposits with the Federal Reserve and other central banks. In 2023, net cash used for investing activities primarily reflects changes in interest-bearing deposits with the Federal Reserve and other central banks and changes in federal funds sold and securities purchased under resale agreements, partially offset by a net decrease in the securities portfolio.

Net cash provided by financing activities was $6.3 billion in 2024, compared with net cash used for financing activities of $3.5 billion in 2023. In 2024, net cash provided by financing activities primarily reflects changes in deposits and issuances of long-term debt, partially offset by repayments of long-term debt and common stock repurchases. In 2023, net cash used for financing activities primarily reflects repayments of long-term debt, changes in payables to customers and broker-dealers and common stock repurchases, partially offset by issuances of long-term debt and changes in deposits.

Capital

Capital data *(dollars in millions, except per share amounts; common shares in thousands)*	**2024**	2023
At Dec. 31:		
BNY shareholders' equity to total assets ratio	**9.9%**	9.9%
BNY common shareholders' equity to total assets ratio	**8.9%**	8.9%
Total BNY shareholders' equity	**$ 41,318**	$ 40,770
Total BNY common shareholders' equity	**$ 36,975**	$ 36,427
BNY tangible common shareholders' equity – Non-GAAP *(a)*	**$ 19,412**	$ 19,174
Book value per common share	**$ 51.52**	$ 47.97
Tangible book value per common share – Non-GAAP *(a)*	**$ 27.05**	$ 25.25
Closing stock price per common share	**$ 76.83**	$ 52.05
Market capitalization	**$ 55,139**	$ 39,524
Common shares outstanding	**717,680**	759,344
Full-year:		
Cash dividends per common share	**$ 1.78**	$ 1.58
Common dividend payout ratio	**31%**	41%
Common dividend yield	**2.3%**	3.0%

(a) See "Supplemental Information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 115 for the reconciliation of these Non-GAAP measures.

The Bank of New York Mellon Corporation's total shareholders' equity increased to $41.3 billion at Dec. 31, 2024 from $40.8 billion at Dec. 31, 2023. The increase primarily reflects earnings and an increase in additional paid-in capital, partially offset by common stock repurchases and dividend payments.

The unrealized loss (after-tax) on our available-for-sale securities portfolio, net of hedges, included in accumulated other comprehensive income was $1.2 billion at Dec. 31, 2024, compared with $1.6 billion at Dec. 31, 2023. The improvement in the net unrealized loss, including the impact of related hedges, primarily reflects securities moving closer to maturity.

We repurchased 48.9 million common shares at an average price of $62.70 per common share for a total of $3.1 billion in 2024.

In January 2023, we announced a share repurchase program approved by our Board of Directors providing for the repurchase of up to $5.0 billion of common shares beginning Jan. 1, 2023. This new share repurchase plan replaced all previously authorized share repurchase plans.

In April 2024, we announced a new authorization providing for the repurchase of $6.0 billion of common shares in addition to any remaining capacity under the existing January 2023 authorization.

In July 2024, our Board of Directors approved a 12% increase in the quarterly cash dividend on common stock, from $0.42 to $0.47 per share. We began paying the increased quarterly cash dividend in the third quarter of 2024.

Capital adequacy

Regulators establish certain levels of capital for bank holding companies ("BHCs") and banks, including BNY and our bank subsidiaries, in accordance with established quantitative measurements. For the Parent to maintain its status as a financial holding company ("FHC"), our U.S. bank subsidiaries and BNY must, among other things, qualify as "well capitalized." As of Dec. 31, 2024 and Dec. 31, 2023, BNY and our U.S. bank subsidiaries were "well capitalized." Failure to satisfy regulatory standards, including "well capitalized" status or capital adequacy rules more generally, could result in limitations on our activities and adversely affect our financial condition. See the discussion of these matters in "Supervision and Regulation – Regulated Entities of BNY and Ancillary Regulatory Requirements" and "Risk Factors – Capital and Liquidity Risk – Failure to satisfy regulatory standards, including "well capitalized" and "well managed" status or capital adequacy and liquidity rules more generally, could result in limitations on our activities and adversely affect our business and financial condition."

The U.S. banking agencies' capital rules are based on the framework adopted by the Basel Committee on Banking Supervision ("BCBS"), as amended from time to time. For additional information on these capital requirements, see "Supervision and Regulation."

The table below presents our consolidated and largest bank subsidiary regulatory capital ratios.

Consolidated and largest bank subsidiary regulatory capital ratios	**Dec. 31, 2024**			Dec. 31, 2023
	Well capitalized	Minimum required *(a)*	Capital ratios	Capital ratios
Consolidated regulatory capital ratios: *(b)*				
Advanced Approaches:				
CET1 ratio	N/A *(c)*	8.5%	**11.7%**	11.5%
Tier 1 capital ratio	6%	10	**14.4**	14.2
Total capital ratio	10	12	**15.3**	14.9
Standardized Approach:				
CET1 ratio	N/A *(c)*	8.5%	**11.2%**	11.9%
Tier 1 capital ratio	6%	10	**13.7**	14.6
Total capital ratio	10	12	**14.8**	15.6
Tier 1 leverage ratio	N/A *(c)*	4	**5.7**	6.0
SLR *(d)*	N/A *(c)*	5	**6.5**	7.3
The Bank of New York Mellon regulatory capital ratios: *(b)(e)*				
CET1 ratio	6.5%	7%	**16.1%**	16.2%
Tier 1 capital ratio	8	8.5	**16.1**	16.2
Total capital ratio	10	10.5	**16.3**	16.3
Tier 1 leverage ratio	5	4	**6.3**	6.6
SLR *(d)*	6	3	**7.6**	8.5

(a) Minimum requirements for Dec. 31, 2024 include minimum thresholds plus currently applicable buffers. The U.S. global systemically important banks ("G-SIB") surcharge of 1.5% is subject to change. The countercyclical capital buffer is currently set to 0%. The stress capital buffer ("SCB") requirement is 2.5%, equal to the regulatory minimum for Standardized Approach capital ratios.
(b) For our CET1, Tier 1 capital and Total capital ratios, our effective capital ratios under U.S. capital rules are the lower of the ratios as calculated under the Standardized and Advanced Approaches. The Tier 1 leverage ratio is based on Tier 1 capital and quarterly average total assets.
(c) The Federal Reserve's regulations do not establish well capitalized thresholds for these measures for BHCs.
(d) The SLR is based on Tier 1 capital and total leverage exposure, which includes certain off-balance sheet exposures.
(e) The Bank of New York Mellon's effective capital ratios under the U.S. capital rules are the lower of the ratios as calculated under the Standardized and Advanced Approaches, which for Dec. 31, 2024 was the Standardized Approach for the CET1 and Tier 1 capital ratios and the Advanced Approaches for the Total capital ratio, and for Dec. 31, 2023 was the Advanced Approaches.
N/A - Not applicable.

Our CET1 ratio determined under the Standardized Approach was 11.2% at Dec. 31, 2024 and 11.5% at Dec. 31, 2023 under the Advanced Approaches. The decrease was primarily driven by capital returned through common stock repurchases and dividends and higher RWAs, partially offset by capital generated through earnings.

The Tier 1 leverage ratio was 5.7% at Dec. 31, 2024, compared with 6.0% at Dec. 31, 2023. The decrease was driven by higher average assets, partially offset by an increase in capital.

Risk-based capital ratios vary depending on the size of the balance sheet at period end and the levels and types of investments in assets, and leverage ratios vary based on the average size of the balance sheet over the quarter. The balance sheet size fluctuates from period to period based on levels of customer and market activity. In general, when servicing clients are more actively trading securities, deposit balances and the balance sheet as a whole are higher. In addition, when markets experience significant volatility or stress, our balance sheet size may increase considerably as client deposit levels increase.

Our capital ratios are necessarily subject to, among other things, anticipated compliance with all necessary enhancements to model calibration, approval by regulators of certain models used as part of RWA calculations, other refinements, further implementation guidance from regulators, market practices and standards and any changes BNY may make to its businesses. As a consequence of these factors, our capital ratios may materially change, and may be volatile over time and from period to period.

Under the Advanced Approaches, our operational loss risk model is informed by external losses, including fines and penalties levied against institutions in the financial services industry, particularly those that relate to businesses in which we operate, and as a result external losses have impacted and could in the future impact the amount of capital that we are required to hold.

The following table presents our capital components and RWAs.

Capital components and risk-weighted assets (in millions)	Dec. 31, 2024	2023
CET1:		
Common shareholders' equity	**$ 36,975**	$ 36,427
Adjustments for:		
Goodwill and intangible assets *(a)*	**(17,563)**	(17,253)
Net pension fund assets	**(333)**	(297)
Embedded goodwill	**(254)**	(275)
Deferred tax assets	**(62)**	(62)
Other	**(4)**	(6)
Total CET1	**18,759**	18,534
Other Tier 1 capital:		
Preferred stock	**4,343**	4,343
Other	**(63)**	(14)
Total Tier 1 capital	**$ 23,039**	$ 22,863
Tier 2 capital:		
Subordinated debt	**$ 1,398**	$ 1,148
Allowance for credit losses	**392**	414
Other	**(11)**	(11)
Total Tier 2 capital – Standardized Approach	**1,779**	1,551
Excess of expected credit losses	**109**	85
Less: Allowance for credit losses	**392**	414
Total Tier 2 capital – Advanced Approaches	**$ 1,496**	$ 1,222
Total capital:		
Standardized Approach	**$ 24,818**	$ 24,414
Advanced Approaches	**$ 24,535**	$ 24,085
Risk-weighted assets:		
Standardized Approach	**$ 167,786**	$ 156,178
Advanced Approaches:		
Credit Risk	**$ 90,076**	$ 87,223
Market Risk	**4,808**	3,380
Operational Risk	**65,588**	70,925
Total Advanced Approaches	**$ 160,472**	$ 161,528
Average assets for Tier 1 leverage ratio	**$ 402,069**	$ 383,705
Total leverage exposure for SLR	**$ 353,523**	$ 313,555

(a) *Reduced by deferred tax liabilities associated with intangible assets and tax-deductible goodwill.*

The table below presents the factors that impacted CET1 capital.

CET1 generation (in millions)	2024
CET1 – Beginning of period	**$ 18,534**
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	**4,336**
Goodwill and intangible assets, net of related deferred tax liabilities	**(310)**
Gross CET1 generated	**4,026**
Capital deployed:	
Common stock repurchases	**(3,064)**
Common stock dividends *(a)*	**(1,348)**
Total capital returned	**(4,412)**
Other comprehensive gain (loss):	
Unrealized gain on assets available-for-sale	**429**
Foreign currency translation	**(189)**
Unrealized (loss) on cash flow hedges	**(6)**
Defined benefit plans	**3**
Total other comprehensive gain	**237**
Additional paid-in capital *(b)*	**413**
Other additions (deductions):	
Net pension fund assets	**(36)**
Embedded goodwill	**21**
Other	**(24)**
Total other (deductions)	**(39)**
Net CET1 generated	**225**
CET1 – End of period	**$ 18,759**

(a) *Includes dividend-equivalents on share-based awards.*
(b) *Primarily related to stock awards and stock issued for employee benefit plans.*

The following table shows the impact on the consolidated capital ratios at Dec. 31, 2024 of a $100 million increase or decrease in common equity, or a $1 billion increase or decrease in RWAs, quarterly average assets or total leverage exposure.

Sensitivity of consolidated capital ratios at Dec. 31, 2024	Increase or decrease of	
(in basis points)	$100 million in common equity	$1 billion in RWA, quarterly average assets or total leverage exposure
CET1:		
Standardized Approach	6 bps	7 bps
Advanced Approaches	6	7
Tier 1 capital:		
Standardized Approach	6	8
Advanced Approaches	6	9
Total capital:		
Standardized Approach	6	9
Advanced Approaches	6	10
Tier 1 leverage	2	1
SLR	3	2

Stress capital buffer

In July 2023, the Federal Reserve announced that BNY's SCB requirement would remain at 2.5%, equal to the regulatory floor, for the period from Oct. 1, 2023 through Sept. 30, 2024. The SCB replaced the static 2.5% capital conservation buffer for Standardized Approach capital ratios for Comprehensive Capital Analysis and Review ("CCAR") BHCs. The SCB does not apply to bank subsidiaries, which remain subject to the static 2.5% capital conservation buffer. In August 2024, the Federal Reserve announced that BNY's SCB requirement would remain at 2.5%, equal to the regulatory floor, for the period from Oct. 1, 2024 through Sept. 30, 2025. See "Supervision and Regulation" for additional information.

The SCB final rule generally eliminates the requirement for prior approval of common stock repurchases in excess of the distributions in a firm's capital plan, provided that such distributions are consistent with applicable capital requirements and buffers, including the SCB.

Total Loss-Absorbing Capacity ("TLAC")

The following summarizes the minimum requirements for BNY's external TLAC and external long-term debt ("LTD") ratios, plus currently applicable buffers.

	As a % of RWAs *(a)*	**As a % of total leverage exposure**
Eligible external TLAC ratios	Regulatory minimum of 18% plus a buffer *(b)* equal to the sum of 2.5%, the method 1 G-SIB surcharge (currently 1%), and the countercyclical capital buffer, if any	Regulatory minimum of 7.5% plus a buffer *(c)* equal to 2%
Eligible external LTD ratios	Regulatory minimum of 6% plus the greater of the method 1 or method 2 G-SIB surcharge (currently 1.5%)	4.5%

(a) RWA is the greater of the Standardized Approach and Advanced Approaches.
(b) Buffer to be met using only CET1.
(c) Buffer to be met using only Tier 1 capital.

External TLAC consists of the Parent's Tier 1 capital and eligible unsecured LTD issued by it that has a remaining term to maturity of at least one year and satisfies certain other conditions. Eligible LTD consists of the unpaid principal balance of eligible unsecured debt securities, subject to haircuts for amounts due to be paid within two years, that satisfy certain other conditions. Debt issued prior to Dec. 31, 2016 has been permanently grandfathered to the extent these instruments otherwise would be ineligible only due to containing impermissible acceleration rights or being governed by foreign law.

The following table presents our external TLAC and external LTD ratios.

TLAC and LTD ratios	**Dec. 31, 2024**		
	Minimum required	Minimum ratios with buffers	Ratios
Eligible external TLAC:			
As a percentage of RWA	18.0%	21.5%	30.2%
As a percentage of total leverage exposure	7.5%	9.5%	14.3%
Eligible external LTD:			
As a percentage of RWA	7.5%	N/A	15.3%
As a percentage of total leverage exposure	4.5%	N/A	7.3%

N/A – Not applicable.

If BNY maintains risk-based ratio or leverage TLAC measures above the minimum required level, but with a risk-based ratio or leverage below the minimum level with buffers, we will face constraints on dividends, equity repurchases and discretionary executive compensation based on the amount of the shortfall and eligible retained income.

Issuer purchases of equity securities

Share repurchases – fourth quarter of 2024 *(dollars in millions, except per share amounts; common shares in thousands)*	Total shares repurchased	Average price per share	Total shares repurchased as part of a publicly announced plan or program	Maximum approximate dollar value of shares that may yet be purchased under the publicly announced plans or programs at Dec. 31, 2024
October 2024	3,087	$ 76.39	3,087	$ 5,846
November 2024	4,654	78.11	4,654	5,483
December 2024	1,857	81.16	1,857	5,332
Fourth quarter of 2024 *(a)*	**9,598**	**$ 78.15**	**9,598**	**$ 5,332** *(b)*

(a) Includes 40 thousand shares repurchased at a purchase price of $3 million from employees, primarily in connection with the employees' payment of taxes upon the vesting of restricted stock. The average price of open market share repurchases was $78.15.

(b) Represents the maximum value of the shares to be repurchased under the share repurchase plan and includes shares repurchased in connection with employee benefit plans.

In January 2023, we announced a share repurchase program approved by our Board of Directors providing for the repurchase of up to $5.0 billion of common shares beginning Jan. 1, 2023. This new share repurchase plan replaced all previously authorized share repurchase plans.

In April 2024, we announced a new authorization providing for the repurchase of $6.0 billion of common shares in addition to any remaining capacity under the existing January 2023 authorization.

Share repurchases may be executed through open market repurchases, in privately negotiated transactions or by other means, including through repurchase plans designed to comply with Rule 10b5-1 and other derivative, accelerated share repurchase and other structured transactions. The timing and exact amount of any common stock repurchases will depend on various factors, including market conditions and the common stock trading price; the Company's capital position, liquidity and financial performance; alternative uses of capital; and legal and regulatory limitations and considerations.

Trading activities and risk management

Our trading activities are focused on acting as a market-maker for our customers, facilitating customer trades and risk-mitigating hedging in compliance with the Volcker Rule. The risk from market-making activities for customers is managed by our traders and limited in total exposure through a system of position limits, value-at-risk ("VaR") methodology and other market sensitivity measures. VaR is the potential loss in value due to adverse market movements over a defined time horizon with a specified confidence level. The calculation of our VaR used by management and presented below assumes a one-day holding period, utilizes a 99% confidence level and incorporates non-linear product characteristics. VaR facilitates comparisons across portfolios of different risk characteristics. VaR also captures the diversification of aggregated risk at the firm-wide level.

VaR represents a key risk management measure and it is important to note the inherent limitations to VaR, which include:

- VaR does not estimate potential losses over longer time horizons where moves may be extreme;
- VaR does not take into account the potential variability of market liquidity; and
- Previous moves in market risk factors may not produce accurate predictions of all future market moves.

See Note 23 of the Notes to Consolidated Financial Statements for additional information on the VaR methodology.

The following tables indicate the calculated VaR amounts for the trading portfolio for the designated periods using the historical simulation VaR model.

VaR *(a)*	**2024**			**Dec. 31,**
(in millions)	**Average**	**Minimum**	**Maximum**	**2024**
Interest rate	**$ 2.7**	**$ 1.9**	**$ 4.6**	**$ 2.6**
Foreign exchange	**2.2**	**1.6**	**3.0**	**2.0**
Equity	**0.1**	**—**	**1.0**	**0.1**
Credit	**1.3**	**0.9**	**1.9**	**1.5**
Diversification	**(4.4)**	**N/M**	**N/M**	**(4.8)**
Overall portfolio	**1.9**	**1.4**	**3.0**	**1.4**

VaR *(a)* *(in millions)*	2023 Average	2023 Minimum	2023 Maximum	Dec. 31, 2023
Interest rate	$ 3.2	$ 1.9	$ 7.6	$ 2.6
Foreign exchange	2.9	2.0	5.7	2.9
Equity	0.2	—	1.5	0.1
Credit	1.5	0.7	3.5	1.3
Diversification	(5.0)	N/M	N/M	(4.7)
Overall portfolio	2.8	1.3	8.9	2.2

(a) VaR exposure does not include the impact of the Company's consolidated investment management funds and seed capital investments.

N/M – Because the minimum and maximum may occur on different days for different risk components, it is not meaningful to compute a minimum and maximum portfolio diversification effect.

The interest rate component of VaR represents instruments whose values are predominantly driven by interest rate levels. These instruments include, but are not limited to, U.S. Treasury securities, swaps, swaptions, forward rate agreements, exchange-traded futures and options, and other interest rate derivative products.

The foreign exchange component of VaR represents instruments whose values predominantly vary with the level or volatility of currency exchange rates or interest rates. These instruments include, but are not limited to, currency balances, spot and forward transactions, currency options and other currency derivative products.

The equity component of VaR consists of instruments that represent an ownership interest in the form of domestic and foreign common stock or other equity-linked instruments. These instruments include, but are not limited to, common stock, exchange-traded funds, preferred stock, listed equity options (puts and calls), OTC equity options, equity total return swaps, equity index futures and other equity derivative products.

The credit component of VaR represents instruments whose values are predominantly driven by credit spread levels, i.e., idiosyncratic default risk. These instruments include, but are not limited to, single issuer credit default swaps, and securities with exposures from corporate and municipal credit spreads.

The diversification component of VaR is the risk reduction benefit that occurs when combining portfolios and offsetting positions, and from the correlated behavior of risk factor movements.

During 2024, interest rate risk generated 43% of average gross VaR, foreign exchange risk generated 35% of average gross VaR, equity risk generated 1% of average gross VaR and credit risk generated 21% of average gross VaR. During 2024, our daily trading loss exceeded our calculated VaR amount of the overall portfolio on only one occasion.

The following table of total daily trading revenue or loss illustrates the number of trading days in which our trading revenue or loss fell within particular ranges during the past five quarters.

Distribution of trading revenue (loss) *(a)*

(dollars in millions)	**Dec. 31, 2024**	Sept. 30, 2024	June 30, 2024	March 31, 2024	Dec. 31, 2023
Revenue range:	Number of days				
Less than $(2.5)	—	—	—	—	2
$(2.5) – $0	**2**	2	2	1	3
$0 – $2.5	**12**	18	8	19	18
$2.5 – $5.0	**26**	27	34	30	25
More than $5.0	**24**	17	19	12	15

(a) Trading revenue (loss) includes realized and unrealized gains and losses primarily related to spot and forward foreign exchange transactions, derivatives and securities trades for our customers and excludes any associated commissions, underwriting fees and net interest income.

Trading assets include debt and equity instruments and derivative assets, primarily foreign exchange and interest rate contracts, not designated as hedging instruments. Trading assets were $14.0 billion at Dec. 31, 2024 and $10.1 billion at Dec. 31, 2023.

Trading liabilities include debt and equity instruments and derivative liabilities, primarily foreign exchange and interest rate contracts, not designated as hedging instruments. Trading liabilities were $4.9 billion at Dec. 31, 2024 and $6.2 billion at Dec. 31, 2023.

Under our fair value methodology for derivative contracts, an initial "risk-neutral" valuation is performed on each position assuming time discounting based on a AA credit curve. In addition, we consider credit risk in arriving at the fair value of our derivatives.

We reflect external credit ratings as well as observable credit default swap spreads for both ourselves and our counterparties when measuring the fair value of our derivative positions. Accordingly, the valuation of our derivative positions is sensitive to the current changes in our own credit spreads, as well as those of our counterparties.

At Dec. 31, 2024, our OTC derivative assets, including those in hedging relationships, of $3.7 billion included a credit valuation adjustment ("CVA") deduction of $11 million. Our OTC derivative liabilities, including those in hedging relationships, of $2.9 billion included a debit valuation adjustment ("DVA") of $7 million related to our own credit spread. Net of hedges, the CVA increased by less than $1 million and the DVA decreased by less than $1 million in 2024, which decreased other trading revenue by $1 million in 2024. During 2024, no realized loss was charged off against CVA reserves.

At Dec. 31, 2023, our OTC derivative assets, including those in hedging relationships, of $2.3 billion included a CVA deduction of $16 million. Our OTC derivative liabilities, including those in hedging relationships, of $3.8 billion included a DVA of $4 million related to our own credit spread. Net of hedges, the CVA increased by $1 million and the DVA increased by $1 million in 2023, which increased other trading revenue by less than $1 million in 2023. During 2023, no realized loss was charged off against CVA reserves.

The table below summarizes our exposure, net of collateral related to our derivative counterparties, as determined on an internal risk management basis. Significant changes in counterparty credit ratings could alter the level of credit risk faced by BNY.

Foreign exchange and other trading counterparty risk rating profile

	Dec. 31, 2024		Dec. 31, 2023	
(dollars in millions)	Exposure, net of collateral	Percentage of exposure, net of collateral	Exposure, net of collateral	Percentage of exposure, net of collateral
Investment grade	**$ 3,201**	**98%**	$ 2,062	95%
Non-investment grade	**76**	**2%**	103	5%
Total	**$ 3,277**	**100%**	$ 2,165	100%

Asset/liability management

Our diversified business activities include processing securities, accepting deposits, investing in securities, lending, raising money as needed to fund assets and other transactions. The market risks from these activities include interest rate risk and foreign exchange risk. Our primary market risk is exposure to movements in U.S. dollar interest rates and certain foreign currency interest rates. We actively manage interest rate sensitivity and use earnings simulation and discounted cash flow models to identify interest rate exposures.

An earnings simulation model is the primary tool used to assess changes in pre-tax net interest income between a baseline scenario and hypothetical interest rate scenarios. Interest rate sensitivity is quantified by calculating the change in pre-tax net interest income between the scenarios over a 12-month measurement period.

The baseline scenario incorporates the market's forward rate expectations and management's assumptions regarding client deposit rates, credit spreads, changes in the prepayment behavior of loans and securities and the impact of derivative financial instruments used for interest rate risk management purposes as of each respective quarter-end. These assumptions have been developed through a combination of historical analysis and future expected pricing behavior and are inherently uncertain. Actual results may differ materially from projected results due to timing, magnitude and frequency of interest rate changes, and changes in market conditions and management's strategies, among other factors. Client deposit levels and mix are key assumptions impacting net interest income in the baseline as well as the hypothetical interest rate scenarios. The earnings simulation model assumes static deposit levels and mix, and it also assumes that no management actions will be taken to mitigate the effects of interest rate changes. Typically, the baseline scenario uses the average deposit balances of the quarter.

In the table below, we use the earnings simulation model to assess the impact of various hypothetical interest rate scenarios compared to the baseline scenario. In each of the scenarios, all currencies' interest rates are instantaneously shifted higher or lower at the start of the forecast. Long-term interest rates are defined as all tenors equal to or greater than three years and short-term interest rates are defined as all tenors equal to or less than three months. Interim term points are interpolated where applicable. The impact of interest rate shifts may not be linear. The results of this earnings simulation should therefore not be extrapolated for more severe interest rate scenarios than those presented in the table below.

The following table shows net interest income sensitivity for BNY.

Estimated changes in net interest income *(in millions)*	**Dec. 31, 2024**	Sept. 30, 2024	Dec. 31, 2023
Up 100 bps rate shock vs. baseline	**$ 125**	$ 190	$ 254
Long-term up 100 bps, short-term unchanged	**88**	130	71
Short-term up 100 bps, long-term unchanged	**37**	60	183
Long-term down 100 bps, short-term unchanged	**(90)**	(139)	(73)
Short-term down 100 bps, long-term unchanged	**(104)**	(124)	(270)
Down 100 bps rate shock vs. baseline	**(194)**	(263)	(343)

At Dec. 31, 2024, the changes in the impacts of a 100 basis point upward or downward shift in rates on net interest income compared with Sept. 30, 2024 were primarily driven by an increase in fixed-rate assets and floating rate liabilities.

While the net interest income sensitivity scenario calculations assume static deposit balances to facilitate consistent period-over-period comparisons, net interest income is impacted by changes in deposit balances and interest rate trajectory. Noninterest-bearing deposits are particularly sensitive to changes in short-term rates.

To illustrate the net interest income sensitivity to noninterest-bearing deposits, we estimate that a $5 billion instantaneous reduction/increase in U.S. dollar-denominated noninterest-bearing deposits would reduce/increase the net interest income sensitivity results in the up 100 basis point rate shock scenario in the table above by approximately $260 million, and in the down 100 basis point rate shock scenario by approximately $160 million. The impact would be smaller if the reduction/increase was assumed to be a mixture of interest-bearing and noninterest-bearing deposits.

Additionally, during periods of low short-term interest rates, money market mutual fund fees and other similar fees are typically waived to protect investors from negative returns.

For a discussion of factors impacting the growth or contraction of deposits, see "Risk Factors – Capital and Liquidity Risk – Our business, financial condition and results of operations could be adversely affected if we do not effectively manage our liquidity."

We also project future cash flows from our assets and liabilities over a long-term horizon and then discount these cash flows using instantaneous parallel shocks to prevailing interest rates. This measure reflects the structural balance sheet interest rate sensitivity by discounting all future cash flows. The aggregation of these discounted cash flows is the economic value of equity ("EVE"). The following table shows how EVE would change in response to changes in interest rates.

Estimated changes in EVE	**Dec. 31, 2024**
Rate change:	
Up 200 bps vs. baseline	**(1.9)%**
Up 100 bps vs. baseline	**—%**
Down 100 bps vs. baseline	**(0.7)%**
Down 200 bps vs. baseline	**(2.4)%**

The asymmetrical accounting treatment of the impact of a change in interest rates on our balance sheet may create a situation in which an increase in interest rates can adversely affect reported equity and regulatory capital, even though economically there may be no impact on our economic capital position. For example, an increase in rates will result in a decline in the value of our available-for-sale securities portfolio. In this example, there is no corresponding change on our fixed liabilities, even though economically these liabilities are more valuable as rates rise.

These results do not reflect strategies that management could employ to limit the impact as interest rate expectations change.

To manage foreign exchange risk, we fund foreign currency-denominated assets with liability instruments denominated in the same currency. We utilize various foreign exchange contracts if a liability denominated in the same currency is not available or desired, and to minimize the earnings impact of translation gains or losses created by investments in foreign markets. We use forward foreign exchange contracts to protect the value of our net investment in foreign operations. At Dec. 31, 2024, net investments in foreign operations totaled $14 billion and were spread across 19 foreign currencies.

Overview

BNY plays a vital role in the global financial markets, and effective risk management is critical to our success. BNY operates under the Enterprise Risk Management Framework ("risk management framework") which is the foundation of our risk management approach. Risk management begins with a strong risk culture, and we reinforce our culture through principle-based policies including the Code of Conduct, which are grounded in our core values of passion for excellence, integrity, strength in diversity and courage to lead.

These values are critical to our success. They not only explain what we stand for and our shared culture, but also help us to think and act globally. They serve as a representation of the promises we have made to our clients, communities, shareholders and each other.

BNY's Risk Identification process is a core component of BNY's risk framework and is the foundation for understanding and managing risk. We utilize a common risk language, our Risk Taxonomy, to identify risks across our six primary risk categories: Operational Risk, Market Risk, Credit Risk, Liquidity Risk, Model Risk and Strategic Risk. Quarterly, the Company engages in a process designed to document identification and assessment of its risks, and to determine the set of risks material to BNY. Outputs from the Risk Identification process inform elements of our risk framework such as our Risk Appetite as well as Enterprise-wide Stress Testing and Capital Planning.

BNY's Risk Appetite expresses the level of risk we are willing to tolerate to meet our strategic objectives in a manner that balances risk and reward while considering our risk capacity and maintaining a balance sheet that remains resilient throughout market cycles. This guides BNY's risk-taking activities and informs key decision-making processes, including the manner by which we pursue our business strategy and the methods by which we manage risk. The Risk Appetite Statement and associated key risk metrics to monitor our risk profile are updated and approved by the Risk Committee of the Board at least annually.

BNY conducts Enterprise-wide Stress Testing as part of its Internal Capital Adequacy Assessment Process in accordance with CCAR, and as required by the enhanced prudential standards issued pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). Enterprise-wide Stress Testing considers the Company's lines of business, products, geographic areas and risk types incorporating the results from underlying models and projections for a range of stress scenarios. Additional details on Capital Planning and Stress Testing are included in "Supervision and Regulation."

Three Lines of Defense

BNY's three lines of defense model is a critical component of our risk management framework to clarify roles and responsibilities across the organization.

BNY's first line of defense includes senior management and business and corporate staff, excluding management and employees in Risk Management, Compliance and Internal Audit. Senior management in the first line is responsible for maintaining and implementing an effective risk management framework and appropriately managing risk consistent with its strategy and risk tolerance, including establishing clear responsibilities and accountability for the identification, measurement, management and control of risk.

Risk and Compliance is the independent second line of defense, reporting to the Chief Risk Officer. The Chief Risk Officer reports to both the Chief Executive Officer and the Risk Committee of the Company's Board of Directors. Risk and Compliance is responsible for establishing policies, expectations and guidance for managing risk at BNY while also independently monitoring, reviewing and challenging the first line. To facilitate the comprehensive global application of consistent standards for each risk or compliance topic, independent oversight is provided by Risk and Compliance across three perspectives – lines of business; legal entities; and enterprise-wide risk and compliance disciplines.

Internal Audit is BNY's third line of defense and serves as an independent, objective assurance function that reports directly to the Audit Committee of the Company's Board of Directors. It assists the Company in accomplishing its objectives by bringing a systematic, disciplined, risk-based approach to evaluate and improve the effectiveness of the Company's risk management, control and governance processes. The scope of Internal Audit's work includes the review and evaluation of the adequacy, effectiveness and sustainability of risk management procedures, internal control systems, information systems and governance processes.

Governance

BNY's management is responsible for execution of the Company's risk management framework and the governance structure that supports it, with oversight provided by BNY's Board of Directors through two key Board committees: the Risk Committee and the Audit Committee.

A summary of the governance structure is provided below.

BNY Board of Directors	
Risk Committee	Audit Committee
Senior Risk and Control Committee ("SRCC")	

- Anti-Money Laundering Oversight Committee
- Asset Liability Committee
- Balance Sheet Risk Committee
- Business Risk Committees
- Compliance and Ethics Oversight Committee
- Contract Management Committee
- Credit Portfolio Management Committees
- Enterprise Insider Threat Steering Committee
- Enterprise Risk Committee
- International Senior Risk and Control Committee
- Operational Risk Committee
- Product Approval and Review Committee
- Regulatory Oversight Committee
- Resolvability Steering Committee
- Technology Risk Committee

The Risk Committee is comprised entirely of independent directors and meets on a regular basis to review and assess the control processes with respect to the Company's inherent risks. It also reviews and assesses the Company's risk management policies and practices. The roles and responsibilities of the Risk Committee are described in more detail in its charter, a copy of which is available on our website, www.bny.com.

The Audit Committee is also comprised entirely of independent directors. The Audit Committee meets on a regular basis to perform an oversight review of the integrity of the financial statements and financial reporting process, compliance with legal and regulatory requirements, the Company's independent registered public accountant's qualifications and independence, and the performance of our internal audit function and the independent registered public accountant. The Audit Committee also reviews management's assessment of the adequacy of internal controls. The functions of the Audit Committee are described in more detail in its charter, a copy of which is available on our website, www.bny.com.

The SRCC is the most senior management level risk governance group at the Company and is responsible for oversight of all Risk Management, Compliance & Ethics activities and processes, including the Enterprise Risk Management Framework. The committee is chaired by the Chief Risk Officer and its members include the Chief Financial Officer, Chief Information Officer, Global Head of Engineering and General Counsel.

Subcommittees of the SRCC include:

- Anti-Money Laundering Oversight Committee: Oversees the systems and controls relating to all aspects of anti-money laundering and terrorist financing compliance (including Know Your Customer, suspicious activity reporting and sanctions) within the Company.
- Asset Liability Committee ("ALCO"): The senior management committee responsible for balance sheet oversight, including capital, liquidity and interest rate risk management.

- Balance Sheet Risk Committee (the "BSRC"): Reviews and receives escalation relating to balance sheet risk management frameworks associated with the assets, liabilities and capital of the Company. There is a focus on treasury risk topics, including matters related to liquidity risk, capital management, investment portfolio risk, and interest rate risk in the banking book.
- Business Risk Committees: Review and assess risk and control issues observed from existing business practices or activities or arising from new business practices or activities in our various lines of business and supporting operations.
- Compliance and Ethics Oversight Committee: Provides governance and oversight of the operations of the Compliance and Ethics function and the management and reporting of compliance risk-related issues, as well as Compliance and Ethics processes, policies, procedures and standards.
- Contract Management Committee: The governance and escalation body for the Company's Customer Contract Management policy and determines the client contract management policies and infrastructure for the Company.
- Credit Portfolio Management Committees: Seven Portfolio Management Committees, governed by the same charter and rules, manage, monitor and review each of Credit Risk's primary portfolio segments, including underwriting criteria, portfolio limits and composition, risk metrics, concentration, credit strategy, quality and exposure, stress test outcomes and wrong way risk.
- Enterprise Insider Threat Steering Committee: Provides enterprise-wide governance and oversight related to the Enterprise Insider Threat Program and related initiatives, as well as provides visibility to senior leadership related to the enterprise risk profile as it relates to insider threat risks.
- Enterprise Risk Committee: Oversees the Enterprise Risk Management Framework and related activities, including comprehensive discussions, deliberations and collaboration on material and emerging risks, limit setting, risk reporting, issue management, escalation and relevant decision-making.
- International Senior Risk and Control Committee: Provides risk management oversight, and acts as a point of convergence for the coordination, transparency and communication of material issues (live or emerging) across international entities.
- Operational Risk Committee: Oversees the operational risk profile and is responsible for monitoring and managing the appropriateness of the operational risk framework, policy design, adherence tracking and mitigating controls.
- Product Approval and Review Committee: Responsible for reviewing and approving proposals to introduce new and modify or retire existing products.
- Regulatory Oversight Committee: Provides strategic direction, oversight, challenge, and coordination across regulatory remediation initiatives.
- Resolvability Steering Committee: Oversees recovery and resolution planning, including but not limited to the project governance and oversight framework for all recovery and resolution planning requirements in relevant jurisdictions where BNY operates.
- Technology Risk Committee: Oversees the review and assessment of technology risk and control issues observed from existing business practices or activities, or arising from new business practices or activities in our various lines of business and supporting operations so as to assist the Company in managing and monitoring technology risk and control issues.

Risk Types Overview

The understanding, identification, measurement and mitigation of risk are essential elements for the successful management of BNY. We leverage a comprehensive risk taxonomy to support consistent language for defining and understanding risks. The primary categories in our risk taxonomy are:

Type of risk	Description
Operational	The risk of loss and/or regulatory, legal or reputational impact resulting from inadequate or failed internal processes, people and systems or from external events. Operational risk includes risks, such as compliance and financial crimes, technology risks and third party risks.
Market	The risk of financial loss or adverse change to the economic condition of BNY resulting from movements in market risk factors. Market risk factors include, but are not limited to, interest rates, credit spreads, foreign exchanges rates, commodity prices, and equity prices.
Credit	Credit risk denotes a broad category of adverse financial outcomes arising from credit events (default, bankruptcy, ratings migration) associated with obligor/counterparty not meeting (inability/unwilling) its contractual obligations. Credit risk is present in the majority of our assets, but primarily concentrated in the loan and securities books, as well as foreign exchange and off-balance sheet exposures such as lending commitments, letters of credit and securities lending indemnifications.
Liquidity	The risk arising from an inability to access funding, convert assets to cash quickly and efficiently, or to roll over or issue new debt, especially during periods of market stress. Liquidity risk includes the inability to access funding sources or manage fluctuations in funding levels. Liquidity risk can arise from cash flow mismatches, market constraints from the inability to convert assets to cash, the inability to raise cash in the markets, deposit run-off or contingent liquidity events.
Model	The potential loss arising from incorrectly designing/using a model or stress conditions that invalidate the assumptions of a model.
Strategic	The risk arising from the flawed design, decision or implementation of a business strategy, and potential disruption to business strategy by external factors and/or internal decisions. More specifically, the risks arising from adverse business decisions, poor implementation of business decisions or lack of responsiveness to changes in the financial industry and operating environment. Strategic risks may also arise from the acceptance of new businesses, the introduction or modification of products, strategic finance and risk management decisions, business process changes, complex transactions, acquisitions/divestitures/ joint ventures and major capital expenditures/investments.

Operational risk

In providing a comprehensive array of products and services, we are exposed to operational risk. Operational risk may result from, but is not limited to, errors related to transaction processing, failure of internal control systems and meeting compliance requirements, fraud by employees or persons outside BNY or business interruption due to system failures or other events. Operational risk may also include breaches of our technology and information systems resulting in unauthorized access to confidential information or from internal or external threats, such as cyberattacks. Operational risk also includes potential legal or regulatory actions that could arise. In the case of an operational event, we could suffer financial losses as well as reputational damage.

To address these risks, we maintain comprehensive policies and procedures and an internal control framework designed to provide a sound operational environment. These controls have been designed to manage operational risk at appropriate levels given our financial strength, the business environment and markets in which we operate, and the nature of our businesses, and considering factors such as competition and regulation.

The organizational framework for operational risk is based upon a strong risk culture that incorporates both governance and risk management activities comprising:

- Accountability of Businesses – Business managers are responsible for maintaining an effective system of internal controls commensurate with the business risk profiles and in accordance with BNY policies and procedures.
- Operational Risk Management is the independent second line function responsible for developing risk management policies and tools for assessing, measuring, monitoring and managing operational risk for BNY. The primary objectives of the Operational Risk Management Framework are to promote effective risk management, identify emerging risks and drive improvement in controls and to reduce operational risk. The Operational

Risk Management function includes independent operational risk oversight of all lines of business and functions, as well as specialist oversight of areas such as data risk, fraud risk, and third party risk.

- Technology risk is a subset of operational risk. Technology Risk Management is part of the second line of defense risk function providing oversight over technology risks in an effort to improve the likelihood that technology risks are identified, considered, and managed effectively against the stated risk appetite of the Company. Technology Risk Management is responsible for developing risk management policies and tools in an effort to identify and manage risks across cyber, infrastructure, applications, and resiliency and is responsible for confirming such policies and tools are well understood by the first line of defense. Further, Technology Risk Management oversees the risk reporting process through our governance and that the risks are managed within our defined risk appetite and risk management framework. Technology Risk Management uses its expertise in engaging in centralized activities and capabilities, and data-driven methodologies. Additionally, Technology Risk Management acts as a catalyst to drive the development of global technology policies, key controls, and methods to assess, measure, and monitor information and technology risk for BNY. The function also conducts integrated independent assessments on multiple cyber and digital initiatives within the Company and works to drive better understanding and a more accurate assessment of technology risks.
- Operational resiliency is a strategic priority for the Company. Foundational to our enterprise resiliency strategy is the Business Services Framework, governed by the first line Enterprise Resiliency Office, with second line oversight from Resiliency Risk Management. First line business management is accountable for maintaining effective resiliency capabilities under this framework, while Engineering and Operations are responsible for successful execution in coordination with the business. Elements of the resiliency strategy include the Business Services Framework, management of technology assets, Incident and Crisis Management, as well as Disaster Recovery Testing and Business Continuity capabilities. We are also focused on the resiliency capabilities of our third-party service providers. These processes are intended to position the Company to continuously deliver services to our clients through our ability to prevent, respond to and recover from business disruptions and threats.
- Compliance and financial crimes risk is also a subset of operational risk with second line Compliance and Ethics and Financial Crime Compliance teams. Compliance and financial crimes risk is defined as the risk of legal or regulatory sanctions, material financial loss, or a financial institution's reputational loss as a result of its failure to comply with laws, regulations, rules, related self-regulatory organizational standards, and codes of conduct or organizational standards of practice. We seek to comply with all obligations through a comprehensive, integrated Compliance and Ethics Management Framework.

Market risk

Our business activity tends to minimize outright our direct exposure to market risk, with such risk primarily limited to market volatility from trading activity in support of clients. More significant market risk is assumed in the form of interest rate and credit spread risk within the investment portfolio as a means for asset/liability management and net interest income generation, and also through the interest rate risk associated with BNY's balance sheet position which is sensitive to adverse movements in interest rates.

The Company has indirect market risk exposure associated with the change in the value of financial collateral underlying securities financing and derivatives positions. The Collateral Margin Review Committee reviews and approves the standards for collateral received or paid in respect of collateralized derivative agreements and securities financing transactions. The Markets business monitors its market risk through a variety of metrics including trading VaR and trading stressed VaR. Finally, the Risk Quantification Review Group reviews back-testing results for the Company's VaR model.

Credit risk

We extend direct credit in order to foster client relationships and as a method by which to generate interest income from the deposits that result from business activity. We extend and incur intraday credit exposure in order to facilitate our various processing activities.

To balance the value of our activities with the credit risk incurred in pursuing them, we set and monitor internal credit limits for activities that entail credit risk, most often on the size of the exposure and the quality of the counterparty. For credit exposures driven by changing market rates and prices, exposure measures include an add-on for such potential changes.

We manage credit risk exposure at a counterparty, industry, country and portfolio level. Credit risk exposure at the counterparty level is managed through our credit approval framework and involves four approval levels up to and including the Chief Risk Officer of the Company. The requisite approvals are based upon the size and relative risk of the aggregate exposure under consideration. The Credit Risk Group is responsible for approving the size, terms and maturity of all credit exposures proposed by the business, as well as the ongoing monitoring of the creditworthiness of the counterparty. In addition, it is responsible for challenging and approving the internal risk ratings on each exposure.

The calculation of a fundamental credit measure is based on a projection of a statistically probable credit loss, used to help determine the appropriate loan loss reserve and to measure customer profitability. Credit loss considers three basic components: the estimated size of the exposure whenever default might occur, the probability of default before maturity and the severity of the loss we would incur, commonly called "loss given default." Borrowers/counterparties are assigned ratings by the business and reviewed, challenged and approved by the Credit Portfolio Managers on an 18-grade scale, which translate to a scaled probability of default. Additionally, transactions are assigned loss given default ratings (on a 5-grade scale) that reflect the transactions' structures, including the effects of guarantees, collateral and relative seniority of position.

The Risk Modeling and Analytics Group is responsible for the calculation methodologies and the estimates of the inputs used in those methodologies for the determination of expected loss. These methodologies and input estimates are regularly evaluated for appropriateness and accuracy. As new techniques and data become available, the Risk Modeling and Analytics Group incorporates, where appropriate, those techniques or data.

BNY seeks to limit both on- and off-balance sheet credit risk through prudent underwriting and the use of capital only where risk-adjusted returns warrant. We seek to manage risk and improve our portfolio diversification through syndications, asset sales, credit enhancements and active collateralization and netting agreements. In addition, we have a separate Credit Risk Review Group, which is an independent group within Internal Audit, composed of experienced loan review officers who perform timely reviews of the loan files and credit ratings assigned to the loans.

Liquidity risk

Adequate liquidity is vital to BNY's ability to process payments as well as settle and clear transactions on behalf of clients. The Company's liquidity position can be affected by multiple factors, including funding mismatches, market conditions that impact our ability to convert our investment portfolio to cash, inability to issue debt or roll over funding, run-off of core deposits, and contingent liquidity events such as additional collateral posting requirements. Additionally, a downgrade in our credit rating cannot only lead to an outflow of deposits, which are a major source of our funding, but also increase our margin requirements on secured transactions and have a broader adverse impact on our overall brand that may further impair our ability to refinance maturing liabilities. Changes in economic conditions or exposure to other risks can also affect our liquidity.

The Board of Directors approves liquidity risk tolerance and is responsible for oversight of liquidity risk management of the Company. ALCO provides governance for the appropriate execution of Board-approved strategies, policies and procedures for managing liquidity. Senior management is responsible for executing those Board-approved strategies, policies and procedures for managing liquidity which ALCO oversees, as well as regularly reporting the liquidity position of the Company to the Board of Directors. The BSRC provides governance over independent risk oversight of liquidity risks, and oversees the establishment of control frameworks.

BNY actively manages and monitors its cash position, quality of the investment portfolio, intraday liquidity positions and potential liquidity needs in order to support the timely payment and settlement of obligations under both normal and stressed conditions. The Company uses a range of stress testing measures in connection with its efforts to maintain sufficient liquidity relative to risk appetite, including the Liquidity Coverage Ratio and Internal Liquidity Stress Testing.

Model risk

Models support our infrastructure for managing risk. Among their functions, models help us value securities, rate the quality of an obligor's credit, establish capital needs and monitor liquidity trends. Model failure might stem from faulty design, misuse, or environmental conditions that invalidate our assumptions. When this happens, the Company could be exposed to losses and other adverse consequences resulting from operational, market, credit and liquidity risk, as well as reputational harm. We aim to maintain a low-risk environment.

BNY's processes are designed to identify the conditions under which model risk incidents could occur and to establish controls that are designed to minimize or prevent loss in case of such an event. These processes include enforcement of standards for developing models, a process to validate new models, change controls for existing models, and a monitoring system to assess performance throughout a model's life.

When evaluating the degree of model risk, we consider multiple dimensions, including the quality of design, the robustness of controls, and indications of underperformance. Based on these measures, we create an overall metric that is intended to measure the health of the Company's modeling environment and set thresholds around it. This allows us to manage model risk, not only at the level of the individual model, but also in aggregate, across all the Company's businesses.

Strategic risk

Our strategy includes, but is not limited to, improving organic growth across our businesses, delivering quality solutions and evolving our operating model. Successful realization of our strategy requires that we provide expertise, insight and market-leading and technology-enabled products and services that drive economies of scale. Additionally, it requires attracting, developing and retaining highly talented people capable of executing our strategy, while safeguarding our financial profile. Failure to achieve these objectives may negatively impact both our growth strategy and our ability to service our existing clients, resulting in potential financial loss or litigation.

The markets in which we and our clients operate can evolve quickly. The introduction of new or disruptive technologies, geopolitical events and economic slowdowns are examples of factors that can create market uncertainty. Failure to anticipate or participate in transformational change within a given market or appropriately and promptly react to market conditions or client preferences could result in poor strategic positioning and potential negative financial impact. While it is essential that we continue to innovate and respond to changing markets and client demand, we strive to do so in a manner that does not adversely affect our financial position or compromise our fundamental business strategy.

Other Risk Considerations

In addition to the primary risk categories and sub-categories noted above, we consider risks that have significance and may manifest across multiple categories of risk. These risk considerations include data risk, fraud risk, third party risk, environmental, social and governance risk, reputational risk and geopolitical and country risk.

Data risk

We are exposed to data management risk when we fail to consistently manage and control our data assets through the entire lifecycle, including managing the production, confidentiality, quality, integrity, availability, and retention of data information.

Our risk management approach considers data risks within our business activities. Our Data Management Framework and supporting policies address management of data in key areas of data architecture, data governance, data quality management, data protection, data usage and ethics.

Emphasis is placed on data quality through data policies, regular quality assessments, and continuous improvement programs aimed at enhancing data integrity. The data architecture must be resilient and scalable to support the complex and evolving needs of the business. Efforts are made to strengthen the control environment in mitigating data management risks, aiming to achieve a higher data maturity level which enables the integration of innovative data solutions.

We also consider data risks in the execution of our business objectives and processes, including the development of new products and services, including AI applications. We remain committed to increasing the effectiveness of our data management practices which are designed to enable us to deliver products and services to our clients across the investment lifecycle.

Fraud risk

Fraud risk, the risk associated with an internal or external party deliberately performing an activity that relies on deception to achieve financial gain to the detriment of BNY or its clients or affiliated or related parties, is an inherent risk as part of our business. As part fraud prevention, we utilize tools which include culture and awareness campaigns, risk identification, risk assessment and risk mitigation which help us understand key fraud risks and controls and to educate employees about the expectations of identifying and reporting fraud attempts in order to protect assets of BNY and its clients.

Third party risk

Third party risk arises from an adverse impact on the Company due to reliance on third parties, including vendors, that provide goods or perform services or other benefits on our behalf or on behalf of our clients. As part of our third-party risk management framework, we identify, evaluate, measure, mitigate, monitor and re-assess risks in an attempt to reduce the likelihood of, and negative impacts from, operational failures throughout the lifecycle of an engagement with a third party.

Environmental, social and governance

We are exposed to environmental, social and governance risks factors that may lead to increased risk levels across one or more enterprise risk categories and may impact our risk management frameworks. For example, climate risks include physical risks from acute and chronic weather-related effects as well as transition risks from changes such as fiscal policy, legislation and regulation, technological development, and investor and customer preference changes. Social and governance risks could also impact our risk categories and risk management frameworks.

These effects may be wide-ranging with potential financial and operational resilience implications that could negatively impact the Company's strategic objectives and financial performance, reputation, business operations, ability to service clients and broad stakeholder relationships. Potential risk outcomes include, but are not limited to, adverse publicity, loss of business, financial loss, litigation, employee impacts, and other operational impacts. For example, climate-related impacts have been identified across our credit portfolios, strategic positioning, operational resiliency, and the pace and volume of regulatory change, with the potential for reputational impacts across these areas. Thus, these risk factors are considered when managing risk within appetite and limits across the enterprise risk categories.

Reputational risk

We are exposed to Reputational Risk as a result of negative stakeholder perception which may result from any decision, action, or inaction by BNY, any of our employees, or through other associated parties, such as clients, strategic partners, and third parties. Reputational impacts can result in risks to current or anticipated earnings, capital, liquidity, brand, and enterprise value, and can stem from any line of business, corporate function, legal entity, product, or service.

Geopolitical and country risk

We are exposed to the effects of geopolitical events, including tensions between nations and/or regions that may disrupt the stability of international relations, economies or markets. Geopolitical event risks include wars, trade or territorial disputes, sanctions, cybersecurity conflicts, nuclear advancements, the imposition of tariffs and retaliatory measures, shifts in alliances and government policy changes that impact global systems and stakeholders. These events can affect macroeconomic factors and financial markets which could result in losses to BNY or its clients. We are also exposed to the risks associated with maintaining commercial relationships within or connected to sovereign jurisdictions which, among other things, may not possess: an independent judiciary, a history of political pluralism, robust protections for private property (including intellectual property), traditions of free enterprise or the rule of law, or similar attributes. We monitor geopolitical events to assess and measure the potential impact on BNY.

BNY maintains a broad range of defenses aimed at remaining abreast of and responding to evolving cybersecurity threats impacting the Company, its operations, its clients, its third-party service providers and the broader financial services sector. During 2024, cybersecurity threats did not have a material effect on the Company's business strategy or operations. However, the financial services sector is prone to cybersecurity threats, and there can be no assurance that the Company will be able to successfully protect its information systems against material cybersecurity incidents in the future. Given the increasing prevalence and severity of cybersecurity incidents affecting financial institutions, other companies and governmental agencies as well as the evolving and adaptive nature of cybersecurity threats, cybersecurity risk management is a priority for the Company that impacts its allocation of resources, operations and risk management strategy. For a further discussion of the various risks related to cybersecurity threats and the potential impact on the Company's business strategy, results of operations or financial condition, see "Risk Factors – Operational Risk."

Risk management strategy and procedures

BNY has implemented policies and procedures designed to detect, prevent and respond to malicious and accidental disruptions to the delivery of critical technology services. BNY's cybersecurity risk management program is embedded in the Company's three lines of defense model.

As part of its first line of defense, the Company maintains a dedicated Information Security Division ("ISD"), led by the Chief Information Security Officer (the "CISO"), that is responsible for the day-to-day management of risks from cybersecurity threats. ISD's responsibilities include cybersecurity threat intelligence, incident response and other cybersecurity operations aimed at enabling the Company to identify, assess and manage existing and emerging cybersecurity threats. ISD monitors for potential threats and communicates relevant risks to the CISO and other members of executive management. Additionally, ISD maintains a cybersecurity incident response and reporting process pursuant to which cybersecurity incidents are classified according to their severity based upon an assessment of multiple factors. Certain cybersecurity incidents may activate enterprise-wide resiliency processes, which include, among other things, escalation through the management and Board committee structures described below. In addition, the Company maintains a preparedness program designed to reinforce cybersecurity risk management practices and compliance with the Company's policies and procedures. The preparedness program includes mandatory training for all employees, contractors and consultants, enhanced training for those in roles presenting higher risk, calibrated phishing email simulations, distribution of information security awareness materials and cybersecurity event simulation exercises. In addition, the Company leverages both internal and external assessments and engages with third-party assessors, consultants and auditors to evaluate and test its cybersecurity controls and provide guidance on potential improvements, including design and operating effectiveness. The Company has standing arrangements with third parties to assist the Company in identifying, assessing and managing cybersecurity threats, including in connection with risk assessments, penetration testing, legal advice and other aspects of the Company's cybersecurity risk management and incident response processes.

BNY has a defined third-party governance framework to help manage the risk posed to the Company by the use of third-party service providers. The Company evaluates the risk posed by third-party service engagements based on multiple factors. The Company has protocols that seek to mitigate cybersecurity risks associated with third-party service providers based on the risk level assigned to such third party, which may include mandatory contractual obligations or the implementation of additional controls by the Company and/or the applicable service provider.

ISD is subject to ongoing review and challenge from Technology Risk Management, which is a part of the independent second line of defense risk function. Technology Risk Management, together with the broader Risk & Compliance group, is responsible for and manages the Company's risk management framework and establishes guidance for ISD and management designed to help identify, assess and manage cybersecurity risk. For more information on how we monitor and manage our risk management framework, see "Risk Management – Overview."

Internal Audit serves as the third line of defense and provides an independent view on how effectively the organization as a whole manages cybersecurity risk.

For a further discussion of BNY's three lines of defense model, see "Risk Management – Three Lines of Defense."

Risk management oversight and governance

The Company's management is responsible for assessing and managing the Company's material risks from cybersecurity threats with oversight provided by the Parent's Board of Directors and the Board committees. The Risk Committee of the Board has primary responsibility for oversight of the overall operation of the Company's risk management framework, including policies and practices addressing cybersecurity risk, and is responsible for the oversight of the second line of defense with respect to its cybersecurity risk management responsibilities. The Technology Committee of the Board and the full Board regularly receive reports and briefings from management concerning cybersecurity matters, including any significant changes to the Company's cybersecurity program. The Company also has protocols for escalating cybersecurity threats and incidents to the Technology Committee of the Board and the full Board. In addition, the Audit Committee monitors and oversees the performance of Internal Audit, including with respect to its cybersecurity risk management responsibilities.

At the management level, the Technology Oversight Committee, which is the senior management committee responsible for the governance and oversight of the Company's significant technology projects and initiatives, reviews reports from management concerning ISD and is responsible for, among other things, escalating issues, including significant cybersecurity threats and incidents, to the Technology Committee of the Board. The Technology Oversight Committee is chaired by the Chief Information Officer (the "CIO") and its members include the CISO.

The Technology Risk Committee is the most senior governance committee primarily focused on cybersecurity and technology risk issues and is a part of the second line of defense risk function. It is responsible for, among other things, overseeing and reviewing emerging cybersecurity risks, significant cybersecurity incidents and remediation plans. The Technology Risk Committee receives reports from management and has protocols for escalating certain issues and risks to the SRCC and the Risk Committee of the Board of Directors. The Technology Risk Committee is chaired by the interim Chief Technology Risk Officer. Members include key leaders from the first line of defense, including the CISO.

BNY's CIO, CISO and interim Chief Technology Risk Officer each have extensive experience in assessing and managing risks from cybersecurity threats. The Company's CISO joined BNY in 2022 and previously served as head of information security at a Fortune 500 biopharmaceutical company and an information technology company, as well as the Global Chief Technology Officer at a large cybersecurity company. The Company's CIO joined BNY in September 2024 from a large multinational company, where she was responsible for overseeing information technology and cybersecurity operations. The Company's interim Chief Technology Risk Officer joined BNY in November 2024 and has previous experience as Global Head of Cyber, Technology and Information Security Risk Management at a global systemically important financial institution and over a decade of experience serving the U.S. intelligence community in a variety of cybersecurity-related positions.

For a further discussion of BNY's risk management governance structure, see "Risk Management – Governance."

Evolving Regulatory Environment

BNY engages in banking, investment advisory and other financial activities across the globe and is subject to extensive regulation in the jurisdictions in which it operates. Global supervisory authorities generally are charged with ensuring the safety and soundness of financial institutions, protecting the interests of customers, including depositors in banking entities and investors in mutual funds and other pooled vehicles, safeguarding the integrity of securities and other financial markets and promoting systemic resiliency and financial stability in the relevant country. They are not, however, generally charged with protecting the interests of our shareholders or non-depositor creditors. This discussion outlines the material elements of selected laws and regulations applicable to us. The impact of certain other laws and regulations, such as tax law, is discussed elsewhere in this Annual Report. Changes in these standards, or in their application, cannot be predicted, but may have a material effect on our businesses and results of operations.

The financial services industry has been the subject of enhanced regulatory oversight in the past 15 years globally, and this enhanced oversight environment is likely to continue in the future. Our businesses have been subject to a significant number of global reform measures. Moreover, political developments have resulted and may continue to result in legislative and regulatory changes to key aspects of laws and regulations affecting large banking and financial institutions and in laws or regulations relating to sustainability matters.

Enhanced Prudential Standards

The Federal Reserve has adopted rules ("SIFI Rules") to implement liquidity requirements, capital stress testing and overall risk management requirements affecting U.S. systemically important financial institutions ("SIFIs"). BNY must comply with enhanced liquidity and overall risk management standards, which include maintenance of a buffer of highly liquid assets based on projected funding needs for 30 days. The liquidity buffer is in addition to the rules regarding the LCR and NSFR, discussed below, and is described by the Federal Reserve as being "complementary" to these liquidity standards.

Capital Planning and Stress Testing

Payment of Dividends, Stock Repurchases and Other Capital Distributions

The Parent is a legal entity separate and distinct from its banks and other subsidiaries. Therefore, the Parent primarily relies on dividends, interest, distributions and other payments from its subsidiaries, including extensions of credit from the IHC, to meet its obligations, including its obligations with respect to its securities, and to provide funds for share repurchases and payment of common and preferred dividends to its stockholders, to the extent declared by the Board of Directors. Various federal and state laws and regulations limit the amount of dividends that may be paid to the Parent by our U.S. bank subsidiaries without regulatory consent. If, in the opinion of the applicable federal regulatory agency, a depository institution under its jurisdiction is engaged in or is about to engage in an unsafe or unsound practice (which, depending on the financial condition of the bank, could include the payment of dividends), the regulator may require, after notice and hearing, that the bank cease and desist from such practice. The Federal Reserve, the FDIC and the Office of the Comptroller of the Currency ("OCC," and together, the "Agencies") have indicated that the payment of dividends would constitute an unsafe and unsound practice if the payment would reduce a depository institution's capital to an inadequate level. Moreover, under the Federal Deposit Insurance Act, as amended (the "FDI Act"), an insured depository institution ("IDI") may not pay any dividends if the institution is undercapitalized or if the payment of the dividend would cause the institution to become undercapitalized. In addition, the Agencies have issued policy statements which provide that FDIC-insured depository institutions and their holding companies should generally pay dividends only out of their current operating earnings.

In general, the amount of dividends that may be paid by our U.S. banking subsidiaries, including to the Parent, is limited to the lesser of the amounts calculated under a "recent earnings" test and an "undivided profits" test. Under the recent earnings test, a dividend may not be paid if the total of all dividends declared and paid by the entity in any calendar year exceeds the current year's net income combined with the retained net income of the two preceding years, unless the entity obtains prior regulatory approval. Under the undivided profits test, a dividend may not be paid in excess of the entity's "undivided profits" (generally, accumulated net profits that have not been paid out as dividends or transferred to surplus). The ability of our U.S. bank subsidiaries to pay dividends to the Parent may also be affected by the capital adequacy standards applicable to those subsidiaries, which include minimum requirements and buffers.

There are also limitations specific to the IHC's ability to make distributions or extend credit to the Parent. The IHC is not permitted to pay dividends to the Parent if certain key capital or liquidity indicators are breached. Additionally, if our projected financial resources deteriorate so severely that resolution of the Parent becomes imminent, the committed lines of credit provided by the IHC to the Parent will automatically terminate, with all outstanding amounts becoming due.

BNY's capital distributions are subject to Federal Reserve oversight. The major component of that oversight is the Federal Reserve's CCAR, implementing its capital plan rule. That rule requires BNY to submit annually a capital plan to the Federal Reserve. We are also required to collect and report certain related data on a quarterly basis to allow the Federal Reserve to monitor progress against the annual capital plan.

On March 4, 2020, the Federal Reserve finalized an SCB rule, which made changes to the capital plan rule. The SCB rule eliminated the quantitative grounds for objection to a firm's CCAR capital plan and introduced an SCB that became part of quarterly capital requirements of CCAR firms on Oct. 1, 2020. The final rule replaced the 2.5% capital conservation buffer with an SCB requirement for capital ratios under the U.S. capital rules' standardized approach risk-weightings framework ("Standardized Approach") that is based on the largest projected decrease in a firm's CET1 ratio in the nine-quarter CCAR supervisory severely adverse scenario plus four quarters of planned common stock dividends as percentage of RWAs. The SCB is subject to a 2.5% floor. Each CCAR firm, including BNY, will be notified of its SCB by August 31, and the SCB will become effective on October 1 of the applicable calendar year. In June 2024, the Federal Reserve notified BNY that its preliminary SCB requirement would remain at 2.5%, which equals the regulatory floor. The SCB requirement was confirmed via an announcement from the Federal Reserve in August 2024. The SCB rule requires that firms reduce their planned capital actions if those distributions would cause the firm to fall below applicable buffer requirements based on the firm's own baseline scenario projections and allows firms to increase certain planned capital distributions if they are forecasted to be above capital buffer constraints. The SCB rule also eliminates the requirement for prior approval of capital distributions in excess of the distributions in a firm's capital plan, provided that such distributions do not cause a breach of the firm's capital ratios, including applicable buffers. In addition, the SCB rule provides that a firm must receive prior approval for any dividend, stock repurchase or other capital distribution, other than a capital distribution on a newly issued capital instrument, if a firm is required to resubmit its capital plan. In December 2024 and February 2025, the Federal Reserve indicated that it intends to propose changes to the stress test framework during 2025 and, for the 2025 stress test, take steps to reduce the volatility of results and to improve model transparency. See "MD&A – Results of Operations – Capital" for information about our share repurchase program.

To the extent a banking organization's capital buffer is less than 100% of its applicable buffer requirements, its distributions and discretionary bonus payments are constrained by the amount of the shortfall and its eligible retained income. Under the final rule, eligible retained income is defined as the greater of (i) a banking organization's net income for the four preceding calendar quarters, net of any distributions and associated tax effects not already reflected in net income, and (ii) the average of a banking organization's net income over the preceding four quarters. The Federal Reserve made corresponding changes to the definition of "eligible retained income" in the TLAC buffer requirements. For more information on TLAC, see "Total Loss-Absorbing Capacity" below.

Regulatory Stress-Testing Requirements

In addition to the CCAR stress testing requirements, Federal Reserve regulations also include complementary Dodd-Frank Act Stress Tests ("DFAST"). The CCAR and DFAST requirements substantially overlap, and the Federal Reserve implements them at the BHC level on a coordinated basis. Under these DFAST regulations, we are required to undergo an annual regulatory stress test conducted by the Federal Reserve. The BHC is required to conduct an annual company-run stress test. In addition, The Bank of New York Mellon is required to conduct an annual company-run stress test (although the bank is permitted to combine certain reporting and disclosure of its stress test results with the results of BNY). Results from our annual company-run stress tests are reported to the appropriate regulators and published.

Capital Requirements – Generally

As a BHC, we are subject to U.S. capital rules, administered by the Federal Reserve. Our bank subsidiaries are subject to similar capital requirements administered by the Federal Reserve in the case of The Bank of New York Mellon and by the OCC in the case of our national bank subsidiaries, BNY Mellon, National Association ("BNY Mellon, N.A.") and The Bank of New York Mellon Trust Company, National Association. These requirements are intended to ensure that banking organizations have adequate capital given the risk levels of their assets and off-balance sheet exposures.

Notwithstanding the detailed U.S. capital rules, the Agencies retain significant discretion to set higher capital requirements for categories of BHCs or banks or for an individual BHC or bank as warranted.

U.S. Capital Rules – Minimum Risk-Based Capital Ratios and Capital Buffers

The U.S. capital rules require banking organizations subject to the advanced approaches risk-weighting framework (the "Advanced Approaches"), such as BNY, to satisfy minimum risk-based capital ratios using both the Standardized Approach and the Advanced Approaches. See "MD&A – Results of Operations – Capital" for details on these requirements. In addition, for CCAR firms, these minimum ratios are supplemented by (i) the SCB (which, for BNY, is 2.5%, as noted), in the case of a firm's Standardized Approach capital ratios, and (ii) a capital conservation buffer of 2.5%, in the case of a firm's Advanced Approaches capital ratios. The capital conservation buffer can only be satisfied with CET1 capital.

When systemic vulnerabilities are meaningfully above normal, the SCB and capital conservation buffer may be expanded up to an additional 2.5% through the imposition of a countercyclical capital buffer. For internationally active banks such as BNY, the countercyclical capital buffer required threshold is a weighted average of the countercyclical capital buffers deployed in each of the jurisdictions in which the bank has private sector credit exposures. The Federal Reserve, in consultation with the OCC and FDIC, has affirmed the current countercyclical capital buffer level for U.S. exposures of 0% and noted that any future modifications to the buffer would generally be subject to a 12-month phase-in period. Any countercyclical capital buffer required threshold arising from exposures outside the U.S. will also generally be subject to a 12-month phase-in period.

For G-SIBs like BNY, the U.S. capital rules' buffers are also supplemented by a G-SIB risk-based capital surcharge, which is the higher of the surcharges calculated under two methods (referred to as "method 1" and "method 2"). Method 1 is based on the BCBS framework and considers a G-SIB's size, interconnectedness, cross-jurisdictional activity, substitutability and complexity. Method 2 uses similar inputs but is calibrated to result in significantly higher surcharges and replaces substitutability with a measure of reliance on short-term wholesale funding. The G-SIB surcharge applicable to BNY for 2024 was 1.5%.

U.S. Capital Rules – Deductions from and Adjustments to Capital Elements

The U.S. capital rules provide for a number of deductions from and adjustments to CET1 capital. These include, for example, providing that unrealized gains and losses on all available-for-sale debt securities may not be filtered out for regulatory capital purposes, and the requirement that deferred tax assets dependent upon future taxable income and significant investments in non-consolidated financial entities be deducted from CET1 to the extent that any one such category exceeds 10% of CET1 or all such categories in the aggregate exceed 15% of CET1.

In addition, the Agencies adopted a final rule that generally requires certain Advanced Approaches banking organizations, including BNY, to deduct from Tier 2 capital, subject to certain exceptions, direct, indirect and synthetic exposures to covered debt instruments, including TLAC instruments.

U.S. Capital Rules – Advanced Approaches Risk-Based Capital Rules

Under the U.S. capital rules' Advanced Approaches framework, credit risk-weightings are generally based on risk-sensitive approaches that largely rely on the use of internal credit models and parameters, whereas under the Standardized Approach credit risk-weightings are generally based on supervisory risk-weightings which vary primarily by counterparty type and asset class. BNY is required to comply with Advanced Approaches reporting and public disclosures. For purposes of determining whether we meet minimum risk-based capital requirements under the U.S. capital rules, our CET1 ratio, Tier 1 capital ratio, and total capital ratio is the lower of each ratio as calculated under the Standardized Approach and under the Advanced Approaches framework (based on currently applicable buffers).

U.S. Capital Rules – Standardized Approach

The Standardized Approach calculates risk-weighted assets in the denominator of capital ratios using a broad array of risk-weighting categories that are intended to be risk sensitive. The risk-weights for the Standardized Approach generally range from 0% to 1,250%. Higher risk-weights under the Standardized Approach apply to a variety of exposures, including certain securitization exposures, equity exposures, claims on securities firms and exposures to counterparties on OTC derivatives.

Securities finance transactions, including transactions in which we serve as agent and provide securities replacement indemnification to a securities lender, are treated as repo-style transactions under the U.S. capital rules. The rules do not permit a banking organization to use a simple VaR approach to calculate exposure amounts for repo-style transactions or to use internal models to calculate the exposure amount for the counterparty credit exposure for repo-style transactions under the Standardized Approach (although these methodologies are allowed in the Advanced Approaches). Under the Standardized Approach, a banking organization may use a collateral haircut approach to recognize the credit risk mitigation benefits of financial collateral that secures a repo-style transaction, including an agented securities lending transaction, among other transactions. To apply the collateral haircut approach, a banking organization must determine the exposure amount and the relevant risk weight for the counterparty and collateral posted.

U.S. Capital Rules – Standardized Approach for Measuring Counterparty Credit Risk Exposures for Derivatives

The Agencies jointly issued the Standardized Approach for Counterparty Credit Risk ("SA-CCR") in January 2020 amending the U.S. capital rules to implement a modified approach for calculating the exposure amount for derivative contracts. The final rule also incorporates SA-CCR into the determination of exposure amount of derivatives for total leverage exposure under the SLR and the cleared transaction framework under the U.S. capital rules. SA-CCR was implemented in the first quarter of 2022.

U.S. Capital Rules – Leverage Ratios

The U.S. capital rules require a minimum 4% leverage ratio for all banking organizations, as well as a 3% Basel III-based SLR for Advanced Approaches banking organizations, including BNY. Unlike the Tier 1 leverage ratio, the SLR includes certain off-balance sheet exposures in the denominator, including the potential future credit exposure of derivative contracts and 10% of the notional amount of unconditionally cancelable commitments.

The U.S. G-SIBs (including BNY) are subject to an enhanced SLR, which requires us to maintain an SLR of greater than 5% (composed of the current minimum requirement of 3% plus a greater than 2% buffer) and requires bank subsidiaries of those BHCs to maintain at least a 6% SLR in order to qualify as "well capitalized" under the prompt corrective action regulations discussed below.

The Agencies adopted a final rule to exclude certain central bank deposits from the total leverage exposure, the SLR denominator, and related TLAC and LTD measures of custody banks, including BNY and The Bank of New York Mellon. Under the final rule, qualifying central banks include a Federal Reserve Bank, the European Central Bank or a central bank of a member country of the Organisation for Economic Co-operation and Development ("OECD"), provided that an exposure to the OECD member country receives a 0% risk-weighting and the sovereign debt of such country is not, and has not been, in default in the past five years. The central bank deposit exclusion from the SLR denominator equals the average daily balance over the applicable quarter of all deposits placed with a qualifying central bank up to an amount equal to the on-balance sheet deposit liabilities that are linked to fiduciary or custodial and safekeeping accounts.

BCBS Revisions to Components of Basel III and U.S. Implementation

In December 2017, the BCBS released revisions to Basel III intended to reduce variability of RWA and improve the comparability of banks' risk-based capital ratios. In January 2019, the BCBS released revised minimum capital requirements for market risk.

On July 27, 2023, the Federal Reserve, the OCC, and the FDIC proposed for comment substantial revisions to the capital requirements applicable to large banking organizations and to banking organizations with significant trading activity, including BNY, to implement the international capital standards issued by the BCBS. Large banking organizations would be required to calculate risk-based capital ratios under both a new Expanded Risk-based Approach (replacing the current Advanced Approaches framework) and the current Standardized Approach.

The proposal would replace existing models-based Advanced Approaches for calculating RWA for credit risk and operational risk with new standardized approaches that are part of the Expanded Risk-based Approach. The proposed Expanded Risk-based Approach also includes a revised approach to market risk.

The proposal would also indirectly impact several other regulations, including the requirements for total loss-absorbing capacity, long-term debt requirements, and the surcharge for G-SIBs. The Federal Reserve has indicated that it expects to work with the OCC and FDIC in 2025 on a revised proposal.

Risk-Based Capital Surcharges for Global Systemically Important Bank Holding Companies

On July 27, 2023, the Federal Reserve proposed amendments to its rule regarding risk-based capital surcharges for G-SIBs, including BNY, to revise certain systemic indicators and measures for G-SIB surcharges. We are assessing the potential impact of the proposal.

Total Loss-Absorbing Capacity

The Federal Reserve imposes external TLAC and related requirements for U.S. G-SIBs, including BNY, at the top-tier holding company.

U.S. G-SIBs are required to maintain a minimum eligible external TLAC equal to the greater of (i) 18% of RWAs plus a buffer (to be met using only CET1) equal to the sum of 2.5% of RWAs, the G-SIB surcharge calculated under method 1 and any applicable countercyclical buffer; and (ii) 7.5% of their total leverage exposure (the denominator of the SLR) plus a buffer (to be met using only Tier 1 Capital) equal to 2%.

U.S. G-SIBs are also required to maintain minimum external eligible LTD equal to the greater of (i) 6% of RWAs plus the G-SIB surcharge (calculated using the greater of method 1 and method 2), and (ii) 4.5% of total leverage exposure. In order to be deemed eligible LTD, debt instruments must, among other requirements, be unsecured, not be structured notes, and have a maturity of at least one year from the date of issuance. In addition, LTD issued on or after Dec. 31, 2016 must (i) not have acceleration rights, other than in the event of non-payment or the bankruptcy or insolvency of the issuer and (ii) be governed by U.S. law. However, debt issued by a U.S. G-SIB prior to Dec. 31, 2016 is permanently grandfathered to the extent these securities would be ineligible only due to containing impermissible acceleration rights or being governed by foreign law.

Further, the top-tier holding companies of U.S. G-SIBs are not permitted to issue certain guarantees of subsidiary liabilities, incur liabilities guaranteed by subsidiaries, issue short-term debt to third parties, or enter into derivatives and certain other financial contracts with external counterparties. Certain liabilities are capped at 5% of the value of the U.S. G-SIB's eligible external TLAC instruments.

On Aug. 29, 2023, the Federal Reserve proposed for comment amendments to the TLAC rule applicable to U.S. G-SIBs, including BNY. The proposal would: (i) require a $400,000 minimum denomination for newly issued long-term debt of G-SIBs used to satisfy TLAC and LTD requirements; (ii) allow only 50% of the amount of eligible long-term debt with a maturity of one year or more but less than two years to count towards TLAC requirements; and (iii) exempt certain agreements from the scope of the TLAC rule's clean holding company prohibitions with respect to qualified financial contracts with third parties. We are evaluating the potential impact of the proposed rule.

Certain foreign jurisdictions impose internal TLAC requirements on the foreign subsidiaries of U.S. G-SIBs. The European Union's Capital Requirements Regulation 2 ("EU CRR2") requires EU material subsidiaries of non-EU G-SIBs (including BNY) to maintain a minimum level of internal loss absorbing capacity; this requirement will continue under the EU's proposed Capital Requirements Regulation 3 ("EU CRR3"). The BNY SA/NV is considered an EU material subsidiary for purposes of this regulation and is, therefore, subject to an internal TLAC requirement.

Prompt Corrective Action Regarding IDI Capital Requirements

The FDI Act, as amended by the Federal Deposit Insurance Corporation Improvement Act of 1991 ("FDICIA"), requires the Agencies to take "prompt corrective action" in respect of IDIs that do not meet specified capital requirements. FDICIA establishes five capital categories for FDIC-insured banks: "well capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized," and "critically undercapitalized." The FDI Act imposes progressively more restrictive constraints on operations, management and capital distributions the less capital the institution holds. While these regulations apply only to banks, such as The Bank of New York Mellon and BNY Mellon, N.A., the Federal Reserve is authorized to take appropriate action against the parent BHC, such as the Parent, based on the undercapitalized status of any banking subsidiary. In certain circumstances, the Parent would be required to guarantee the performance of the capital restoration plan if one of our banking subsidiaries were undercapitalized.

The Agencies' prompt corrective action framework contains "well capitalized" thresholds for IDIs. Under these rules, an IDI must have the capital ratios as detailed in the "Capital" disclosure in order to satisfy the quantitative ratio requirements to be deemed "well capitalized."

Liquidity Standards – Basel III and U.S. Rules

BNY is subject to the U.S. LCR Rule, which is designed to ensure that BNY and certain domestic bank subsidiaries maintain an adequate level of unencumbered HQLA equal to their expected net cash outflow for a 30-day time horizon under an acute liquidity stress scenario. As of Dec. 31, 2024, the Parent and its domestic bank subsidiaries were in compliance with applicable LCR requirements.

The Agencies have issued a final NSFR rule that implements a quantitative long-term liquidity requirement applicable to large and internationally active banking organizations, including BNY. Under the final rule, BNY's NSFR is expressed as a ratio of its available stable funding to its required stable funding amount, and BNY is required to maintain an NSFR of 1.0. As of Dec. 31, 2024, BNY was in compliance with the NSFR rule.

Separately, as noted above, the SIFI Rules impose additional liquidity requirements for BHCs with $100 billion or more in total assets, including BNY, including an independent review of liquidity risk management; establishment of cash flow projections; a contingency funding plan and liquidity risk limits; liquidity stress testing under multiple stress scenarios and time horizons tailored to the specific products and profile of the company; and maintenance of a liquidity buffer of unencumbered highly liquid assets sufficient to meet projected net cash outflows over 30 days under a range of stress scenarios.

Volcker Rule

The provisions of the Dodd-Frank Act commonly referred to as the "Volcker Rule" prohibit "banking entities," including BNY, from engaging in proprietary trading and limit our sponsorship of, and investments in, private equity and hedge funds ("covered funds"), including our ability to own or provide seed capital to covered funds. In addition, the Volcker Rule restricts us from engaging in certain transactions with covered funds (including, without limitation, certain U.S. funds for which BNY acts as both sponsor/manager and custodian). These restrictions are subject to certain exceptions.

The restrictions concerning proprietary trading contain limited exceptions for, among other things, bona fide liquidity risk management and risk-mitigating hedging activities, as well as certain classes of exempted instruments, including government securities. Ownership interests in covered funds are generally limited to 3% of the total number or value of the outstanding ownership interests of any individual fund at any time more than one year after the date of its establishment. The aggregate value of all such ownership interests in covered funds is limited to 3% of the banking organization's Tier 1 capital, and such interests are subject to a deduction from its Tier 1 capital. The 2019 amendments to the Volcker Rule (discussed below) remove the requirements that ownership interests in third-party covered funds held under the underwriting and market-making exemptions be subject to the aggregate limit and capital deduction but preserve these requirements for ownership interests in covered funds sponsored or organized by BNY.

The Volcker Rule regulations also require us to develop and maintain a compliance program. In 2019, the Agencies, the Commodity Futures Trading Commission ("CFTC") and the SEC modified the regulations implementing the Volcker Rule. The most impactful aspects of the revisions with respect to BNY concern the compliance requirements applicable to institutions with moderate exposure to trading assets and trading liabilities, which are institutions with less than $20 billion and more than $1 billion of trading assets and trading liabilities. Specifically, among other revisions, such "moderate trading" banks are no longer required to file an annual CEO attestation and quantitative metrics. Furthermore, the comprehensive six-pillar compliance program associated with the Volcker Rule no longer applies to "moderate trading" banks; rather, such banks are permitted to tailor their compliance programs to the size and nature of their activities. BNY is treated as a "moderate trading" bank under the revised Volcker Rule. The final revisions also clarified and amended certain definitions, requirements and exemptions.

On June 25, 2020, a second set of amendments to the Volcker Rule was released, which is principally focused on the restrictions on banking entities' investments in, sponsorship of, and other relationships with covered funds. Generally, the changes establish new exclusions from the covered fund definition for certain types of investment vehicles, modify the eligibility criteria for certain existing exclusions, and clarify and modify other provisions with respect to investment in, sponsoring of and transactions with covered funds.

Derivatives Trading and Margining

Title VII of the Dodd-Frank Act imposes a comprehensive regulatory structure on the OTC derivatives markets in which BNY operates, including requirements relating to the business conduct of dealers, trade reporting, margin and recordkeeping. Title VII also requires persons acting as swap dealers, including The Bank of New York Mellon, to register with the CFTC and become subject to the CFTC's supervisory, examination and enforcement powers. Additionally, Title VII requires persons acting as security-based swap dealers to register with the SEC. The Bank of New York Mellon is registered as a security-based swap dealer.

In addition, because BNY is subject to supervision by the Federal Reserve, we must comply with the U.S. prudential margin rules for variation and initial margin with respect to its OTC swap transactions. Furthermore, various BNY subsidiaries are also subject to OTC derivatives regulation by local authorities in Europe and Asia.

Single Counterparty Credit Limits

The Federal Reserve adopted a rule in June 2018 imposing single-counterparty credit limits ("SCCLs") on, among other organizations, domestic BHCs, including BNY, that are G-SIBs. The SCCLs apply to the credit exposure of a covered firm and all of its subsidiaries to a single counterparty and all of its affiliates and connected entities.

The rule established two primary credit exposure limits: (i) a covered domestic BHC may not have aggregate net credit exposure to any unaffiliated counterparty in excess of 25% of its Tier 1 capital; and (ii) a U.S. G-SIB is further prohibited from having aggregate net credit exposure in excess of 15% of its Tier 1 capital to any "major counterparty" (defined as a G-SIB or a non-bank SIFI). The rule provides a cure period of 90 days (or, with prior notice from the Federal Reserve, a longer or shorter period) for breaches of the SCCL rule. During the cure period, a company may not engage in additional credit transactions with the particular counterparty unless the covered company has obtained a temporary credit exposure limit increase from the Federal Reserve.

Recovery and Resolution Planning

As required by the Dodd-Frank Act, large domestic financial institutions, such as BNY, are required to submit periodically to the Federal Reserve and the FDIC a plan – referred to as the 165(d) resolution plan – for their rapid and orderly resolution in the event of material financial distress or failure. In addition, certain large IDIs, such as The Bank of New York Mellon, are required to submit periodically to the FDIC a separate plan for resolution in the event of the institution's failure. The public portions of these resolution plans are available on the Federal Reserve's and FDIC's websites. BNY also maintains a comprehensive recovery plan, which describes actions it could take to seek to avoid failure if faced with financial stress.

On June 20, 2024, the FDIC issued a final rule amending its resolution planning rule applicable to covered IDIs. The amended rule: (i) adjusts the frequency of resolution plan submissions by IDIs affiliated with a U.S. G-SIB, including The Bank of New York Mellon, from a 3-year cycle to a 2-year cycle; (ii) expands resolution plan content requirements; (iii) requires IDIs to provide the FDIC with notice within 45 days of certain "extraordinary events"; and (iv) revises certain definitions to be more consistent with similar concepts and approaches under the Dodd-Frank Act. The final rule became effective on Oct. 1, 2024.

In 2019, the Federal Reserve and FDIC issued a final rule modifying certain requirements for the 165(d) resolution plan. The final rule requires U.S. G-SIBs, such as BNY, to file alternating full and more limited, targeted resolution plans every two years. The final rule does not materially modify the components or informational requirements of full resolution plans. BNY submitted a full resolution plan dated July 1, 2023. The Federal Reserve and FDIC found no deficiencies or shortcomings in BNY's 2023 resolution plan submission.

If the Federal Reserve and FDIC jointly determine that our 165(d) resolution plan is not credible and we fail to address the deficiencies in a timely manner, the FDIC and the Federal Reserve may jointly impose more stringent capital, leverage or liquidity requirements or restrictions on our growth, activities or operations. If we continue to fail to adequately remedy any deficiencies, we could be required to divest assets or operations that the regulators determine necessary to facilitate our orderly resolution.

The resolution strategy set out in our 165(d) resolution plan is a single point of entry strategy, whereby certain key operating subsidiaries would be provided with sufficient capital and liquidity to operate in the event of material financial stress or failure, and only our parent holding company would file for bankruptcy. In connection with our single point of entry resolution strategy, we have established the IHC to facilitate the provision of capital and liquidity resources to certain key subsidiaries in the event of material financial distress or failure. In addition, we have a binding support agreement in place that requires the IHC to provide that support. The support agreement required the Parent to transfer its intercompany loans and most of its cash to the IHC and requires the Parent to continue to transfer cash and other liquid financial assets to the IHC on an ongoing basis.

BNY and the other U.S. G-SIBs are also subject to heightened supervisory expectations for recovery and resolution preparedness under Federal Reserve rules and guidance. The Federal Reserve incorporates reviews of our capabilities in respect of recovery and resolution preparedness as part of its ongoing supervision of BNY.

In the European Economic Area ("EEA") and in the UK, the Bank Recovery and Resolution Directive, as amended by the Bank Resolution and Recovery Directive II ("BRRD"), provides the legal framework for recovery and resolution planning, including a set of harmonized powers to resolve or implement recovery of in-scope institutions, such as EEA and UK subsidiaries of third country banks. The UK transposed the BRRD into local legislation and regulation before the UK exit from the EU on Dec. 31, 2020. Existing EU law that was in force and applicable in the UK on Dec. 31, 2020, continues to be effective under the UK regulatory framework as "retained EU law."

The BRRD, as implemented in local law, gives relevant EEA and UK regulators various powers, including: (i) powers to intervene pre-resolution to require an institution to take remedial steps to avoid the need for resolution; (ii) resolution tools and powers to facilitate the resolution of failing entities, such as the power to "bail-in" the debt of an institution (including certain deposit obligations); (iii) the power to require a firm to change its structure to remove impediments to resolvability; and (iv) powers to require in-scope institutions to prepare recovery plans. Under the BRRD, resolution authorities (rather than the institutions themselves) are responsible for drawing up resolution plans based on information provided by relevant institutions.

Under applicable rules, in-scope institutions are required to maintain a minimum requirement for their own funds (defined as regulatory capital) and eligible liabilities ("MREL") that can be written down or bailed-in to absorb losses. MREL is set on a case-by-case basis for each institution and is applicable to certain EU and UK domiciled credit institutions and certain other firms subject to recovery and resolution planning BNY SA/NV is subject to MREL.

Rules on Resolution Stays for Qualified Financial Contracts

The Agencies' regulations require U.S. G-SIBs (and their subsidiaries and controlled entities) and the U.S. operations of foreign G-SIBs to amend their covered qualified financial contracts ("QFCs"), thereby facilitating the application of U.S. special resolution regimes as necessary.

The regulations allow these G-SIBs to comply by amending covered QFCs (with the consent of relevant counterparties) using the International Swaps and Derivatives Association ("ISDA") 2018 U.S. Resolution Stay Protocol, ISDA 2015 Universal Stay Protocol or by executing appropriate bilateral amendments to the covered QFCs. BNY entities which have been confirmed to engage in covered QFC activities have adhered to the Protocol and, where necessary, have executed bilateral amendments to cover QFCs.

Insolvency of an Insured Depository Institution or a Bank Holding Company; Orderly Liquidation Authority

Under the FDI Act, if the FDIC is appointed as conservator or receiver for an IDI, such as The Bank of New York Mellon or BNY Mellon, N.A., upon its insolvency or in certain other circumstances, the FDIC has the power to:

- Transfer any of the depository institution's assets and liabilities to a new obligor, including a newly formed "bridge" bank without the approval of the depository institution's creditors;
- Enforce the terms of the depository institution's contracts pursuant to their terms without regard to any provisions triggered by the appointment of the FDIC in that capacity; or
- Repudiate or disaffirm any contract or lease to which the depository institution is a party, the performance of which is determined by the FDIC to be burdensome and the disaffirmance or repudiation of which is determined by the FDIC to promote the orderly administration of the depository institution.

In addition, under federal law, the claims of holders of domestic deposit liabilities and certain claims for administrative expenses against an IDI would be afforded a priority over other general unsecured claims, including claims of debt holders, in the "liquidation or other resolution" of such an institution by any receiver. As a result, regardless of whether the FDIC repudiates any debt obligations of The Bank of New York Mellon or BNY Mellon, N.A., the debt holders would be treated differently from, and could receive, if anything, substantially less than, the depositors of the bank.

The Dodd-Frank Act created a resolution regime (known as the "orderly liquidation authority") applicable to domestic systemically important financial companies that are not IDIs, including BHCs, such as the Parent, and their non-bank affiliates. Under the orderly liquidation authority, the FDIC may be appointed as receiver for the systemically important institution, and its failed non-bank subsidiaries, for purposes of liquidating the entity if, among other conditions, it is determined that the institution is in default or in danger of default and the failure poses a risk to the stability of the U.S. financial system.

In liquidations of failing financial institutions where the Dodd-Frank orderly liquidation authority applies, the orderly liquidation authority supplants the U.S. Bankruptcy Code and sets forth the powers of the FDIC as receiver and the rights and obligations of creditors and other parties who have dealt with the financial institution. The powers of the FDIC as receiver under the orderly liquidation authority were based on the powers of the FDIC as receiver for IDIs under the FDI Act. However, the provisions governing the rights of creditors under the orderly liquidation authority were modified in certain respects to reduce disparities with the treatment of creditors' claims under the U.S. Bankruptcy Code.

Nonetheless, substantial differences in the rights of creditors exist between these two regimes, including the right of the FDIC to disregard the strict priority of creditor claims in some circumstances, the use of an administrative claims procedure to determine creditors' claims (as opposed to the judicial procedure utilized in bankruptcy proceedings), and the right of the FDIC to transfer assets or liabilities of the institution to a third party or a "bridge" entity.

Depositor Preference in Bank Resolutions

The FDIC applies a priority regime ("depositor preference") for the distribution of receivership assets of a failed bank. Under the depositor preference regime, when a U.S. bank fails, the claims of a receiver of an IDI for administrative expenses and claims of holders of U.S. deposit liabilities (including foreign deposits that are payable in the U.S. as well as in a foreign branch of the depository institution) are afforded priority over claims of other unsecured creditors of the institution, including depositors in non-U.S. branches. As a result, such depositors could receive, if anything, substantially less than the depositors in U.S. offices of the depository institution.

FDIC Deposit Insurance

Our U.S. banking subsidiaries, including The Bank of New York Mellon and BNY Mellon, N.A., accept deposits, and those deposits have the benefit of FDIC insurance up to the applicable limit. The current limit for FDIC insurance for deposit accounts is $250,000 per depositor at each insured bank. Under the FDI Act, insurance of deposits may be terminated by the FDIC upon a finding that the IDI has engaged in unsafe and unsound practices, is in an unsafe or unsound condition to continue operations or has violated any applicable law, regulation, rule, order, condition imposed by the FDIC, or written agreement between the IDI and the FDIC.

The FDIC's Deposit Insurance Fund ("DIF") is funded by assessments on IDIs. The FDIC assesses DIF premiums based on an IDI's average consolidated total assets, less the average tangible equity of the IDI during the assessment period. For larger institutions, such as The Bank of New York Mellon and BNY Mellon, N.A., assessments are determined based on CAMELS ratings and forward-looking financial measures to calculate the assessment rate, which is subject to adjustments by the FDIC, and the assessment base.

Under the FDIC's regulations, a custody bank, including The Bank of New York Mellon and BNY Mellon, N.A., may deduct from its assessment base 100% of cash and balances due from depository institutions, securities, federal funds sold, and securities purchased under agreement to resell with a Standardized Approach risk-weight of 0% and may deduct 50% of such asset types with a Standardized Approach risk-weight of greater than 0% and up to and including 20%. This assessment base deduction may not exceed the average value of deposits that are classified as transaction accounts and are identified by the bank as being directly linked to a fiduciary or custodial and safekeeping account.

Following the bank failures in March 2023, the FDIC announced that, as required by the FDI Act, any losses to the DIF to support uninsured depositors would be recovered by a special assessment prescribed through regulation. Under the FDI Act, the FDIC has discretion with respect to the design and timeframe for any special assessment, which may be on IDIs, depository institution holding companies (with the concurrence of the Treasury Secretary), or both, as the FDIC determines to be appropriate. The FDIC may consider the types of entities that benefit from the action taken, economic conditions, the effects on the industry, and such other factors as the FDIC deems appropriate.

On Nov. 16, 2023, the FDIC adopted a final rule, effective April 1, 2024, implementing a special assessment on IDIs to recover losses to the DIF associated with the 2023 closures of Silicon Valley Bank and Signature Bank. Under the rule, the FDIC will collect from each IDI a special assessment, based on the IDI's estimated uninsured deposits (excluding the first $5 billion of estimated uninsured deposits applied at the banking organization level) as of Dec. 31, 2022, during an initial special assessment period of eight quarters that began in the first quarter of 2024. The special assessment is subject to periodic adjustment by the FDIC, including early cessation, extension or a potential one-time final special assessment for any shortfall to the DIF. We have recorded accruals and related adjustments for the estimate of the special assessment to noninterest expense starting in the fourth quarter of 2023 and throughout 2024.

BHC as Source of Strength and Liability of Commonly Controlled Depository Institutions

The Federal Reserve requires BHCs to act as a source of financial and managerial strength to their bank subsidiaries. BNY has a statutory obligation to commit resources to its bank subsidiaries in times of financial distress. In addition, any loans by BNY to its bank subsidiaries would be subordinate in right of payment to depositors and to certain other indebtedness of its banks. In the event of a BHC's reorganization under the U.S. Bankruptcy Code, any commitment by the BHC to a federal bank regulator to maintain the capital of a subsidiary IDI will be deemed assumed by the bankruptcy trustee and entitled to priority of payment of the unsecured claim resulting from such commitment. Further, in certain circumstances, BNY's IDI subsidiaries could be held liable for losses incurred by another BNY IDI subsidiary. In the event of impairment of the capital stock of one of BNY's national bank subsidiaries or The Bank of New York Mellon, BNY, as the banks' stockholder, could be required to pay such deficiency.

Bank Transactions with Non-bank Affiliates

Transactions between BNY's banking subsidiaries, on the one hand, and the Parent and its non-bank subsidiaries and affiliates, on the other, are subject to certain restrictions, limitations and requirements, which include limits on the types and amounts of transactions (including extensions of credit and asset purchases by our banking subsidiaries) that may take place and generally require those transactions to be in good faith, at arm's-length, and on market terms. In general, extensions of credit by a BNY banking subsidiary to any non-bank affiliate, including the Parent, must be secured by designated amounts of specified collateral and are limited in the aggregate to 10% of the relevant bank's capital and surplus for transactions with a single affiliate and to 20% of the relevant bank's capital and surplus for transactions with all affiliates. There are also limitations on affiliate credit exposures arising from derivative transactions and securities lending and borrowing transactions.

Acquisitions/Transactions by Banks or BHCs

Federal and state laws impose notice and approval requirements for mergers and acquisitions involving depository institutions or BHCs. The Bank Holding Company Act of 1956, as amended by the Gramm-Leach-Bliley Act and by the Dodd-Frank Act (the "BHC Act"), requires the prior approval of the Federal Reserve for the direct or indirect acquisition by a BHC of more than 5% of any class of the voting shares or all or substantially all of the assets of a commercial bank, savings and loan association or BHC. In reviewing bank acquisition and merger applications, the bank regulatory authorities will consider, among other things, the competitive effect of the transaction, financial and managerial resources, including the capital position of the combined organization, convenience and needs of the community factors, including the applicant's record under the Community Reinvestment Act of 1977 (the "CRA"), the effectiveness of the subject organizations in combating money laundering activities and the risk to the stability of the U.S. banking or financial system. In addition, prior Federal Reserve approval would be required for BNY to acquire direct or indirect ownership or control of any voting shares of a company with assets of $10 billion or more that is engaged in activities that are "financial in nature."

Anti-Money Laundering ("AML") and the USA PATRIOT Act

A major focus of governmental policy on financial institutions has been aimed at combating money laundering and terrorist financing. The USA PATRIOT Act of 2001 contains numerous AML requirements for financial institutions that are applicable to BNY's bank, broker-dealer and investment adviser subsidiaries and mutual funds and private investment companies advised or sponsored by our subsidiaries. Those regulations impose obligations on financial institutions to maintain a broad AML program that includes internal controls, independent testing, compliance management personnel, training, and customer due diligence processes, as well as appropriate policies, procedures and controls to detect, prevent and report money laundering, terrorist financing and other suspicious activity, and to verify the identity of their customers. Certain of those regulations impose specific due diligence requirements on financial institutions that maintain correspondent or private banking relationships with non-U.S. financial institutions or persons.

The Anti-Money Laundering Act of 2020 ("AMLA"), which amends the Bank Secrecy Act ("BSA"), was enacted to comprehensively reform and modernize

U.S. AML laws. Among other things, the AMLA codifies a risk-based approach to AML compliance for financial institutions; requires the development of standards by the U.S. Department of the Treasury for evaluating technology and internal processes for BSA compliance; and expands enforcement- and investigation-related authority, including a significant expansion in the available sanctions for certain BSA violations and instituting BSA whistleblower incentives and protections. The AMLA contains many statutory provisions that require additional rulemakings, reports and other measures, and the rulemaking process has begun for several of these provisions. In June 2021, the first government-wide priorities for anti-money laundering and countering the financing of terrorism ("AML/CFT Priorities") were published. These AML/CFT Priorities will need to be incorporated into banks' risk-based BSA compliance programs after completion of the rulemaking process and on the effective date of the final regulations. The impact of the AMLA will depend on, among other things, the completion of the rulemaking process and the issuing of implementation guidance.

Financial Crimes Enforcement Network ("FinCEN")

FinCEN, a bureau of the U.S. Department of the Treasury, issued rules under the BSA that apply to covered financial institutions, including The Bank of New York Mellon and BNY Mellon, N.A., setting forth five pillars of an effective AML program: development of internal policies, procedures and related controls; designation of a compliance officer; a thorough and ongoing training program; independent review for compliance; and customer due diligence ("CDD"). CDD requires a covered financial institution to implement and maintain risk-based procedures for conducting CDD that include the identification and verification of any beneficial owner(s) of each legal entity customer at the time a new account is opened.

Bank Secrecy Act Extended to Investment Advisers

On Aug. 28, 2024, FinCEN adopted a final rule requiring certain investment advisers to establish anti-money laundering/countering the financing of terrorism ("AML/CFT") programs pursuant to the BSA and to monitor for, and report, suspicious activity and currency transactions to FinCEN. Investment advisers will be required to apply their AML/CFT programs to all advisory services provided to all customers, except that they will be permitted to exclude mutual funds, certain bank- and trust company-sponsored collective investment funds, and other investment advisers subject to the rule. Among other requirements, the AML/CFT program must (i) be risk-based, (ii) be reasonably designed to prevent the investment adviser from being used for money laundering, terrorist financing, or other illicit finance activities and to achieve compliance with applicable provisions of the BSA and regulations thereunder, (iii) provide for independent compliance testing, and (iv) designate responsible persons and ongoing training. Investment advisers must comply with the Rule by Jan. 1, 2026. BNY has evaluated the final rule and is implementing a program designed to meet the applicable regulatory requirements.

NYSDFS Anti-Money Laundering and Anti-Terrorism Regulations

The New York State Department of Financial Services ("NYSDFS") issued regulations requiring regulated institutions, including The Bank of New York Mellon, to maintain a transaction monitoring program to monitor transactions for potential BSA and AML violations and suspicious activity reporting, and a watch list filtering program to interdict transactions prohibited by applicable sanctions programs.

The regulations require a regulated institution to maintain programs to monitor and filter transactions for potential BSA and AML violations and prevent transactions with sanctioned entities. The regulations also require institutions to submit annually a board resolution or senior officer compliance finding confirming steps taken to ascertain compliance with the regulation.

Privacy and Data Protection

The privacy provisions of the Gramm-Leach-Bliley Act generally prohibit financial institutions, including BNY, from disclosing nonpublic personal financial information of consumer customers to third parties for certain purposes (primarily marketing) unless customers have the opportunity to "opt out" of the disclosure. The Fair Credit Reporting Act restricts information sharing among affiliates for marketing purposes.

In the EU, privacy law is primarily regulated by the General Data Protection Regulation ("GDPR"). The

GDPR contains enhanced compliance obligations and penalties for non-compliance.

EU Artificial Intelligence Act

On July 12, 2024, the EU's Regulation on Artificial Intelligence ("AI Act") was published in the Official Journal of the EU and came into force on Aug. 1, 2024. The AI Act will apply extraterritorially, impacting both EU and non-EU entities, and will impact BNY. The AI Act creates a pan-EU regulatory framework to manage the risks associated with the use of artificial intelligence, including with respect to financial services. The AI Act requires categorization of AI systems into four risk levels depending on their potential to harm individuals or society (unacceptable risk, high risk, limited risk, and minimal risk) and imposes obligations depending on the risk categorization, which may include data governance, documentation and recordkeeping, human oversight, testing, cybersecurity, disclosure, regulatory notification or reporting, or training. In addition, the AI Act prohibits AI that pose unacceptable risks that are abusive or contradict EU values, including AI that may be manipulative, exploitive, or discriminatory. The individual provisions of the AI Act apply on a rolling basis from Feb. 2, 2025 to Aug. 2, 2027. BNY has evaluated the impact of the AI Act and has established an implementation program designed to operationalize the regulatory requirements applicable to BNY within required time frames.

SEC Conflicts of Interest Rule for Use of Artificial Intelligence by Broker-Dealers and Investment Advisers

On July 26, 2023, the SEC proposed new rules intended to address certain conflicts of interest associated with the use of "Covered Technology" by broker-dealers and investment advisers ("Firms") in investor interactions ("Proposed AI Rules"). Covered Technology is generally described as applying to "artificial intelligence" or "AI" and is broadly defined under the Proposed AI Rules to include the use of analytical, technological, or computational functions, algorithms, models, correlation matrices, or similar methods or processes that optimize for, predict, guide, forecast, or direct investment-related behaviors or outcomes of an investor. If adopted, the Proposed AI Rules would: (i) generally apply when a Firm uses a Covered Technology in engaging or communicating with an investor, including by exercising discretion with respect to an investor's account, providing an investor with information, or soliciting an investor and (ii) require Firms to (among other things) identify conflicts of interests when using Covered Technology in interactions with investors, and adopt policies and procedures to eliminate or neutralize those conflicts of interest. We continue to evaluate the potential impact of the proposed rules.

Cybersecurity Regulation

The NYSDFS requires financial institutions regulated by NYSDFS, including The Bank of New York Mellon, to establish a cybersecurity program, adopt a written cybersecurity policy, designate a chief information security officer, address artificial intelligence risks related to cybersecurity, and have policies and procedures in place to ensure the security of information systems and non-public information accessible to, or held by, third parties. The NYSDFS rule also includes a variety of other requirements to protect the confidentiality, integrity and availability of information systems, including the annual delivery of a certificate of compliance.

The Agencies have adopted a final rule imposing notification requirements for significant computer-security incidents on banking organizations. Under the final rule, a BHC, state member bank or national bank, including the Parent, The Bank of New York Mellon and BNY Mellon, N.A., is required to notify the Federal Reserve or OCC, as applicable, within 36 hours after a computer-security incident that could: (i) result in the banking organization's inability to deliver services to a material portion of its customer base, (ii) disrupt the banking organization's lines of businesses the failure of which would result in material losses, or (iii) disrupt operations the failure of which would threaten the financial stability of the U.S.

On July 26, 2023, the SEC adopted rules, effective on Sept. 5, 2023, requiring public companies, including the Parent, to disclose material cybersecurity incidents and details regarding their cybersecurity risk management, strategy and governance. Under the rules, public companies must disclose material cybersecurity incidents on Form 8-K. Disclosure of material incidents generally is due within four business days after a public company determines that a cybersecurity incident is material. On an annual basis, public companies must describe in their annual report on Form 10-K their processes for assessing, identifying, and managing, and management's role and expertise in assessing and managing, material cybersecurity risks; whether any cybersecurity risks have materially affected or are reasonably likely to material affect the company; and the board of directors' oversight of cybersecurity risks.

On March 15, 2023, the SEC proposed a new rule regarding cybersecurity risk management for entities including broker-dealers, security-based swap dealers, and transfer agents. The proposed rule would require such entities to maintain written policies and procedures to address their cybersecurity risk, immediately notify the SEC of significant cybersecurity incidents, and publicly disclose descriptions of their cybersecurity risks and significant cybersecurity incidents.

In addition, on March 15, 2023, the SEC proposed amendments to Regulation S-P, including a requirement for broker-dealers, investment companies, RIAs, and transfer agents to adopt written policies and procedures for an incident response program with respect to unauthorized access to or use of customer information. The proposal would require these entities to notify individuals whose sensitive customer information was accessed or used without authorization not later than 30 days after becoming aware that the information was compromised. BNY is evaluating the potential impact of the proposals.

SEC Amendments to Regulation S-P for Safeguarding of Customer Information

On May 16, 2024, the SEC adopted amendments (the "S-P Amendments") to Regulation S-P, which governs the safeguarding, treatment and disposal of customer records and information by certain financial institutions, to enhance the protection of customer financial information and establish a federal minimum standard for data breach notifications to affected individuals by brokers, dealers, investment companies, registered investment advisers and transfer agents ("S-P covered institutions"). The S-P Amendments: (i) extend certain requirements of Regulation S-P to transfer agents registered with the SEC or another appropriate regulatory agency; (ii) require S-P covered institutions to develop, implement, and maintain written policies and procedures for an incident response program that is reasonably designed to detect, respond to, and recover from unauthorized access to or use of customer information; (iii) set forth a data breach notification requirement that requires S-P covered institutions to notify affected individuals whose customer information was, or is reasonably likely to have been, accessed or used without authorization (subject to certain exceptions) within 30 days after the S-P covered institution becomes aware that unauthorized access to or use of customer information has, or is reasonably likely to have, occurred; (iv) broaden the group of customers whose information is protected; (v) address the use of service providers by S-P covered institutions; and (vi) codify an existing statutory exemption to the requirement to provide annual privacy notices to customers. The S-P Amendments are effective as of Aug. 2, 2024 and BNY will have 18 months to come into compliance. BNY has evaluated the S-P Amendments and is implementing a program designed to meet the applicable regulatory requirements.

Sustainability

The SEC adopted a final rule, on March 6, 2024, requiring registrants, including BNY, to disclose material climate-related information in registration statements and periodic reports; however, the final rule is currently subject to multiple legal challenges and, on April 4, 2024, the SEC voluntarily issued an order staying the final rule pending the completion of judicial review of the legal challenges. In addition, the SEC's May 2022 proposed rule and form amendments under the Investment Company Act of 1940, as amended (the "1940 Act") and the Investment Advisers Act of 1940 remains pending and would require certain registered investment funds and certain investment advisers to provide enhanced disclosures regarding environmental, social, and governance factors considered. Implementation of the SEC rules is currently uncertain.

A number of states have proposed or enacted laws and regulations addressing climate disclosure. For example, California enacted three statutes imposing extensive new climate-related disclosure obligations on certain companies doing business in California, which became effective on Jan. 1, 2024, including the Climate Corporate Data Accountability Act (as updated in 2024, "SB 253"), which requires annual disclosure of greenhouse gas emissions beginning in 2026, and the Climate-Related Financial Risk Act (as updated in 2024, "SB 261"), which requires publication of biennial reports disclosing climate-related financial risks and the measures adopted to mitigate the disclosed risks beginning on Jan. 1,

2026. Conversely, certain states have enacted or implemented, or have proposed to enact or implement, statutes, regulations or policies that prohibit financial institutions from denying or canceling products or services to a person, or otherwise discriminating against a person in making available products or services, on the basis of social credit scores and certain other sustainability factors.

In Europe, EU entities in-scope for the Corporate Sustainability Reporting Directive ("CSRD") will soon be subject to new requirements to disclose information about impacts, risks, and opportunities related to sustainability matters. Five EU subsidiaries of BNY are currently subject to these requirements, with BNY SA/NV required to report in 2025 and the remaining four subsidiaries currently scheduled to report in 2026. However, on Feb. 26, 2025, the European Commission published proposals aimed at simplifying the EU sustainability rules (the "Omnibus Package"). Under the Omnibus Package, only companies with more than 1,000 employees and either a turnover above EUR 50 million or a balance sheet total above EUR 25 million would be obliged to report under CSRD. In addition, there is a proposal to postpone the application of all reporting requirements for companies currently in scope of CSRD and which are required to report as of 2026 and 2027 until 2028.

The Omnibus Package also puts forward proposals that would amend the obligations under the current Corporate Sustainability Due Diligence Directive ("CSDDD"). CSDDD entered into force in the EU on July 25, 2024, and applies to large EU companies and non-EU companies with significant EU activity. Under the current legislative text, CSDDD will apply on a phased-in basis, starting three years after CSDDD's entry into force, dependent on a company's number of employees and net worldwide or EU turnover. In-scope companies are required to comply with due diligence obligations for their operations and for their upstream chains of activities and to adopt a transition plan for climate change mitigation. The Omnibus Package introduces proposals aimed at simplifying aspects of CSDDD's sustainability due diligence requirements and postponing the first phase of their application (covering the largest companies) to July 26, 2028.

If the proposals put forward by the European Commission under the Omnibus Package are implemented, this may have a direct impact on the obligations of the BNY entities currently in scope of CSRD and CSDDD.

Our UK supervisory authorities have adopted new disclosure requirements and supervisory expectations that currently apply or will apply to our subsidiaries and branches that are regulated by the UK Financial Conduct Authority ("FCA") and the UK Prudential Regulation Authority ("PRA"). For example, since the end of 2021 our PRA regulated branch and banking subsidiary have been subject to the PRA's supervisory expectations for the management of climate-related financial risks, including as regards governance, risk management, scenario analysis and disclosure. Further, new FCA rules on anti-greenwashing will require that from May 31, 2024, any sustainability-related claims made about our products and services by our FCA regulated entities are consistent with the sustainability characteristics of such products or services and are fair, clear and not misleading.

Published guidance from our regulators globally, including the Agencies and NYSDFS, has primarily focused on climate-related financial risk management, including with respect to, among other things, governance, policies and procedures, strategy, risk management, data and reporting, and scenario analysis. As the global regulatory framework for climate and sustainability-related disclosure and risk management practices continues to evolve, including potential expansion, contraction or streamlining of regulations, we continue to monitor developments and evaluate the potential impacts on our business and operations.

Incentive Compensation Arrangements

Section 956 of the Dodd-Frank Act requires six federal regulators to jointly prescribe regulations or guidelines regarding incentive-based compensation practices at certain financial institutions, including BNY. The timeframe for a joint proposal and implementation of a final rule, if any, is currently unknown.

Regulated Entities of BNY and Ancillary Regulatory Requirements

BHC and Bank Entities

BNY is registered as an FHC under the BHC Act and subject to supervision by the Federal Reserve. In general, the BHC Act limits an FHC's business activities to banking, managing or controlling banks, performing certain servicing activities for subsidiaries, engaging in activities incidental to banking, and engaging in any activity, or acquiring and retaining the shares of any company engaged in any activity, that is either financial in nature or complementary to a financial activity and does not pose a substantial risk to the safety and soundness of depository institutions or the financial system generally.

A BHC's ability to maintain FHC status is dependent on: (i) its U.S. IDI subsidiaries qualifying on an ongoing basis as "well capitalized" and "well managed" under the prompt corrective action regulations of the appropriate regulatory agency (discussed above under "Prompt Corrective Action"); (ii) the BHC itself qualifying on an ongoing basis as "well capitalized" and "well managed" under applicable Federal Reserve regulations; and (iii) its U.S. IDI subsidiaries' continuing to maintain at least a "satisfactory" rating under the CRA.

The Federal Reserve's rating system for the supervision of large financial institutions ("LFIs") applies to, among other entities, all BHCs with total consolidated assets of $100 billion or more, including BNY. The LFI rating system includes a four-level rating scale and three component ratings. The four levels are: Broadly Meets Expectations; Conditionally Meets Expectations; Deficient-1; and Deficient-2. The component ratings are assigned for: Capital Planning and Positions; Liquidity Risk Management and Positions; and Governance and Controls. A firm must be rated "Broadly Meets Expectations" or "Conditionally Meets Expectations" for each of its component ratings to be considered "well managed" in accordance with various statutes and regulations that permit additional activities, prescribe expedited procedures or provide other benefits for "well managed" firms. See "U.S. Capital Rules – Leverage Ratios" and "Prompt Corrective Action Regarding IDI Capital Requirements" above for details on qualifying as "well capitalized."

An FHC that does not continue to meet all the requirements for FHC status will, depending on which requirements it fails to meet, lose the ability to undertake new activities, continue current activities, or make acquisitions that are not generally permissible for BHCs without FHC status. As of Dec. 31, 2024, BNY and our U.S. bank subsidiaries were "well capitalized" based on the ratios and rules applicable to them.

The Bank of New York Mellon, BNY's largest banking subsidiary, is a New York state-chartered bank, a member of the Federal Reserve and subject to regulation, supervision and examination by the Federal Reserve, the FDIC and the NYSDFS. BNY's national bank subsidiaries, BNY Mellon, N.A. and The Bank of New York Mellon Trust Company, National Association, are chartered as national banking associations subject to primary regulation, supervision and examination by the OCC.

On Aug. 8, 2023, the Federal Reserve issued a Supervision and Regulation Letter (SR 23-7) announcing the establishment of its Novel Activities Supervision Program ("NASP") to complement its existing supervision and oversight of supervised banking organizations, including BNY. The NASP encompasses risk-based monitoring and examination and focuses on, novel activities related to crypto-assets, distributed ledger technology, and complex, technology-driven partnerships with non-bank providers of banking products and services to customers. The Federal Reserve also evaluates, under the NASP, the concentrated provision of banking services to crypto-asset-related entities and fintechs.

Securities Markets

We operate a number of broker-dealers that engage in securities underwriting and other broker-dealer activities in the U.S. These companies are SEC-registered broker-dealers and members of Financial Industry Regulatory Authority, Inc. ("FINRA"), a securities industry self-regulatory organization. BNY's non-bank subsidiaries engaged in securities-related activities are regulated by supervisory agencies in the countries in which they conduct business, where required.

Certain of BNY's public finance and advisory activities are regulated by the Municipal Securities Rulemaking Board and the relevant BNY affiliates have registered with the SEC, as required under the SEC's Municipal Advisors Rule if they provide advice to municipal entities or certain other persons on the issuance of municipal securities, or about certain investment strategies or municipal derivatives.

Certain of BNY's subsidiaries are registered with the CFTC as commodity pool operators, introducing brokers and/or commodity trading advisors and, as such, are subject to CFTC regulation. The Bank of New York Mellon is registered as a swap dealer (as defined in the Dodd-Frank Act) with the CFTC and is a member of the National Futures Association ("NFA") in that same capacity. As a swap dealer, The Bank of New York Mellon is subject to regulation, supervision and examination by the CFTC and NFA.

On Dec. 13, 2023, the SEC approved a final rule requiring covered clearing agencies that clear transactions in U.S. Treasuries ("CCPs") to establish policies requiring their direct participants, including BNY, to submit for clearing all "eligible secondary market transactions" in U.S. Treasuries to which such direct participant is a counterparty, which include all repurchase and reverse repurchase agreements ("repo") collateralized by U.S. Treasuries and certain cash transactions in U.S. Treasuries engaging specific institutions, including inter-dealer brokers, registered broker-dealers, government securities brokers and government securities dealers. Eligible secondary market transactions, however, exclude (i) repo transactions with affiliates (under certain conditions), central banks, sovereign entities, international financial institutions, natural persons and CCPs and (ii) securities lending transactions involving U.S. Treasuries. The compliance date for all eligible cash market transactions is Dec. 31, 2026 and the compliance date for all eligible repo market transactions is June 30, 2027.

SEC Rules Impacting Investment and Wealth Management

SEC regulations impose requirements on mutual funds, exchange-traded funds and other registered investment companies ("RICs") under the 1940 Act. Among other things, these rules require mutual funds (other than money market funds) to provide portfolio-wide and position-level holdings data to the SEC on a monthly basis.

The regulations also impose liquidity risk management requirements that are intended to reduce the risk that funds will not be able to meet shareholder redemptions and to minimize the impact of redemptions on remaining shareholders.

On July 12, 2023, the SEC adopted amendments to rules that govern money market funds. The amendments became effective Oct. 2, 2023, with tiered compliance dates. The amendments include, among other things: (i) a mandatory liquidity fee for institutional prime and institutional tax-exempt money market funds, which will apply when a fund experiences daily net redemptions that exceed 5% of net assets (effective Oct. 2, 2023); (ii) maintenance of a fund board's ability to impose liquidity fees (not to exceed 2% of the value of the shares redeemed) on a discretionary basis for non-government money market funds (effective April 2, 2024); (iii) substantially increasing the required minimum levels of daily and weekly liquid assets for all money market funds from 10% and 30%, to 25% and 50%, respectively (effective April 2, 2024); and (iv) removal of a money market fund's ability to impose temporary "gates" to suspend redemptions in order to prevent dilution and remove the link between a money market fund's liquidity level and its imposition of liquidity fees (effective Oct. 2, 2023).

On Sept. 20, 2023, the SEC adopted amendments expanding the scope of terms that the SEC considers materially deceptive and misleading in a fund's name without a corresponding policy and related controls to invest at least 80% of the fund's net asset value (plus certain borrowings) in the manner suggested by the fund's name ("80% Policy"), including names that reference "growth" or "value," or a name indicating that investment decisions incorporate any environmental, social and governance factors. The amendments became effective Dec. 10, 2023 and fund groups will have either 24 months or 30 months to come into compliance, depending upon their net asset size.

On Oct. 26, 2022, the SEC proposed for comment new rules to prohibit RIAs from outsourcing certain services and functions without first meeting certain threshold requirements, including conducting due diligence, and thereafter requiring ongoing monitoring of the service providers. The proposal would apply to RIAs that outsource select "covered functions," which include those services or functions that are necessary for providing advisory services in compliance with federal securities laws and that, if not performed or performed negligently, would result in potential harm to clients. The proposal would further require RIAs to conduct due diligence and monitoring for all third-party recordkeepers and obtain reasonable assurances that the recordkeepers will meet certain standards. Finally, it would require RIAs to maintain books and records related to the new rule's oversight obligations and to report censustype information about the service providers covered under the rule. We continue to evaluate the impact of the proposed rule.

On Nov. 2, 2022, the SEC proposed for public comment rule amendments that would require the adoption of "swing pricing" and a "hard close" by all open-end RICs other than money market funds and exchange-traded funds ("Open-End Funds"). The requirements would alter the manner in which shares in Open-End Funds are traded, as shareholders would no longer receive the NAV per share for their transactions but instead could receive a price more or less than the NAV depending on whether a "swing factor" was applied to their transaction. This swing factor would be the amount by which the Open-End Fund adjusts its per-share NAV and would represent a good-faith estimate of the transaction costs imposed on current shareholders of the Open-End Fund by the transacting shareholders. To facilitate the operation of swing pricing, the SEC also proposed to require a "hard close" for Open-End Funds, which would make a purchase or sale order for shares of an Open-End Fund eligible for a given day's price only if the Open-End Fund or certain designated agents receive the order before the time when the Open-End Fund calculates its NAV, which is typically as of 4:00 PM Eastern Time. We continue to evaluate the impact of the proposed rule.

SEC Rule 6c-11 (the "ETF Rule") under the 1940 Act permits exchange traded funds ("ETFs") that satisfy certain conditions to organize and operate without first obtaining an exemptive order from the SEC and requires an ETF to make certain disclosures, including historical data on an ETF's premiums, discounts and bid-ask spread information, as well as the ETF's daily portfolio holdings. The ETF Rule also requires ETFs using custom baskets to put written policies and procedures in place establishing that the custom baskets are in the best interests of the ETF and its shareholders. Pursuant to the ETF Rule, BNY has launched a number of ETFs.

Certain of our subsidiaries are RIAs, and as such are supervised by the SEC. They are also subject to various U.S. federal and state laws and regulations and to the laws and regulations of any countries in which they conduct business. Our subsidiaries advise both RICs, including the BNY Mellon Family of Funds and BNY Mellon ETF Funds, and private investment companies which are not registered under the 1940 Act.

Certain of our investment management, trust and custody operations provide services to employee benefit plans that are subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), administered by the U.S. Department of Labor. ERISA imposes certain statutory duties, liabilities, disclosure obligations and restrictions on fiduciaries, as applicable, related to the services being performed and fees being paid.

SEC Regulation Best Interest ("Reg BI") requires a broker-dealer to act in the "best interest" of a retail customer when making a recommendation of any securities transaction or investment strategy to any such customer. The Form CRS Relationship Summary ("Form CRS") requires RIAs and broker-dealers to provide retail investors with a brief summary about the nature of their relationship with their investment professional and supplements other more detailed disclosures.

On Feb. 15, 2023, the SEC adopted final rule amendments to shorten the standard settlement cycle for certain broker-dealer securities transactions to T+1. The compliance date for the transition to T+1 settlement under the final rule for in-scope transactions was May 28, 2024.

On Dec. 14, 2022, the SEC proposed four rulemakings related to market structure, including a proposed Regulation Best Execution, which would establish a best execution regulatory framework for broker-dealers, and proposals regarding order competition and disclosure of order execution information. We continue to assess the potential impacts of the proposals.

On Feb. 15, 2023, the SEC proposed amendments to the custody rule under the 1940 Act, which generally requires RIAs deemed to have custody of client funds or securities to, among other requirements, maintain client funds or securities with a qualified custodian. The proposal would expand the types of investments covered by the custody rule to include any client "assets." It would also require RIAs to enter into a written agreement with, and obtain reasonable assurances from, the qualified custodian that the custodian will comply with protections in the proposed rule, including with respect to indemnification of the client, responsibility for subcustodians and central securities depositaries, asset segregation, and not subjecting client assets to any liens. In addition, the SEC proposed amendments to the investment adviser recordkeeping rule to require advisers to keep additional, more detailed records. We continue to evaluate the potential impact of the proposals.

Operations and Regulations Outside the U.S.

We maintain a presence in the UK through the London branch of The Bank of New York Mellon, The Bank of New York Mellon (International) Limited (a credit institution incorporated and authorized in the UK), and a number of our investment firms. We maintain a presence in the EU through the Frankfurt branch of The Bank of New York Mellon, BNY SA/NV, which is headquartered in Belgium and has a branch network in a number of other EU countries, and through certain of our investment firms.

BNY SA/NV is a public limited liability company incorporated under the laws of Belgium, holds a banking license issued by the National Bank of Belgium and is authorized to carry out all banking and savings activities as a credit institution. The European Central Bank (the "ECB") has responsibility for the direct supervision of significant banks and banking groups in the Euro area, including BNY SA/NV. The ECB's supervision is carried out in conjunction with the relevant national prudential regulator (the National Bank of Belgium in BNY SA/NV's case), as part of the Single Supervisory Mechanism. BNY SA/NV conducts its activities in Belgium as well as through its branch offices in Denmark, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Poland and Spain. In Europe, branches of The Bank of New York Mellon are subject to regulation in the countries in which they are established, in addition to being subject to oversight by BNY's U.S. regulators.

Certain of our financial services operations in the UK are subject to regulation and supervision by the FCA and the PRA. The PRA is responsible for the authorization and prudential regulation of firms that carry on PRA-regulated activities, including banks. PRA-authorized firms are also subject to regulation by the FCA for conduct purposes. In contrast, FCA-authorized firms (such as investment management firms) have the FCA as their sole regulator for both prudential and conduct purposes. As a result, FCA-authorized firms must comply with FCA prudential and conduct rules and the FCA's Principles for Businesses, while dual-regulated firms must comply with the FCA conduct rules and FCA Principles, as well as the applicable PRA prudential rules and the PRA's Principles for Businesses.

The PRA regulates The Bank of New York Mellon (International) Limited, our UK-incorporated bank, as well as the London branch of The Bank of New York Mellon. Certain of BNY's UK-incorporated subsidiaries are authorized to conduct investment business in the UK. Their investment management advisory activities and their sale and marketing of retail investment products are regulated by the FCA. Certain UK investment funds, including investment funds of BNY, are registered with the FCA and are offered for sale to retail investors in the UK.

The types of activities in which the foreign branches of our banking subsidiaries and our international subsidiaries may engage are subject to various restrictions imposed by the Federal Reserve. Those foreign branches and international subsidiaries are also subject to the laws and regulatory authorities of the countries in which they operate and, in the case of banking subsidiaries, may be subject to regulatory capital requirements in the jurisdictions in which they operate.

The primary prudential framework in the EU is provided by the Capital Requirements Directive ("EU CRD") and Capital Requirements Regulation ("EU CRR"), both of which implement many elements of the Basel III framework. On July 9, 2024, the texts of the EU Capital Requirements Regulation 3 ("CRR3") and Capital Requirements Directive 6 ("CRD6") came into effect and will be implemented in phases through to January 2027. Through these regulations, the EU will implement the Basel 3.1 standards via amendments to EU CRD and CRR. These changes will affect the operations of BNY SA/NV (including capital and liquidity requirements) and the Frankfurt branch of The Bank of New York Mellon (including a capital endowment requirement and additional governance, reporting and supervisory obligations). In addition, CRD6 will restrict the provision of prescribed core banking services by non-EU entities to EU clients, except where these services are provided through an authorized EU branch or where an exemption applies.

The UK's version of the EU Capital Requirements Regulation ("UK CRR") provides the prudential framework for credit institutions in the UK. Aspects of UK CRR are currently proposed to be amended as part of the PRA's plans to implement the Basel 3.1 standards in the UK. The amended rules, which will be relevant to the operations of The Bank of New York Mellon (International) Limited, are set to apply from Jan. 1, 2027.

In the EU, the Investment Firms Directive/Investment Firms Regulation ("IFD/IFR") is the EU's prudential regime for investment firms. The UK has implemented its version of the IFD/IFR via the UK Investment Firms Prudential Regime ("UK IFPR"). Under both IFD/IFR and UK IFPR, the capital requirements for most investment firms are based on factors that are more tailored to the risks that investment firms face, rather than Basel standards for banks such as credit risk, market risk or operational risk. BNY has several EU and UK-domiciled investment firms that are subject to IFD/IFR and UK IFPR respectively.

In addition, various proposed changes to regulations in both the EU and the UK may impact our business. In the EU, this includes the revised Markets in Financial Instruments Directive II and Markets in Financial Instruments Regulation (collectively, "MiFID II"), the revised Alternative Investment Fund Managers Directive ("AIFMD"), the Securitisation Regulations, the revised regulation on OTC derivatives, central counterparties and trade repositories (commonly known as "EMIR"), and the revised Payment Services Directive II ("PSD").

The UK continues to implement post-Brexit changes to its financial services' regulatory framework as part of an ongoing work program by HM Treasury, the FCA and the PRA. This program is undertaken pursuant to a range of initiatives, including the UK Government's Edinburgh Reforms (a series of measures to promote stability and competitive growth in the UK financial markets post-Brexit), the Financial Services and Markets Act 2023, the Smarter Financial Services Regulatory framework (which continues to progress with the replacement of assimilated EU law), and the UK's Wholesale Markets Review.

The lines of business included in our Securities Services, Market and Wealth Services and Investment and Wealth Management business segments are subject to significant regulation in numerous jurisdictions around the world relating to, among other things, the safeguarding, administration and management of client assets and client funds.

BNY continues to assess the impact of the forthcoming changes outlined above on its operations.

Operational Resilience in Europe

The EU's Digital Operational Resilience Act ("DORA") became effective on Jan. 17, 2025 and harmonizes operational resiliency requirements across the EU. DORA is broadly aligned with the BCBS' Principles for Operational Resilience, with a focus on reducing risk of failure of information and communication technology and the risk related to financial entities' dependencies on these items. DORA requires financial entities operating in the EU, including BNY SA/NV and the Frankfurt branch of The Bank of New York Mellon to establish an information and communications technology risk management framework, including monitoring and testing, incident response, business continuity, and third-party risk management. BNY has implemented a program designed to meet the applicable requirements.

Banks and branches operating in the UK, including the London branch of The Bank of New York Mellon and The Bank of New York Mellon (International) Limited, are required to finalize implementation of PRA and FCA requirements on operational resilience by March 31, 2025. The UK's operational resilience regime requires in-scope firms to identify "important business services" critical to operations, map necessary resources, processes and information to deliver the critical services, establish maximum disruption impact tolerances and related testing, maintain a communication strategy, and document the processes in policies and procedures. BNY has evaluated the final rules and is working towards implementing applicable requirements.

Funds Regulation in Europe

The AIFMD has a direct effect on our alternative fund manager clients and our depository business and other products offered across Europe as well as upon our Investment Management business. AIFMD imposes heightened obligations upon depositories, which have operational effects.

Our businesses servicing regulated funds in Europe and our Investment Management businesses in Europe are also affected by the revised directive governing the Directive on Undertakings for

Collective Investment in Transferable Securities ("UCITS V").

Under the regulations for depositary safekeeping duties under AIFMD and UCITS V, the European Commission recognizes the use of omnibus account structures when accounting for assets in a chain of custody, but requires that depositaries and trustees, such as BNY, maintain their own books and records.

On April 15, 2024, an EU directive amending the AIFMD entered into force (known as "AIFMD II"). The revised AIFMD II regime introduces updated rules for depositaries, a new loan origination framework, and liquidity management rules for alternative investment funds ("AIFs"). EU Member States have until April 2026 to implement the relevant changes under AIFMD II into their national laws. BNY is assessing the impact of the changes on its business.

An investment in securities issued by us involves certain risks that you should carefully consider and evaluate both at the time of initial purchase and throughout the holding period of such securities. The following discussion sets forth the most material risk factors that could affect our business, financial condition or results of operations. Some of these risks are interrelated and the occurrence of one may exacerbate the effect of others. Additionally, factors other than those discussed below or in our other reports filed with or furnished to the SEC could also adversely affect our business, financial condition or results of operations. We cannot assure you that the risk factors described below or elsewhere in our reports address all potential risks that we may face. These risk factors also serve to describe considerations which may cause our results to differ materially from those described in forward-looking statements included herein or in other documents or statements that make reference to this Annual Report. See "Forward-looking Statements."

Summary

Investing in our securities and in the securities of banks and financial services companies more broadly is inherently risky. Our business, financial condition and results of operations may be materially and adversely affected by various risk types and considerations, including operational risk, market risk, credit risk, capital and liquidity risk, strategic risk and additional risks, including as a result of the following:

Operational Risk

- Errors or delays in our operational and transaction processing, or those of third parties.
- Our risk management framework, policies and processes not being effective in identifying or mitigating risk and reducing the potential for losses and any inadequacy or lapse in our risk management framework, policies and processes exposing us to unexpected losses.
- Limitations of the models we use to measure, monitor and manage risk.
- A communications or technology disruption or failure within our infrastructure or the infrastructure of third parties that results in a loss of information, delays our ability to access information or impacts our ability to provide services to our clients.
- A cybersecurity incident, or failure in our computer systems, networks and information, or those of third parties, resulting in the theft, disclosure, use or alteration of information, unauthorized access to or loss of information, or system or network failures.
- The development and use of artificial intelligence.
- Extensive government rulemaking, policies, regulation and supervision that impact our operations, and changes to and introduction of new rules and regulations compelling us to change how we manage our businesses.
- Regulatory or enforcement actions or litigation.
- Failure to attract, retain, develop and motivate employees.
- Failure or circumvention of our controls, policies and procedures.

Market Risk

- Weakness and volatility in financial markets and the economy generally.
- Dependence on fee-based business and fee-based revenues, which could be adversely affected by slowing market activity, weak financial markets, underperformance and/or negative trends in savings rates or in investment preferences.
- Levels of and changes in interest rates impacting our profitability and capital levels.
- Unrealized or realized losses on securities related to volatile and illiquid market conditions, reducing our capital levels and/or earnings.

Credit Risk

- Failure or perceived weakness of any of our significant clients or counterparties, and our assumption of credit, counterparty and concentration risk.
- Inadequacy in our allowance for credit losses, including loan and lending-related commitment reserves and a deterioration in our expectations of future economic conditions.

Capital and Liquidity Risk

- Failure to effectively manage our liquidity.
- Failure to satisfy regulatory standards, including "well capitalized" and "well managed" status or

capital adequacy and liquidity rules more generally.

- The Parent's dependence on dividends from its subsidiaries and extensions of credit from its IHC to meet its obligations, including with respect to its securities, and to provide funds for share repurchases, payment of income taxes and payment of dividends to its stockholders.
- Ability to return capital to shareholders, which is subject to the discretion of our Board of Directors and may be limited by U.S. banking laws and regulations, including those governing capital and capital planning, applicable provisions of Delaware law and our failure to pay full and timely dividends on our preferred stock.
- Any material reduction in our credit ratings or the credit ratings of our principal bank subsidiaries, The Bank of New York Mellon, BNY Mellon, N.A. or The Bank of New York Mellon SA/NV, which could increase the cost of funding and borrowing to us and our rated subsidiaries.
- The application of our Title I preferred resolution strategy or resolution under the Title II orderly liquidation authority.

Strategic Risk

- New lines of business, new products and services or transformational or strategic project initiatives, and the failure to implement these initiatives.
- Our strategic transactions.
- Failure to realize some or all of the expected benefits of our transition to a platforms operating model.
- Competition in all aspects of our business.

Additional Risks

- Adverse events, publicity, government scrutiny or other reputational harm.
- Impacts from geopolitical events, acts of terrorism, war, natural disasters, the physical effects of climate change, pandemics and other similar events.
- Sustainability concerns, including a focus on climate change and diversity, which could adversely affect our business, affect client activity levels, subject us to additional regulatory requirements and damage our reputation.
- Tax law changes or challenges to our tax positions with respect to historical transactions.
- Changes in accounting standards governing the preparation of our financial statements and future events.

Operational Risk

Errors or delays in our operational and transaction processing, or those of third parties, may materially adversely affect our business, financial condition, results of operations and reputation.

We are required to accurately process large numbers of transactions each day on a timely basis. The transactions we process or execute are operationally complex and can involve numerous parties, jurisdictions, regulations and systems, and, therefore, are subject to execution and processing errors and failures. In situations reliant upon manual processes, the risk of execution and processing errors and failures is heightened. Manual processes are inherently more prone to human and other processing error, malfeasance, fraud and other misconduct than automated processes. With more complex and voluminous transactions at ever increasing speeds, which present an increased risk of error or significant operational delay, we must continuously evolve and automate our processes, controls, technology, systems and workforce in a manner designed to achieve accurate and timely execution of these transactions. When errors or delays do occur, they may be difficult to detect and remediate in a timely manner. The use of automation, artificial intelligence and other emerging technologies in connection with automated processes, may amplify the impact of any such error or delay, as the failure to timely discover and respond to an operational error can have dramatic consequences, especially in connection with automated processes in light of the speed and volume of transactions involved. These risks are heightened in connection with the implementation of new products, systems or processes, which may present new risks that may not be adequately identified, or for which we may not have adequate controls. Furthermore, the risks resulting from an operational error may be heightened with respect to certain asset classes, such as some digital assets, with respect to which it may be impossible to retrieve wrongfully or erroneously transferred digital assets.

Our business, financial, accounting and processing systems or other operating systems may stop operating properly, become insufficient or become disabled or damaged as a result of a number of factors including events that are wholly or partially beyond our control. We have experienced, and in the future expect to continue to experience, operational errors and delays and disruptions to our transaction processing systems. Such operational errors, disruptions or significant operational delays could have a material and negative impact on our ability to conduct our business or service our clients, which could adversely affect our results due to potentially higher expenses and lower revenues, lower our capital ratios, create liability for us or our clients or negatively impact our reputation. We also recognize that service reliability and systems resilience are essential components to processing transactions and safeguarding financial assets, and an operational error impacting a large number of transactions could have unfavorable ripple effects in the financial markets, which could exacerbate the adverse effects of the error on us. There can be no assurance that our business continuity response plans will effectively mitigate our operational risks, and any backup systems or processes may not sufficiently replace our primary systems.

Affiliates or third parties (including their downstream service providers) with which we do business or that facilitate our business activities, including by providing data, information, technology, security or infrastructure services, have been, and could in the future continue to be, sources of execution and processing errors, breaches or loss, failures or significant operational delays. These risks may be amplified to the extent third parties (including their downstream service providers, such as those that provide data, cloud computing or other security or technology services) with which we do business have adopted the use of automation, artificial intelligence and other emerging technologies. These risks are further heightened to the extent that we rely on a limited, or otherwise concentrated, set of third parties with respect to certain processes or business activities.

Our operations must comply with complex and evolving laws and regulations, including heightened regulatory and supervisory expectations with respect to operational and information security systems. In certain jurisdictions, we may be deemed to be statutorily or criminally liable for operational errors, fraud, breakdowns or delays by affiliates or third parties with which we do business or that facilitate our business activities. Additionally, as a result of regulations, including the Alternative Investment Fund Managers Directive and the Undertakings for Collective Investment in Transferable Securities V, when we act as depositary in the European Economic Area, we could be exposed to restitution risk for, among other things, errors or fraud perpetrated by a sub-custodian resulting in a loss or delay in return of client's securities. When we are not acting as a European Economic Area depositary, we may accept similar liabilities to that of a European Economic Area depositary as a matter of contract in connection with our custody services.

Our risk management framework, policies and processes may not be effective in identifying or mitigating risk and reducing the potential for losses and any inadequacy or lapse in our risk management framework, policies and processes could expose us to unexpected losses that could materially adversely affect our results of operations or financial condition.

Our risk management framework seeks to identify and mitigate risk and loss to us. We have established comprehensive policies and procedures and an internal control framework designed to provide a sound operational environment for the types of risk to which we are subject, including operational risk, credit risk, market risk, liquidity risk, model risk and strategic risk. We have also established frameworks designed to mitigate risk and loss to us as a result of the actions of affiliates or third parties with which we do business (including their common and downstream service providers) or that facilitate our business activities. However, as with any risk management framework, there are inherent limitations to our current and future risk management strategies, including risks that we may not have appropriately anticipated, identified or monitored.

Our regulators remain focused on ensuring that financial institutions build and maintain robust risk management policies. Regulators' views of the quality of our risk models and framework affect our regulators' evaluations of us, and we are exposed to the risk of adverse regulatory and supervisory developments, including enforcement actions and increased costs in connection with remediation efforts, if our regulators view our risk models and framework to be insufficient or if remediation is not completed in a timely manner. Accurate and timely enterprise-wide risk information is necessary to enhance management's decision-making in times of crisis. If our risk management framework or governance structure proves ineffective or if our enterprise-wide management information is incomplete or inaccurate, we could suffer unexpected losses, which could materially adversely affect our results of operations or financial condition.

In addition, our businesses and the markets in which we operate are continuously evolving. We may fail to fully understand the implications of changes in our businesses, industry or the financial markets or fail to adequately or timely enhance our risk framework to address those changes. If our risk framework is ineffective because it fails to keep pace with changes in the industry, financial markets, regulatory requirements, our businesses, our counterparties, clients or service providers or for other reasons, we could incur losses, suffer reputational damage, face significant remediation expenses or find ourselves out of compliance with applicable regulatory or contractual mandates or supervisory expectations.

Our control environment and related systems, from time to time, have in the past not sufficiently detected, and may in the future not sufficiently detect, each error, omission or other mistake made by us. These have in the past included, and may in the future include, calculation errors, errors in software or model development or implementation, data or informational errors or incompleteness, or errors in judgment. Human errors, malfeasance, failure to follow applicable policies, laws, rules or procedures and other misconduct in connection with our risk management framework, policies and processes, even if promptly discovered and remediated, have in the past resulted, and could in the future result, in inaccurate reporting to regulatory bodies, reputational damage and losses and liabilities for us.

An important aspect of our risk management framework is creating a risk culture that is sustainable and appropriate to our role as a major financial institution in which our employees understand that there is risk in every aspect of our business and the importance of managing risk as it relates to their job functions. If we fail to create the appropriate environment that sensitizes our employees to managing risk, our business could be adversely impacted. For more information on how we monitor and manage our risk management framework, see "Risk Management – Overview."

Limitations of the models we use to measure, monitor and manage risk could lead to unexpected losses and adverse business impacts.

We rely on quantitative and qualitative models, analytical techniques and judgment-based estimations to measure, monitor and manage various risks, including credit, market, liquidity and operational risks. These models are also used for financial and other regulatory reporting, capital planning and other critical functions. While essential for decision-making, models are inherently limited and subject to inaccuracies stemming from flawed assumptions, design issues or evolving market conditions. Further, even absent flawed or inadequate model assumptions, design issues and data inaccuracies, there can be no assurance that the models we utilize will adequately mitigate risk or loss to us under all circumstances.

Our models depend on historical data, assumptions and correlations that may not accurately predict future conditions, particularly during periods of market stress or economic uncertainty. For example, unexpected geopolitical events, rapidly evolving market conditions or unforeseen economic downturns may render model assumptions inadequate. Additionally, models may fail to fully capture interdependencies among risk factors, leading to incomplete or misleading outputs.

In certain instances, we rely on models to measure, monitor and predict risks, including as part of our overall asset/liability management. However, these models are inherently limited because they involve techniques, including the use of historical data and trends, assumptions, estimates, judgments and forecasts, which may be incomplete or inaccurate. These models cannot anticipate every economic and financial outcome, particularly during severe market downturns, geopolitical events or other stress events such as those experienced during the COVID-19 pandemic or in connection with the insolvencies of Silicon Valley Bank and Signature Bank in 2023.

The models that we use to assess and control our market risk exposures also reflect assumptions about the degree of correlation among prices of various asset classes or other market indicators. The 2008 financial crisis and resulting regulatory reform highlighted both the importance and some of the limitations of managing unanticipated risks. In times of market stress, limited liquidity or other unforeseen circumstances, previously uncorrelated indicators may become correlated, or previously correlated indicators may move in different directions. Additionally, sudden illiquidity in markets or declines in prices of certain assets may make it more difficult to value certain financial instruments. These types of market movements have at times limited the effectiveness of our hedging strategies and have caused us to incur significant losses, and they may do so in the future.

Weaknesses in model design, implementation or governance may result in flawed outputs, increasing risks. Inaccuracies in input data or issues with data quality or effectiveness can further amplify these risks. To the extent that our models utilize data provided by third parties, deficiencies in the accuracy, timeliness or completeness of third-party data or the effectiveness in our controls and validation processes, could further amplify these risks. Models utilizing artificial intelligence, machine learning or other emerging technologies present additional challenges, including biases in algorithms or datasets, potentially leading to ineffective decision-making, reporting errors or other unintended consequences.

Weaknesses in model risk management practices, including lapses in oversight, monitoring and application, could negatively impact business operations and regulatory compliance. Failure to identify or address deficiencies promptly may result in operational losses, penalties, increased capital requirements or reputational harm.

Although we have implemented policies, procedures and controls designed to mitigate model risk, these measures cannot fully eliminate the inherent limitations of modeling practices. If our models fail to measure, monitor or predict risks appropriately, we could face financial losses, reputational harm, regulatory actions and material impacts on our business and financial results.

A communications or technology disruption or failure within our infrastructure or the infrastructure of third parties that results in a loss of information, delays our ability to access information or impacts our ability to provide services to our clients may materially adversely affect our business, financial condition and results of operations.

We extensively rely on communications and information systems to conduct our business. Our businesses are highly dependent on our ability to process large volumes of data in an accurate, complete and timely manner, which requires global capabilities and scale from our technology platforms. If our technology or communications fail, or those of industry utilities or our service providers fail, we have in the past experienced, and could in the future experience, production and system outages or failures, or other significant operational delays. In addition, any technology disruption or failure could result in the loss of confidential or customer data, as a result of which we could incur losses, suffer reputational damage, face significant remediation expenses or find ourselves out of compliance with applicable regulatory or contractual mandates or supervisory expectations with respect to the preservation of confidential information. Any such disruption, outage, failure or delay could adversely affect our ability to effect transactions or service our clients, which could expose us to liability for damages, result in the loss of business, damage our reputation, subject us to regulatory scrutiny or sanctions or expose us to litigation, any of which could have a material adverse effect on our business, financial condition and results of operations. Remote work arrangements have increased our reliance on remote access systems and video conferencing services, and, as a result, we are exposed to similar risks if the technology and communications systems our employees or employees of third parties use while working remotely fail. Security or technology disruptions, failures or delays that impact our communications or information systems could also adversely affect our ability to manage our exposure to risk or expand our business. These incidents are unpredictable and can arise from numerous sources, not all of which are in our control, including, among others, human error, malfeasance and other misconduct, as well as operational disruptions at a third party or third party's downstream service provider.

Upgrading our computer systems, software and networks may be time-consuming and may subject us to the risk of disruptions, failures or delays due to the complexity and interconnectedness of our computer systems, software and networks. The failure to properly upgrade or maintain these computer systems, software and networks could result in greater susceptibility to cyberattacks, particularly in light of the greater frequency and severity of cyberattacks in recent years, as well as the growing prevalence of cyberattacks affecting third-party software and information service providers. Additionally, cloud technologies are becoming increasingly critical to the operation of our systems and platforms, and, as our reliance on this technology continues to grow, we will continue to be increasingly subject to evolving risks relating to the use of cloud technologies. Our new product initiatives, including in connection with digital asset services, may further expose us to new and evolving technology risks and may lead to dependencies on, and compatibility issues with, decentralized or third-party blockchains and their protocols, which we do not control. Although we have programs and processes to identify such risks, there can be no assurance that any such disruptions, failures or delays will not occur or, if they do occur, that actions taken to mitigate their impact will be timely or adequate. Although we maintain insurance covering certain technology infrastructure losses and intend to maintain such insurance coverage if it is available to us on commercially reasonable terms, there can be no assurance that liabilities or losses we may incur, including as a result of a cybersecurity incident, will be covered under such policies or that the amount of insurance will be adequate.

We continue to evaluate and seek opportunities to strengthen our business continuity and operational resiliency capabilities and have increased our investments in technology to steadily enhance those capabilities, including our ability to resume and sustain our operations. There can be no guarantee, however, that a technology outage will not occur, including as a result of failures related to upgrades and maintenance, that our incident response processes will be effective to efficiently identify and respond to an adverse event, or that our business continuity and operational resiliency capabilities will enable us to maintain our operations and appropriately respond to events. For a discussion of operational risk, see "Risk Management – Risk Types Overview – Operational Risk."

Third parties with which we do business or that facilitate our business activities, including exchanges, clearing houses, financial intermediaries or vendors that provide services or security solutions for our operations, have in the past been, and could in the future also be, sources of technology risk to us, including from breakdowns, capacity constraints, attacks (including cyberattacks targeted at downstream service providers), failures or delays of their own systems or other services that impede their ability to provide products or services to us, which, in turn, could impair our ability to process transactions and communicate with customers and counterparties. This risk may be intensified to the extent that there is concentration in a single unique product or service provided by a single vendor, or to the extent we rely on service providers from a single geographic area or due to the nature of the third-party's industry and operations (e.g., firms that may have less robust scale, financial and operational resiliency standards with which to defend against a cyberattack). We may not be able to effectively monitor or mitigate operational risks impacting our vendors or relating to the use of common and other vendors by third-party service providers, which could result in potential liability to clients and customers, regulatory fines, penalties or other sanctions, increased operational costs or harm to our reputation.

As our business areas evolve, whether due to the introduction of technology, new service offering requirements for our clients, interactions with third-party service providers, or changes in regulation relative to these service offerings, unforeseen risks materially impacting our business operations could arise. The technology used has become increasingly complex and relies on the continued effectiveness of the programming code and integrity of the inputted data. Rapid technological changes and competitive pressures require us to make significant and ongoing investments in technology not only to develop competitive new products and services or adopt new technologies, but to sustain our current businesses. Our financial performance depends in part on our ability to develop and market these new products and services in a timely manner at a competitive price and adopt or develop new technologies that differentiate our products or provide cost efficiencies. The failure to adequately review and consider critical business changes prior to and during introduction and deployment of key technological systems, or the failure to adequately align operational capabilities with evolving client commitments and expectations, subjects us to the risk of an adverse impact on our ability to service and retain customers and on our operations. The costs we incur in enhancing our technology could be substantial and may not ultimately improve our competitiveness or profitability.

As a result of financial entities, including financial technology companies, central agents, clearing agents and houses, exchanges and technology systems across the globe becoming more interconnected and complex, a technology failure or other operational incident that significantly degrades, deletes or compromises the systems or data of one or more financial entities or suppliers increases the risk that such disruptions could have a material impact on counterparties or other market participants, including us. A disruptive event, failure or delay experienced by one institution could disrupt the functioning of the overall financial system and has in the past impaired, and could in the future impair, our ability to settle transactions, which could, in turn, increase our counterparty credit and other exposures.

A cybersecurity incident, or a failure in our computer systems, networks and information, or those of third parties, could result in the theft, disclosure, use or alteration of information, unauthorized access to or loss of information, or system or network failures. Any such incident or failure could adversely impact our ability to conduct our businesses, damage our reputation and cause losses.

We have been, and we expect to continue to be, the target of varying degrees of attempted cyberattacks, computer viruses or other malicious software, denial of service efforts, phishing attacks, penetration attempts and other information security threats intended to disrupt our operations, including unauthorized access attempts and cyberattacks targeted at third-party service providers and their downstream service providers. Remote working arrangements, our employees' usage of mobile and cloud technologies and our reliance on third-party service providers leave our networks susceptible to greater access points for attackers to exploit. This further increases the risk of unauthorized access to our networks and results in greater amounts of information being available for access, all of which heightens risks relating to the frequency and severity of cyberattacks against us and our third-party service providers and their downstream service providers. Although we deploy a broad range of sophisticated defenses and continue to expend significant resources to bolster these protections, there can be no assurance that these security measures will provide absolute security or prevent breaches and attacks, and we could suffer a material adverse impact or disruption as a result of a cybersecurity incident.

Cybersecurity incidents may occur through or as a result of system errors, lack of adequate policies and procedures, human error, software vulnerabilities (which may be unknown), potential lapses in information security practices or other irregularities, and intentional or unintentional acts by individuals or groups (including employees, vendors, customers and state actors, as well as others with malicious intent) having authorized or unauthorized access to our systems, data-bearing devices or facilities as well as the systems, devices or facilities of our clients, counterparties or third-party service providers. Malicious actors, who may see their effectiveness enhanced by the use of artificial intelligence, such as through the use of "deep-fake" technology or quantum computing, may also attempt to place individuals within BNY or fraudulently induce employees, vendors, customers or other users of our systems through social engineering, such as phishing, to disclose sensitive information in order to gain access to our data or that of our clients, or to send funds or authorize the sending of funds. A cybersecurity incident that results in the theft, loss, disclosure, use or alteration of information (which may include confidential or proprietary information), system or network failures, or unauthorized access or loss of access to information, may require us to reconstruct lost data (which may not be possible) or reimburse clients for data and credit monitoring services, or result in loss of customer business or damage to our computers or systems and those of our customers and counterparties. Further, although the application of distributed ledger technology is growing, such technology is nascent and may be vulnerable to cyberattacks or have other weaknesses, which could result in the loss of customer assets, including customer funds or custodied digital assets. Losses of certain types of assets, such as digital assets, may be distinctly difficult to recover and could subject us to customer disputes, claims for reimbursement, losses, negative publicity, reputational damage and governmental and regulatory scrutiny, investigations and enforcement actions.

Cyberattacks are expected to accelerate on a global basis in both frequency and magnitude as threat actors are becoming increasingly sophisticated in using novel techniques and tools, including artificial intelligence and other emerging technologies, that have the potential to circumvent controls, evade detection and even remove forensic evidence. Thus, the risk of an occurrence of a cybersecurity incident is inherent to a decision to invest in our company and the financial services sector as a whole. These impacts could be costly and time-consuming and could materially adversely affect our business, financial condition and results of operations.

While we seek to mitigate these risks to ensure the integrity of our systems and information and continuously evolve our cybersecurity capabilities, there can be no assurance that our mitigation strategies will be effective against all forms of cyberattacks. It is also possible that employees or services providers may not follow our policies and procedures and we may not anticipate or implement effective preventive measures against all cybersecurity threats, or detect all such threats, including because the techniques used change, develop and evolve frequently or are not recognized until after they are launched. Third parties with which we do business or that facilitate our business activities are also subject to the foregoing risks, and we can not guarantee that they will maintain effective systems and controls to mitigate and respond to these threats, or that they will properly implement and execute the policies and processes in the manner described to us. The failure of any third-party service provider to promptly detect, respond to or report cybersecurity incidents may adversely affect our ability to effectively report or respond to cybersecurity incidents in a timely manner. Moreover, attacks can originate from a wide variety of sources, including malicious actors who are involved with organized crime or who may be linked to terrorist organizations or state or quasi-state actors, or from cross-contamination of legitimate parties (including vendors and their service providers, clients, financial market utilities and other financial institutions). Risks relating to attacks on our vendors, including supply chain attacks affecting our software and information technology service providers, have been rising as such attacks become increasingly frequent and severe and as financial entities and technology systems have become increasingly consolidated, interdependent and complex.

The failure to maintain an adequate technology infrastructure and applications with effective cybersecurity controls relative to the type, size and complexity of operations, markets and products traded, access to trading venues and our market interconnectedness could impact operations and impede our productivity and growth, which could cause our earnings to decline or could impact our ability to comply with regulatory obligations, leading to regulatory fines and sanctions. We may be required to expend significant additional resources, including through the use of third parties, to address exposures arising from cybersecurity risks and threats. Despite our procedures intended to identify and mitigate the impact of cybersecurity incidents, a cybersecurity incident, including as a result of a successful cyberattack, could occur and persist for an extended period of time before being detected. In addition, we may not be able to identify and fully assess the impact of a cybersecurity incident in a timely manner. An investigation of a cybersecurity incident is inherently unpredictable and the extent of a particular cybersecurity incident and the path of investigating the incident may not be immediately clear. It may take a significant amount of time before such an investigation can be completed and reliable information about the incident is known. While such an investigation is ongoing, we may not necessarily know the source and extent of the harm or how best to contain and remediate it, certain errors or actions could be repeated or compounded before they are discovered and remediated, and communication to the public, clients, regulators and other stakeholders may not be sufficiently timely or accurate, any or all of which could further increase the costs and consequences of a cybersecurity incident. Moreover, as a public company subject to Exchange Act reporting requirements, we are required to publicly disclose certain information about a material cybersecurity event, including the impact or reasonably likely impact. Disclosure may be required before the incident has been resolved or fully investigated. As with the determination of materiality of any other type of event, the determination regarding the materiality of any particular cybersecurity incident or series of related incidents entails a facts-and-circumstances test that takes a number of quantitative and qualitative factors into account. As a result, our management may determine that certain cybersecurity incidents are immaterial and not subject to disclosure under applicable cybersecurity regulations. For example, depending on the particular facts and circumstances, our management may reach such a determination if, among other things, the incident (or a series of related incidents) does not substantially disrupt our ability to operate normally, or deliver our products and services to our clients and the market on a timely basis, or result in the loss or compromise of a significant amount of data or potentially significant expenses or liabilities. As a result, investors should not assume that the absence of disclosure under the new regulations means that our defenses have been successful in preventing and defending every cyberattack directed at us or our third-party service providers.

In addition, we rely on a variety of measures to protect our intellectual property and proprietary information, including copyrights, trademarks, patents and controls on access and distribution. These measures may not prevent misappropriation or infringement of our intellectual property or proprietary information and a resulting loss of competitive advantage. Furthermore, if a third party were to assert a claim of infringement or misappropriation of its proprietary rights, obtained through patents or otherwise, against us, we could be required to spend a significant amount of resources to defend such claims, develop alternative methods of operations, pay substantial money damages, obtain a license from the third party or possibly stop providing one or more products or services. In addition, we conduct business in various jurisdictions that may not have comparable levels of protection for intellectual property and proprietary information as the U.S. The protection afforded in those jurisdictions may be less established and/or predictable. As a result, there may also be heightened risks associated with the potential theft of data, proprietary information, technology and intellectual property in those jurisdictions by domestic or foreign actors, including private parties and those affiliated with or controlled by state actors. Any theft of data, proprietary information, technology or intellectual property may negatively impact our operations and reputation, including disrupting our business activities in those jurisdictions.

We are also subject to laws and regulations relating to the protection and privacy of the information of clients, employees and others, and any failure to comply with these laws and regulations could expose us to liability, increased regulatory oversight and/or reputational damage.

The development and use of artificial intelligence present risks and challenges that may adversely impact our business.

The use and development of artificial intelligence by us, our third-party vendors, clients, counterparties and other market participants in certain business processes, models, including generative artificial intelligence models, services or products may expose us to risks and potential liabilities. These risks may occur as a result of enhanced governmental or regulatory scrutiny, litigation, ethical concerns, confidentiality or other security risks, intellectual property concerns over data rights and protection, heightened susceptibility to cyberattacks, increased frequency and severity of cyberattacks, inaccurate or biased algorithms or underlying datasets, misuse or misappropriation as well as other factors that could adversely affect our business, reputation and financial results. In addition, poor implementation of artificial intelligence, by us or our third-party providers, could subject us to additional risks that we cannot adequately predict or mitigate.

The failure to strategically embrace the potential of artificial intelligence may result in a competitive disadvantage for us. Although we are incorporating artificial intelligence technologies into some of our products, services and processes, if we cannot offer new artificial intelligence-facilitated technologies as quickly as our competitors, if our competitors develop more cost-effective solutions or other product offerings, or if we are not able to source components, such as artificial intelligence chips due to a supply chain shortage amid rising geopolitical uncertainty, we could experience a material adverse effect on our operating results, customer relationships and growth opportunities.

Furthermore, the use or adoption of artificial intelligence into our products or services may result in exposure to claims by third parties of copyright infringement or other intellectual property misappropriation, which may require us to pay compensation or license fees to third parties. The evolving legal, regulatory and compliance framework for artificial intelligence both in the U.S. and internationally may also impact our ability to protect our own data and intellectual property against infringing use and could require changes in our implementation of artificial intelligence technology and increase our compliance costs and the risk of non-compliance. Additionally, we may not be able to control how third-party artificial intelligence that we choose to use are developed or maintained, or how data we input into such tools are used or disclosed, even where we have sought protections with respect to these matters.

We are subject to extensive government rulemaking, policies, regulation and supervision that impact our operations. Changes to and introduction of new rules and regulations have compelled, and in the

future may compel, us to change how we manage our businesses, which could have a material adverse effect on our business, financial condition and results of operations.

As a large, internationally active financial services company, we operate in a highly regulated environment, and are subject to a comprehensive statutory and regulatory regime affecting all aspects of our business and operations, including oversight by governmental agencies both inside and outside the U.S. Regulations and related regulatory guidance and supervisory oversight impact how we analyze certain business opportunities, our capital and liquidity requirements, the revenue profile of certain of our core activities, the products and services we provide, how we manage our balance sheet, how we return capital to shareholders, how we monitor and manage risk and how we promote a sound governance and control environment. Any changes to the regulatory frameworks and environment in which we operate, including changes to interpretation of existing and future laws, rules and regulations, and the significant management attention and resources necessary to address those changes could materially adversely affect our business, financial condition and results of operations and have other negative consequences.

In the future, we could become subject to additional laws, rules and regulations, including related to the safekeeping of client assets, cybersecurity and data protection, digital assets, artificial intelligence and other emerging technologies, climate risk management and sustainability-related governance and reporting, including additional disclosure requirements with respect to sustainability-related goals, investment strategies, risk management and emissions. In addition, certain regulatory initiatives within and outside of the U.S. may overlap and/or conflict with each other, which could subject us to additional compliance costs and regulatory risk. This reflects the nature of developments relating to cybersecurity, digital assets, artificial intelligence and climate regulation, including the increased and ever shifting focus globally by regulators and other governmental authorities on these topics and the relatively uncertain, distinct and novel nature of the associated principles.

The evolving regulatory environment and uncertainty about the timing and scope of future regulations may contribute to decisions we may make to suspend, reduce or withdraw from existing businesses, activities or initiatives, which may result in potential lost revenue or significant restructuring or related costs or exposures. We also face the risk of becoming subject to new or more stringent requirements in connection with the introduction of new regulations or modification of existing regulations, which could require us to hold more capital or liquidity, limit our ability to make distributions or have other adverse effects on our businesses or profitability. In addition, regulatory responses in connection with severe market downturns or unforeseen stress events may lead to new rules and regulations, all of which may increase our operational costs and alter or disrupt our planned future strategies and actions. We are also exposed to the risk of a special assessment, including under the FDI Act, in the event of the failure of a bank or non-bank financial institution, which has in the past adversely affected, and may in the future adversely affect, our results of operations.

The monetary, tax and other policies of various governments, agencies and regulatory authorities both in the U.S. and globally have a significant impact on interest rates, currencies, commodity pricing, the imposition of tariffs, counter tariffs or other limitations on international trade and travel, and overall financial market performance, which can impact our business, results of operations and capital. Changes in these policies are beyond our control and can be difficult to predict and we cannot determine the ultimate effect that any such changes would have upon our business, financial condition or results of operations. For example, the outcome of elections in the United States and internationally, and the resulting political administration transition in jurisdictions in which we operate, could result in additional uncertainties in the regulatory and economic landscape. Legal or regulatory changes affecting access to financial markets can also adversely affect us.

The regulatory and supervisory focus of U.S. banking agencies is primarily intended to protect the safety and soundness of the banking system and federally insured deposits, and not to protect investors in our securities. Regulatory and supervisory standards and expectations both within jurisdictions (in relation to national versus non-national financial services providers) and across jurisdictions may be divergent and otherwise may not be applied in a manner that is consistent and harmonized. Additionally, banking regulators have wide supervisory discretion in the ongoing examination and enforcement of applicable banking statutes, regulations and guidelines, and may restrict our ability to engage in certain activities or acquisitions or may require us to limit our capital distributions, maintain more capital or hold more highly liquid assets.

The U.S. capital rules subject us and our U.S. banking subsidiaries to stringent capital requirements, which could restrict growth, activities or operations, trigger divestiture of assets or operations or limit our ability to return capital to shareholders.

The LCR and NSFR require us to maintain significant holdings of high-quality and generally lower-yielding liquid assets. In calculating the LCR and NSFR, we must also determine which deposits should be considered stable deposits. Stable deposits must meet a series of requirements and typically receive favorable treatment under the LCR and NSFR. We use qualitative and quantitative analysis to identify core stable deposits. It is possible that our LCR and NSFR could fall below applicable regulatory requirements as a consequence of the inherent uncertainties associated with this analysis (including as a result of regulatory changes or additional guidance from our regulators). In addition to facing potential regulatory consequences (which could be significant), we may be required to remedy this shortfall by liquidating assets in our investment portfolio or raising additional debt, each of which could have a material negative impact on our net interest income.

We develop and submit plans for our rapid and orderly resolution in the event of material financial distress or failure to the Federal Reserve and the FDIC. If the agencies determine that our submissions are not credible or would not facilitate an orderly resolution under the U.S. Bankruptcy Code, and we fail to address any such deficiencies in a timely manner, we may be subject to more stringent capital or liquidity requirements or restrictions on our growth, activities or operations, or may be required to divest assets or operations, which could adversely affect our business, financial condition and results of operations.

Our global activities are also subject to extensive regulation and supervision by various non-U.S. regulators, including governments, securities exchanges, central banks and other regulatory bodies in the jurisdictions in which we operate, relating to, among other things, the safeguarding, administration and management of client assets and client funds, regulation of markets, recovery and resolution planning and payments and financial market infrastructure.

Various laws, regulations, rules and directives effective in the jurisdictions in which we operate have an impact on our provision of many products and services. Implementation of, and revisions to, these laws, regulations, rules and directives have affected our operations and risk profile. For example, the key regulatory frameworks impacting our operations in the EU and UK continue to diverge in a number of respects. Further divergence in the nature and scope of these regulations could have an adverse impact on our results of operations and business prospects.

In addition, we are subject in our global operations to rules and regulations relating to corrupt and illegal payments and money laundering, economic sanctions and embargo programs administered by the U.S. Office of Foreign Assets Control and similar bodies and governmental agencies worldwide, and laws relating to doing business with certain individuals, groups and countries, such as the U.S. Foreign Corrupt Practices Act, the Bank Secrecy Act, as amended by the USA PATRIOT Act, the Iran Threat Reduction and Syria Human Rights Act of 2012 and the UK Bribery Act. While we have invested and continue to invest significant resources in training and in compliance monitoring, the geographical diversity of our operations, employees, clients and customers, as well as the vendors and other third parties that we deal with, presents the risk that we may be found in violation of such rules, regulations or laws and any such violation could subject us to significant penalties or adversely affect our reputation. In addition, such rules could impact our ability to engage in business with certain individuals, entities, groups and countries, which could materially adversely affect certain of our businesses and results of operations. Government sanctions and our actions in response to them have had, and in the future could continue to have, a negative impact on our revenue and business. For example, following Russia's invasion of Ukraine in 2022, we ceased new banking business in Russia.

As a result of the implementation of data protection-related laws and regulations, including the EU GDPR, the California Privacy Rights Act of 2020, the China Personal Information Protection Law of 2021 and the New York Department of Financial Services' cybersecurity regulation, we need to allocate additional time and resources to comply with such laws and regulations, and our potential liability for non-compliance and reporting obligations in the case of data breaches has significantly increased. In addition, our businesses are increasingly subject to laws and regulations relating to privacy, surveillance, encryption and data localization in the jurisdictions in which we operate. Compliance with these laws and regulations has required us to change our policies, procedures and technology for information security and segregation of data, which, among other things, makes us more vulnerable to operational failures, and to monetary penalties for breach of such laws and regulations.

Failure to comply with laws, regulations or policies, or meet supervisory expectations, applicable to us and our businesses could result in civil or criminal sanctions or enforcement proceedings by regulatory or governmental authorities, money penalties and reputational damage, which could have a material adverse effect on our business, financial condition and results of operations. If violations of legal or regulatory requirements do occur, they could damage our reputation, increase our legal and compliance costs, including requiring us to devote substantial resources towards remediation efforts, and ultimately adversely impact our results of operations. Laws, regulations or policies currently affecting us and our subsidiaries, supervisory expectations, or regulatory and governmental authorities' interpretation of statutes and regulations may change at any time, which may adversely impact our business and results of operations. See "Supervision and Regulation" for additional information regarding the potential impact of the regulatory environment on our business.

Regulatory or enforcement actions or litigation could materially adversely affect our results of operations or harm our businesses or reputation.

Like many major financial institutions, we and our affiliates are the subject of inquiries, investigations, lawsuits and proceedings by counterparties, clients, other third parties, tax authorities and regulatory and other governmental agencies in the U.S. and abroad, as well as the Department of Justice and state attorneys general. See "Legal proceedings" in Note 22 of the Notes to Consolidated Financial Statements for a discussion of material legal and regulatory proceedings in which we are involved. The number of these investigations and proceedings, as well as the amount of penalties and fines sought, has remained elevated for many firms in the financial services industry, including us. We have in the past been, and may in the future become, subject to heightened regulatory scrutiny, inquiries or investigations, and potentially client-related inquiries or claims, relating to broad, industry-wide concerns that could lead to increased expenses or reputational damage. Regulators and other governmental authorities may also be more likely to pursue enforcement actions, or seek admissions of wrongdoing or guilty pleas, in connection with the resolution of an inquiry or investigation to the extent a firm has previously been subject to other governmental investigations or enforcement actions. The current trend of large settlements by financial institutions with governmental entities may adversely affect the outcomes for other financial institutions in similar actions, especially where governmental officials have announced that the large settlements will be used as the basis or a template for other settlements. Separately, policymakers globally continue to focus on protection of client assets, cybersecurity and data protection, the improper use of electronic communications as well as tax avoidance and evasion.

The complexity of the federal and state regulatory and enforcement regimes in the U.S., coupled with the global scope of our operations and the increased aggressiveness of the tax and regulatory environment worldwide, also means that a single event may give rise to a large number of overlapping investigations and regulatory proceedings, either by multiple federal and state agencies in the U.S. or by multiple regulators and other governmental entities or tax authorities in different jurisdictions. Responding to inquiries, investigations, lawsuits and proceedings, regardless of the ultimate outcome of the matter, is time consuming and expensive and can divert the attention of our senior management from our business. The outcome of such proceedings may be difficult to predict or estimate until late in the proceedings, which may last a number of years.

Certain of our subsidiaries are subject to periodic examination, special inquiries and potential proceedings by regulatory authorities. If compliance failures or other violations are found during an examination, inquiry or proceeding, a regulatory agency could initiate actions and impose sanctions for violations, including, for example, regulatory agreements, remediation undertakings, cease and desist orders, civil monetary penalties or termination of a license and could lead to litigation by investors or clients, any of which could cause our earnings to decline. Further, we are subject to regulatory settlements, orders and feedback that have in the past contained, and in the future may continue to contain, requirements for us to undertake certain remedial measures, including enhancements to existing controls, systems and procedures. Failure to implement these remedial measures in a timely manner could result in further adverse consequences, such as further investigations or proceedings or additional penalties, fines, judgments or additional remedial actions.

Our businesses involve the risk that clients or others may sue us, claiming that we or third parties for whom they say we are responsible have failed to perform under a contract or otherwise failed to carry out a duty perceived to be owed to them, including perceived fiduciary or contractual duties. This risk may be heightened during periods when credit, equity or other financial markets are deteriorating in value or are particularly volatile, when clients or investors are experiencing losses or as public attention on issues such as climate change or other sustainability-related matters intensifies. In some cases, additional third parties that would otherwise be defendants in such cases, or that have agreed to indemnify for such losses, may be bankrupt or in financial distress, or may not honor their obligations. As a publicly held company, we are also subject to the risk of claims under the federal securities laws. Volatility in our stock price increases this risk.

Increasingly, regulators, tax authorities and courts have sought to hold financial institutions liable for the misconduct of their clients where such regulators and courts have determined that the financial institution should have detected that the client was engaged in wrongdoing, even though the financial institution had no direct knowledge of the wrongdoing.

Actions brought against us may result in lawsuits, enforcement actions, injunctions, settlements, damages, fines or penalties, which could have a material adverse effect on our financial condition or results of operations or require changes to our business. Claims for significant monetary damages are asserted in many of these legal actions, while claims for disgorgement, penalties and/or other remedial sanctions may be sought in regulatory matters. These risks may be more acute when operating in foreign jurisdictions or in instances where adversaries to such disputes are government or quasi-government actors otherwise motivated in whole or in part by non-commercial incentives. Although we establish accruals for our litigation and regulatory matters in accordance with applicable accounting guidance, our exposure to such litigation and regulatory matters can be unpredictable, and when those matters proceed to a stage where they present loss contingencies that are both probable and reasonably estimable, there may be a material exposure to loss in excess of any amounts accrued, or in excess of any loss contingencies disclosed as reasonably possible. Such loss contingencies may not be probable and reasonably estimable until the proceedings have progressed significantly, which could take several years and occur close to resolution of the matter.

Each of the risks outlined above could result in increased regulatory supervision and affect our ability to attract and retain customers or maintain access to the capital markets.

Our business may be adversely affected if we are unable to attract, retain, develop and motivate employees.

Our success depends, in large part, on our ability to attract new employees, retain, develop and motivate our existing employees, have a diverse and inclusive workplace and continue to compensate our employees competitively amid heightened regulatory restrictions. Competition for the most skilled employees in most activities in which we engage can be intense, especially in critical strategic locations, and we may not be able to recruit and retain key personnel. In addition, third-party suppliers and service providers on which we rely may face challenges in attracting and retaining their employees, which may have a negative impact on our operations and our resiliency capabilities.

We rely on certain employees with subject matter expertise to assist in the implementation of important initiatives and to support the development of new products and services, including in connection with our technology initiatives. As focus on technology and risk management increases in the financial industry, competition for technologists and risk personnel has intensified, which could constrain our ability to execute on certain of our strategic initiatives.

Our ability to attract, retain and motivate key executives and other highly qualified employees may be negatively impacted by the level and composition of our compensation and benefits programs and by continuous changes to immigration policies and other restrictions applicable to incentive and other compensation programs, including deferral, clawback requirements and other limits on incentive compensation. Some of these restrictions may not apply to some of our competitors and to other institutions with which we compete for talent, in particular as we are more often competing for personnel with financial technology providers and other entities that may not be publicly traded or regulated banking organizations and, in either case, may not have the same limitations on compensation as we do. Furthermore, because a portion of our annual incentive compensation paid to some of our employees is deferred equity that is subject to the value of our common stock, declines in our profitability or outlook could adversely affect the ability to attract and retain employees. Additionally, recent changes to our executive management may create uncertainty, divert resources, be disruptive to our daily operations or impact public or market perception, any of which could result in an adverse impact on our business.

The loss of employees' skills, knowledge of the market and industry experience, and the cost of finding replacements, particularly in competitive labor markets, have led, and may continue to lead, to an increase in labor costs, which may hurt our business. In addition, our current or future approach to in-office and remote-work arrangements may not meet the needs or expectations of our current or prospective employees, may not be perceived as favorable as compared to the arrangements offered by competitors and may not be conducive to a collaborative working environment, which could adversely affect our ability to attract, retain, develop and motivate employees. If we are unable to continue to attract, retain, develop and motivate highly qualified employees, our performance, including our competitive position, could be adversely affected.

A failure or circumvention of our controls, policies and procedures could have a material adverse effect on our business, financial condition, results of operations and reputation.

Management regularly reviews and updates our internal controls, disclosure controls and procedures, and corporate policies and procedures. Any system of controls, however well designed and operated, is based in part on certain assumptions and can provide only reasonable, not absolute, assurances that the objectives of the system will be met. Any failure or circumvention of our controls and procedures or failure to comply with regulations related to controls and procedures could have a material adverse effect on our business, reputation, results of operations and financial condition. Moreover, if we identify material weaknesses in our internal control over financial reporting or are otherwise required to restate our financial statements, we could be required to implement expensive and time-consuming remedial measures and could lose investor confidence in the accuracy and completeness of our financial reports. In addition, there are risks that individuals, either employees or contractors, may circumvent established control mechanisms in order to, for example, exceed exposure, liquidity, trading or investment management limitations, or commit fraud. We are also subject to additional risks that the third parties with which we do business fail to comply with our policies and procedures or fail to notify us promptly of any noncompliance.

Additionally, although we have policies and procedures prohibiting the use of unauthorized personal devices and applications by our employees and contractors, we are subject to inquiries by regulators with respect to recordkeeping obligations and are subject to additional risks related to the use of personal devices and non-approved platforms, applications and tools by our employees or by third parties with which we do business for work-related activities, including risks related to information security and potential violations of record retention, reporting and other requirements. Any failure to comply with such policies and procedures could adversely affect our business.

Market Risk

Weakness and volatility in financial markets and the economy generally may materially adversely affect our business, financial condition and results of operations.

As a financial institution, our Investment Management, Wealth Management, Pershing, Depositary Receipts and Markets, including Securities Lending, businesses are particularly sensitive to economic and market conditions, including in the capital and credit markets. Further, when these markets are volatile or disruptive, we have experienced declines in our fair valued assets, including in our securities portfolio and seed capital, as well as a fair value reduction in the portfolios that we manage that generate investment and wealth management fees. Conditions in the financial markets and the economy generally, both in the U.S. and elsewhere around the world have materially affected, and may continue to affect, our results of operations, including investment management fees.

Foreign exchange trading that we execute for clients generates revenues which are primarily driven by the volume of client transactions and the spread realized on these transactions, both of which are impacted by market volatility and the impact of foreign exchange hedging activities. Our clients' cross-border investing activity could decrease in reaction to economic and political uncertainties, including changes in laws or regulations governing cross-border transactions, such as currency controls or tariffs. Volumes and/or spreads in some of our products tend to benefit from currency volatility and are likely to decrease during times of lower currency volatility. Such revenues also depend on our ability to manage the risk associated with the currency transactions we execute and program pricing.

A variety of factors impact global economies and financial markets, including interest rates and their associated yield curves, commodity pricing, market and political instabilities, volatile debt and equity market values, inflation, expectations relating to inflation trends and monetary policy actions taken by central banks, the strength of the U.S. dollar, geopolitical tensions, the imposition of tariffs, counter tariffs or other limitations on international trade or travel, including changes to international trade and investment policies by the U.S., the EU or other large economies (which could disrupt world trade, lead to trade retaliation and other supply chain complications), unemployment levels, labor strikes, declining business, investor and consumer confidence, recessionary fears, the impact of volatility in digital asset markets on the broader market, governmental budget deficits (including, in the U.S., at the federal, state and municipal levels), partial or full government shutdowns (including concerns about the stability of funding for the U.S. federal government) and contagion risk from possible default on sovereign debt. More specifically, in recent years, the U.S. government has approached its statutory debt limit, which required specific measures taken by the U.S. Treasury Department to prevent the U.S. government's default on its payment obligations. In the future, delays to raise or suspend the federal debt ceiling in similar circumstances could have severe repercussions within the U.S. and to global credit and financial markets and could result in a variety of adverse effects for our business, results of operations, liquidity and financial condition.

Any resulting economic pressure on market participants and lack of confidence in the financial markets may adversely affect our business, financial condition and results of operations. Additionally, global economies and financial markets may be adversely affected by widespread health emergencies, pandemics, natural disasters, climate-related incidents, conflicts and acts of war (such as the conflicts in Ukraine and in the Middle East), terrorism, economic sanctions, other geopolitical events, for example, the economic and geopolitical challenges related to China, including developing tensions between China and Taiwan and/or between China and the U.S., or concerns over the possible escalation, continuation or duration of such events. In particular, we face the following risks in connection with these factors, some of which are discussed at greater length in separate risk factors:

- Geopolitical tension and economic instability in countries around the world can at times increase the demand for low-risk investments, particularly in U.S. Treasuries and the dollar. A "flight to safety" has historically increased our balance sheet, which has negatively impacted, and could continue to negatively impact, our leverage-based regulatory capital measures. A sustained "flight to safety" has historically triggered a decline in trading, capital markets and cross-border activity which would likely decrease our revenue, negatively impacting our results of operations, financial condition and, if sustained in the long term, our business.
- The fees earned by our Investment Management and Wealth Management businesses are higher as assets under management and/or investment performance increase. Those fees are also impacted by the composition of the assets under management, with higher fees for some asset categories as compared to others. Uncertain and volatile capital markets, particularly declines, could result in movements from higher to lower fee products and/or reductions in our assets under

management because of investors' decisions to withdraw assets or from simple declines in the value of assets under management as markets decline.

- Market conditions resulting in lower transaction volumes could have an adverse effect on the revenues and profitability of certain of our businesses such as clearing, settlement, payments and trading.
- The discontinuation of an interest rate benchmark, and the adoption and implementation of alternative reference rates, could adversely impact our business activities and our underlying operations. We utilize reference rates in a variety of agreements and instruments and are responsible for the use of reference rates in a variety of capacities, as well as in our operational functions. We could be subject to claims from customers, counterparties, investors or regulators alleging that we did not correctly discharge our responsibilities in interpreting and implementing contractual interest rate provisions or in selecting new alternative reference rates. These types of claims could subject us to increased legal and operational expenses and could damage our reputation.
- Uncertain and volatile capital markets, particularly declines in equity prices, could reduce the value of our investments in securities, including pension and other post-retirement plan assets and produce downward pressure on our stock price and credit availability without regard to our underlying financial strength.
- Derivative instruments we hold for our own account to hedge and manage our exposure to market risks, including interest rate risk, equity price risk, foreign currency risk and credit risk associated with our products and businesses might not perform as intended or expected, resulting in higher realized losses and unforeseen stresses on liquidity. Our derivatives-based hedging strategies also rely on the performance of counterparties to such derivatives. These counterparties may fail to perform for various reasons resulting in losses on under-collateralized positions.
- The process we use to estimate our expected credit losses is subject to uncertainty in that it requires use of statistical models and difficult, subjective and complex judgments, including forecasts of economic conditions and how these conditions might impair the ability of our borrowers and others to meet their obligations. In uncertain and volatile economic environments, and especially in environments that differ significantly from the historical environments upon which the models we use to estimate our expected credit losses were developed, our ability to estimate our expected credit losses may be impaired, which could adversely affect our overall profitability and results of operations.

For a discussion of our management of market risk, see "Risk Management – Risk Types Overview – Market Risk."

We are dependent on fee-based business for a substantial majority of our revenue and our fee-based revenues could be adversely affected by slowing market activity, weak financial markets, underperformance and/or negative trends in savings rates or in investment preferences.

Our principal commercial focus is on fee-based business, which is distinct from commercial banking institutions that earn most of their revenues from loans and other traditional interest-generating products and services. For the year ended Dec. 31, 2024, 73% of our total revenue was fee-based. Our fee-based businesses include investment and wealth management, custody, corporate trust, depositary receipts, clearing, collateral management and treasury services, which are highly competitive businesses.

Fees for many of our products and services are based on the volume of transactions processed, the market value of assets managed and/or administered, securities lending volume and spreads, and fees for other services rendered. Corporate actions, cross-border investing, global mergers and acquisitions activity, new debt and equity issuances, and secondary trading volumes, among other things, all affect the level of our fee revenue. As the volume of these activities decreases due to low client activity, weak financial markets or otherwise, our fee-based revenues also decrease, which negatively impacts our results of operations.

If our Investment and Wealth Management businesses experience poor investment returns due to weak market conditions or underperformance (relative to competitors or benchmarks), the market values of the portfolios that we manage will be lower (on a relative basis) and our ability to retain existing assets and/or attract new client assets may be impacted. Market and regulatory trends have also resulted in increased demand for lower fee investment and wealth management products and services, and lower performance-fee structures, both of which have impacted and may continue to impact our fee revenue. Some of these dynamics have also negatively impacted fees in our Market and Wealth Services and Securities Services businesses and any of these dynamics may also occur in the future. Significant declines in the volume of capital markets activity would reduce the number of transactions we process and the amount of securities we lend and therefore would also have an adverse effect on our results of operations. Our business may be adversely impacted by decreases in the rate at which individuals invest in mutual funds and other collective funds, unit investment trusts or exchange-traded funds, or contribute to defined contribution plans. Changes in economic and market conditions, including as a result of higher market volatility, inflationary pressures, recessionary conditions or declines in equity values, could result in changes in the investment patterns of our clients or negatively impact the market value of client portfolios, each of which could have a negative impact on our results of operations.

When our investment management revenues decline, interest rates rise or other market factors affect the value of our investment management business, we may have, and in the past have had, declines in the fair value in our Investment Management reporting unit, one of the two reporting units in our Investment and Wealth Management segment. If the fair value of the Investment Management reporting unit declines below its carrying value, we would be required to take, and in the past have taken, an impairment charge.

Levels of and changes in interest rates have impacted, and will in the future continue to impact, our profitability and capital levels, at times adversely.

We earn revenue, known as "net interest income," on the difference between the interest income earned on our interest-earning assets, such as the loans we make and the securities we hold in our investment securities portfolio, and the interest expense incurred on our interest-bearing liabilities, such as deposits and borrowed money. Additionally, we earn net interest income on other activities relating to interest-earning assets and interest-bearing liabilities, such as reverse repurchase agreements and repurchase agreements, respectively. Our net interest margin, which is the result of dividing net interest income by average interest-earning assets, is sensitive to the shape of the yield curve and whether the interest rate paid or received is fixed or moves with changes in market interest rates.

The continued prevalence of higher rates, and any future rate increases, including unexpectedly precipitous increases, could adversely impact our business, financial condition and results of operations, due to:

- higher market volatility, recessionary conditions and declines in equity values, resulting in a decline in the valuation of assets under management;
- reduced liquidity in bonds and fixed-income funds, resulting in lower performance and fees;
- increased number of delinquencies, bankruptcies or defaults and more nonperforming assets and net charge-offs, as borrowers may have more difficulty making higher interest payments;
- higher redemptions from our fixed-income funds or separate accounts, as clients move funds into investments with higher rates of return;
- lower net interest income and net interest margin due to lower non-interest bearing deposit levels, as non-interest bearing deposits leave or shift to interest-bearing deposits;
- declines in deposit levels, resulting in reduced internal and regulatory liquidity buffers and lower revenues;
- reductions in the value of our fixed-income securities held for liquidity purposes;
- further increases in accumulated other comprehensive loss in our shareholders' equity and therefore our tangible common equity due to the impact of rising long-term rates on the available-for-sale securities in our investment portfolio, which would negatively affect our risk-based and leverage based regulatory capital ratios; or
- higher funding cost.

Conversely, a material decline in the short-term rate environment, and/or a flat or inverted yield curve, in the future could adversely impact, and has in the past adversely impacted, our net interest income and results of operations due to:

- compression of our net interest margin, depending on our balance sheet position and the speed and size of the interest rate decline;
- sustained weakness of our spread-based revenues, resulting in continued voluntary waiving of fees on certain money market mutual funds and related distribution fees, in order to prevent the yields on such funds from becoming uneconomic; or
- adverse impacts on the value of our fixed-rate mortgage-backed securities, driven by higher mortgage prepayment speeds.

Our business activities involve investing in interest-bearing assets and incurring interest-bearing liabilities with varying durations. Changes in the direction and levels of interest rates, the relationship between short- and long-term rates and the speed of interest rate changes have in the past impacted, and in the future are expected to continue to impact, our net interest margin, capital ratios and overall financial position. Changes in the direction and level of interest rates may also have adverse impacts on our clients and counterparties, which could adversely impact multiple aspects of our business, including our fee revenue, allowance for credit losses and deposit mix. Although we have policies and procedures in place to assess and mitigate the potential impacts of changes in the direction and level of interest rates, these policies and procedures may not be able to effectively mitigate these risks. If our assumptions about any number of factors used in our interest rate models are incorrect, or if there are unforeseen changes in external environment that are out of our control, it could negatively impact our results of operation and financial position.

A more detailed discussion of the interest rate and market risks we face is contained in "Risk Management – Risk Types Overview – Market Risk."

We have experienced, and may continue to experience, unrealized or realized losses on securities related to volatile and illiquid market conditions, reducing our capital levels and/or earnings.

We maintain an investment securities portfolio of various holdings, types and maturities. At Dec. 31, 2024, approximately 64% of these securities were classified as available-for-sale, which are recorded on our balance sheet at fair value with unrealized gains or losses reported as a component of accumulated other comprehensive income, net of tax. The securities in our held-to-maturity portfolio, recorded on our balance sheet at amortized cost, were approximately 36% of our securities portfolio at Dec. 31, 2024. Our available-for-sale securities portfolio, to the extent unhedged, may result in increased volatility in our accumulated other comprehensive income or earnings relative to a loan portfolio that is accounted for at amortized cost.

Our investment securities portfolio represents a greater proportion of our consolidated total assets (approximately 33% at Dec. 31, 2024), in comparison to many other major U.S. financial institutions due to our custody and trust bank business model. Accordingly, our capital levels and results of operations and financial condition are materially exposed to the risks associated with our investment securities portfolio, including interest rate-related risks.

We reserve for current expected credit losses with respect to our available-for-sale and held-to-maturity securities. Credit losses in excess of our allowance for credit losses would impact our results of operations.

Under the U.S. capital rules, after-tax changes in the fair value of available-for-sale investment securities are included in CET1 capital. Since held-to-maturity securities are not subject to fair-value accounting, changes in the fair value of these instruments (other than expected credit losses) are not similarly included in the determination of CET1 capital. As a result, we may experience increased variability in our CET1 capital relative to those major financial institutions who maintain a lower proportion of their consolidated total assets in an available-for-sale accounting classification.

Generally, the fair value of available-for-sale securities is determined based on market prices available from third-party sources. During periods of market disruption, it may be difficult to value certain of our investment securities if trading becomes less frequent and/or market data becomes less observable. As a result, valuations may include inputs and assumptions that are less observable or require greater estimation and judgment as well as valuation methods which are more complex. These values may not be ultimately realizable in a market transaction, and such values may change very rapidly as market conditions change and valuation assumptions are modified. Decreases in value may have a material adverse effect on our results of operations or financial condition. The estimate of expected credit losses is determined in part by management's assessment of the financial condition and prospects of a particular issuer, projections of future cash flows and recoverability of the particular security. Management's conclusions on such assessments are highly judgmental and include assumptions and projections of future cash flows which may ultimately prove to be incorrect as assumptions, facts and circumstances change. On the other hand, we are limited in the actions we can take related to our held-to-maturity securities absent a significant deterioration in the issuer's creditworthiness. Therefore, we may be constrained in our ability to liquidate a held-to-maturity security that is deteriorating in value. If our determinations change about our intention or ability to not sell available-for-sale securities that have experienced a reduction in fair value below their amortized cost, we could be required to recognize a loss in earnings for the entire difference between fair value and amortized cost.

For information regarding our investment securities portfolio, refer to "Results of Operations – Consolidated balance sheet review – Securities."

Credit Risk

The failure or perceived weakness of any of our significant clients or counterparties, many of whom are major financial institutions or sovereign entities, and our assumption of credit, counterparty and concentration risk, could expose us to credit losses and adversely affect our business.

We have credit exposure to clients and counterparties in many different industries, particularly financial institutions, as a result of trading, clearing and financing, providing custody services, securities lending services or other relationships. We routinely execute transactions with global clients and counterparties in the financial industry as well as sovereigns and other governmental or quasi-governmental entities. Our direct credit exposure consists of extensions of secured and unsecured credit to clients and use of our balance sheet. In addition to traditional credit activities, we also extend intraday credit in order to facilitate our various processing, settlement and intermediation activities. We could be adversely affected by the actions and commercial soundness of organizations to whom we have lent funds, as defaults or non-performance (or even uncertainty concerning such default or non-performance) by one or more of these institutions, or the markets generally, have in the past led to market-wide liquidity problems and could lead to losses or defaults by us or by other institutions (including our counterparties and/or clients) in the future. The consolidation and failures of financial institutions during the 2008 financial crisis increased the concentration of our client and counterparty risk.

As a result of our membership in several industry clearing or settlement exchanges and central counterparty clearinghouses, we may be required to guarantee obligations and liabilities or provide financial support in the event that other members do not honor their obligations or default. These obligations may be limited to members that dealt with the defaulting member or to the amount (or a multiple of the amount) of our contribution to a clearing or settlement exchange guarantee fund, or, in a few cases, the obligation may be unlimited. Additionally, we are exposed to settlement risks, particularly in our payments and foreign exchange activities. Those activities may lead to extensions of credit and consequent losses in the event of a counterparty breach or an operational error, including the failure to provide credit. We are exposed to risk of short-term credit extensions to, or overdrafts by, our clients in connection with the process to facilitate settlement of trades and related foreign exchange activities, particularly when contractual settlement has been agreed with our clients. The occurrence of overdrafts at peak volatility could create significant credit exposure to our clients depending upon the value of such clients' collateral pledged to us at the time. This risk may be heightened during periods of market volatility, during which collateral values may decrease suddenly.

When we provide credit to clients in connection with providing cash management, clearing, custodial and other services, we are exposed to potential loss if the client experiences credit difficulties. Higher market volatility, inflationary pressures, recessionary conditions or declines in equity values could negatively affect the creditworthiness of our clients, which, in turn, would increase our credit risk. We are also generally not able to net exposures across affiliated clients or counterparties and may not be able to net exposures to the same legal entity across multiple products. In addition, we may incur a loss in relation to one entity or product even though our exposure to one of the entity's affiliates is over-collateralized. Moreover, not all of our client or counterparty credit exposure is secured.

In our agency securities lending program, we act as agent on behalf of our clients, the lenders of securities, in securities lending transactions with our clients' counterparties (including broker-dealers), acting as borrowers, wherein securities are lent by our clients and the securities loans are collateralized by cash or securities posted by such counterparties. Typically, in the case of cash collateral, our clients authorize us as their agent to invest the cash collateral in approved investments pursuant to each client's investment guidelines and instructions. Such approved investments may include reverse repurchase transactions with repo counterparties. In many cases, in the securities loans we enter into on behalf of our clients, we agree to replace the client's loaned securities that the borrower fails to return due to certain defaults by the borrower, mainly the borrower's insolvency. Therefore, in situations where the market value of the loaned securities that the borrower fails to return to a client (which loaned securities we are obligated to replace and return to the client) exceeds the amount of proceeds resulting from the liquidation of the client's approved investments and cash and non-cash collateral of such client, we may be responsible for the shortfall amount necessary to purchase any replacement securities. In addition, in certain cases, we may also assume the risk of loss related to approved investments that are reverse repurchase transactions as described above. In these two scenarios, we, rather than our clients, are exposed to the risks of the defaulting counterparty in the securities lending transactions and, where applicable, in the reverse repurchase transactions. For further discussion on our securities lending indemnifications, see "Commitments and contingent liabilities – Off-balance sheet arrangements" in Note 22 of the Notes to Consolidated Financial Statements.

From time to time, we assume concentrated credit risk at the individual obligor, counterparty or group level, potentially exposing us to a single market or political event or a correlated set of events. For example, we may be exposed to defaults by companies located in countries with deteriorating economic conditions or by companies in certain industries. Our commercial real estate portfolio also exposes us to concentrated credit risk, including to the New York metro market. Such concentrations may be material. Our counterparty exposures change daily, and the counterparties or groups of related counterparties to which our risk exposure is material also vary during any reported period; however, our largest exposures tend to be to other financial institutions, clearing organizations and governmental entities, both inside and outside the U.S. Concentration of counterparty exposure presents significant risks to us and to our clients because the failure or perceived weakness of our counterparties (or in some cases of our clients' counterparties) has the potential to expose us to risk of financial loss. Changes in market perception of the financial strength of particular financial institutions or sovereign issuers can occur rapidly, are often based on a variety of factors and are difficult to predict.

Although our overall business is subject to these interdependencies, several of our businesses are particularly sensitive to them, including our currency and other trading activities, our securities lending and securities finance businesses and our investment management business. If we experience any of the losses described above, it may materially and adversely affect our results of operations.

We are also subject to the risk that our contractual rights against third parties may not be enforceable in all circumstances. In addition, deterioration in the credit quality of third parties whose securities or obligations we hold, including a deterioration in the value of collateral posted by third parties to secure their obligations to us under derivatives contracts and other agreements, could result in losses and/or adversely affect our ability to rehypothecate or otherwise use those securities or obligations for liquidity purposes. Disputes with clients and counterparties as to the valuation of collateral can significantly increase in times of market stress and illiquidity. In addition, disruptions in the liquidity or transparency of the financial markets may result in our inability to sell, syndicate or realize the value of our positions, thereby leading to increased concentrations. An inability to reduce our positions may not only increase the market and credit risks associated with such positions but may also increase the level of RWA on our balance sheet, thereby increasing our capital requirements and funding costs, all of which could adversely affect the operations and profitability of our businesses.

Under U.S. regulatory restrictions on credit exposure, which include a broadening of the measure of credit exposure, we are required to limit our exposures to specific obligors or groups, including financial institutions. These regulatory credit exposure restrictions may adversely affect our businesses and may require us to modify our operating models or the policies and practices we use.

Further, we maintain sub-custodian relationships in certain jurisdictions, including emerging and other underdeveloped markets. Our use of sub-custodians exposes us to operational, reputational and regulatory risk, as we are dependent upon such sub-custodians to perform certain services to clients in those markets. The risks of maintaining custody services in such markets are amplified due to evolving regulatory and sanctions requirements, which may increase our financial exposures, in the event those sub-custodians, or we, are unable to return, transfer or reinvest clients' assets. Under certain regulatory regimes, we may be held responsible for resulting losses suffered by our clients, and we may agree to similar or more stringent standards with clients that are not subject to such regulations. Where we have client deposit liabilities related to non-U.S. currencies in jurisdictions where we maintain sub-custodian relationships, we generally maintain a corresponding amount of cash on deposit with the relevant sub-custodian or clearing agency, which increases our credit exposure to that entity and can accumulate over time based upon distributions on, or other activities related to, our clients' assets. If the sub-custodian or clearing agency were to become insolvent in circumstances not involving expropriation of assets or other circumstances that may excuse performance under relevant client agreements, the risk of loss on such cash on deposit could be ours rather than the clients'.

We could incur losses if our allowance for credit losses, including loan and lending-related commitment reserves, is inadequate or if our expectations of future economic conditions deteriorate.

When we loan money, commit to loan money or provide credit or enter into another contract with a counterparty, we incur credit risk, or the risk of loss if our borrowers do not repay their loans or our counterparties fail to perform according to the terms of their agreements. Our profitability is adversely affected when our borrowers default, in whole or in part, on their loan obligations to us or when there is a significant deterioration in the credit quality of our loan portfolio. We reserve for potential future credit losses by recording a provision for credit losses through earnings. The allowance for loan losses and allowance for lending-related commitments represents management's estimate of current expected credit losses over the lifetime of the related credit exposure taking into account relevant information about past events, current conditions and reasonable and supportable forecasts of future economic conditions that affect the collectability of our loans and lending commitments. We use a quantitative methodology and qualitative framework for determining the allowance for loan losses and the allowance for lending-related commitments. Within this qualitative framework, management applies judgment when assessing internal risk factors and environmental factors to compute an additional allowance for each component of the loan portfolio. As is the case with any such judgments, we could fail to identify these factors or accurately estimate their impact. We cannot provide any assurance as to whether charge-offs related to our credit exposure may occur in the future. Current and future market and economic developments may increase default and delinquency rates and negatively impact the quality of our credit portfolio, which may impact our charge-offs. Although our estimates contemplate current conditions and how we expect them to change over the life of the portfolio, it is reasonably possible that actual conditions could be worse than anticipated in those estimates, which could materially affect our results of operations and financial condition. See "Results of Operations – Critical accounting estimates."

Capital and Liquidity Risk

Our business, financial condition and results of operations could be adversely affected if we do not effectively manage our liquidity.

Our operating model and overall strategy rely heavily on our access to financial market utilities and global capital markets. Without such access, it would be difficult to process payments and settle and clear transactions on behalf of our clients. Deterioration in our liquidity position, whether actual or perceived, can impact our market access by affecting participants' willingness to transact with us. Changes to our liquidity can be caused by various factors, such as funding mismatches, a failure in our asset/liability management, market constraints disabling asset to cash conversion, inability to issue debt on terms acceptable to us, run-offs of core deposits and contingent liquidity events such as additional collateral posting. Changes in economic conditions or exposure to credit, market, operational, legal and reputational risks can also affect our liquidity.

Our business is dependent in part on our ability to meet our cash and collateral obligations at a reasonable cost for both expected and unexpected cash flows. We also must manage liquidity risks on an intraday basis, in a manner designed to ensure that we can access required funds during the business day to make payments or settle immediate obligations, often in real time. We receive client deposits through a variety of investment management and investment servicing businesses and we rely on those deposits as a low-cost and stable source of funding. Our ability to continue to receive those deposits, and other short-term funding sources, is subject to variability based on a number of factors, including volume and volatility in the global securities markets, the relative interest rates that we are prepared to pay for those deposits and the perception of the safety of those deposits or other short-term obligations relative to alternative short-term investments available to our clients. We could lose deposits if we suffer a significant decline in the level of our business activity, our credit ratings are materially downgraded, interest rates continue to rise or remain at elevated levels, or if we or our peers become subject to significant negative press or significant regulatory action or litigation, among other reasons. Our liquidity could also be adversely affected by customers' withdrawal of deposits in response to volatility and disruptions in the financial markets or a stress event. Such stress events may impact certain industries in which our depositors may be concentrated or correlated and may consequently disproportionally affect our liquidity. Further, deposit outflows could increase if our clients and customers with uninsured deposits look for alternative placements for their funds amidst market and financial industry volatility. A perceived loss of confidence in BNY as a depository institution may be additionally exacerbated by the speed and pervasiveness with which information, which may be inaccurate or incomplete, is disseminated through social media or other internet forums. If we were to lose a significant amount of deposits, we may need to replace such funding with more expensive funding and/or reduce assets, which would reduce our net interest income.

The degree of client demand for short-term credit tends to increase during periods of market turbulence. For example, investors in mutual funds for which we act as custodian may engage in significant redemption activity due to adverse market or economic conditions. We may then extend intraday credit to our fund clients in order to facilitate their ability to pay such redemptions. In addition, during periods of market turbulence, draws under committed revolving credit facilities that we provide to our institutional clients may increase, and have in the past increased, substantially. Such client demand may negatively impact our leverage-based capital ratios, and in times of sustained market volatility, may result in significant leverage-based ratio declines.

In addition, our access to the debt and equity capital markets and credit markets is a significant source of liquidity. Events or circumstances often outside of our control, such as market disruptions, lack of liquidity in the markets, government fiscal and monetary policies, uncertainty over the U.S. government debt ceiling or loss of confidence by securities purchasers or counterparties in us or in the funds markets, could limit our access to capital markets and credit markets, increase our cost of borrowing, adversely affect our liquidity or impair our ability to execute our business plan. In addition, clearing organizations, regulators, clients and financial institutions with which we interact may exercise the right to require additional collateral based on market perceptions or market conditions, which could further impair our access to and cost of funding. Market perception of sovereign default risks can also lead to inefficient money markets and capital markets, which could further impact our funding availability and cost. Conversely, excess liquidity inflows could increase interest expense, limit our financial flexibility and increase the size of our total assets in a manner that could have a negative impact on our capital ratios.

Under the U.S. capital rules, the size of the capital surcharge that applies to a U.S. G-SIB is based in part on its reliance on short-term wholesale funding, including certain types of deposit funding, which may increase the cost of such funding. Furthermore, certain non-U.S. authorities require large banks to incorporate a separate subsidiary in countries in which they operate and to maintain independent capital and liquidity at foreign subsidiaries. These requirements could hinder our ability to efficiently manage our funding and liquidity in a centralized manner, requiring us to hold more capital and liquidity overall.

In addition, our cost of funding could be affected by actions that we may take in order to satisfy applicable LCR and NSFR requirements, to lower our G-SIB score, to satisfy the amount of eligible long-term debt outstanding under the TLAC rule, to address obligations under our resolution plan or to satisfy regulatory requirements in non-U.S. jurisdictions relating to the pre-positioning of liquidity in certain subsidiaries. Further, the regulatory or stress test liquidity value associated with the securities we hold subject to a held-to-maturity accounting designation could be reduced in the future through regulatory or supervisory action, exposing us to relatively greater capital ratio volatility attributable to interest rate movements to the extent we designate a relatively larger percentage of our securities portfolio as available-for-sale going forward in response to such regulatory or supervisory changes.

If we are unable to raise funds using the methods described above, we would likely need to finance, reduce or liquidate unencumbered assets, such as our central bank deposits and bank placements, or securities in our investment portfolio to meet funding needs. We may be unable to sell some of our assets, or we may have to sell assets at a discount from market value, either of which could adversely affect our business, financial condition and results of operations. Further, our ability to sell assets may be impaired if other market participants are seeking to sell similar assets at the same time, which could occur in a liquidity or other market crisis. Additionally, if we experience cash flow mismatches, deposit run-off or market constraints resulting from our inability to convert assets to cash or access capital markets, our liquidity could be severely impacted. During periods of market uncertainty, our level of client deposits has in recent years tended to increase; however, because these deposits have high potential run-off rates, we have historically deposited these so-called excess deposits with central banks and in other highly liquid and low-yielding instruments.

If we are unable to continue to fund our assets through deposits or access capital markets on favorable terms or if we suffer an increase in our borrowing costs or otherwise fail to manage our liquidity effectively, our liquidity, net interest margin, financial results and condition may be materially adversely affected. In certain cases, this could require us to raise additional capital through the issuance of preferred or common stock, which could dilute the ownership of existing stockholders and/or reduce common stock repurchases or our common stock dividend, to preserve capital. For a further discussion of our liquidity, see “Results of Operations – Liquidity and dividends.”

Failure to satisfy regulatory standards, including “well capitalized” and “well managed” status or capital adequacy and liquidity rules more generally, could result in limitations on our activities and adversely affect our business and financial condition.

Under U.S. and international regulatory capital adequacy rules and other regulatory requirements, we and our subsidiary banks must meet or exceed thresholds that include quantitative measures of assets, liabilities and certain off-balance sheet items, subject to qualitative judgments by regulators about components, risk weightings and other factors. As discussed in “Supervision and Regulation,” BNY is registered with the Federal Reserve as a BHC and an FHC. An FHC’s ability to maintain its status as an FHC is dependent upon a number of factors, including its U.S. bank subsidiaries qualifying on an ongoing basis as “well capitalized” and “well managed” under the banking agencies’ prompt corrective action regulations as well as applicable Federal Reserve regulations. Failure by an FHC or one of its U.S. bank subsidiaries to qualify as “well capitalized” and “well managed,” if unremedied over a period, would cause it to lose its status as an FHC and could affect the confidence of clients in it, compromising its competitive position. Additionally, an FHC that does not continue to meet all the requirements for FHC status could lose the ability to undertake new activities or make acquisitions that are not generally permissible without FHC status or to continue such activities.

The failure by one of our U.S. bank subsidiaries to maintain its status as “well capitalized” could lead to, among other things, higher FDIC assessments and could have reputational and associated business consequences.

If we or our subsidiary banks fail to meet U.S. and international minimum capital rules and other regulatory requirements, we may not be able to deploy capital in the operation of our business or distribute capital to stockholders, which may adversely affect our business.

Failure to meet any current or future capital or liquidity requirements, including those imposed by the U.S. capital rules, the LCR or the NSFR, or by regulators in implementing other portions of the Basel III framework, could materially adversely affect our financial condition. Compliance with U.S. and international regulatory capital and liquidity requirements may impact our ability to return capital to shareholders and may impact our operations by requiring us to liquidate assets, increase borrowings, issue additional equity or other securities, or cease or alter certain operations, which may adversely affect our results of operations.

Finally, our regulatory capital ratios, liquidity metrics and related components are based on our current interpretation, expectations and understanding of the applicable rules and are subject to, among other things, ongoing regulatory review, regulatory approval of certain statistical models, additional refinements, modifications or enhancements (whether required or otherwise) to our models and further implementation guidance. Any modifications resulting from these ongoing reviews, the adoption of new or heightened prudential regulatory requirements, or the continued implementation of the U.S. capital rules (such as proposed revisions to implement and finalize the Basel III reforms), the LCR, the NSFR, the resolution planning process and related amendments, could result in changes in our RWAs, capital components, liquidity inflows and outflows, HQLA, or other elements involved in the calculation of these measures, which could impact regulatory capital and liquidity ratios. Further, because operational risk is currently measured based not only upon our historical operational loss experience but also upon ongoing events in the banking industry generally, our level of operational RWAs could significantly increase or otherwise remain elevated and may potentially be subject to significant volatility, negatively impacting our capital ratios. The uncertainty caused by these factors could ultimately impact our ability to meet our goals, supervisory requirements and regulatory standards.

The Parent is a non-operating holding company and, as a result, is dependent on dividends from its subsidiaries and extensions of credit from its IHC to meet its obligations, including with respect to its securities, and to provide funds for share repurchases, payment of income taxes and payment of dividends to its stockholders.

The Parent is a non-operating holding company, whose principal assets and sources of income are its principal U.S. bank subsidiaries—The Bank of New York Mellon and BNY Mellon, N.A.—and its other subsidiaries, including Pershing and the IHC. The Parent is a legal entity separate and distinct from its banks, the IHC and other subsidiaries. Therefore, the Parent primarily relies on dividends, interest, distributions and other payments from its subsidiaries, including extensions of credit from the IHC, to meet its payment obligations, including with respect to its securities, and to provide funds for share repurchases, the payment of income taxes and payment of common and preferred dividends to its stockholders, to the extent declared by the Board of Directors.

There are various limitations on the extent to which our banks and other subsidiaries can finance or otherwise supply funds to the Parent (by dividend or otherwise) and certain of our affiliates. Each of these restrictions can reduce the amount of funds available to meet the Parent's obligations. Many of our subsidiaries, including our bank subsidiaries, are subject to laws and regulations that restrict dividend payments or authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to the Parent or other subsidiaries. In addition, our bank subsidiaries would not be permitted to distribute a dividend if doing so would constitute an unsafe and unsound practice or if the payment would reduce their capital to an inadequate level. Our subsidiaries may also choose to restrict dividend payments to the Parent in order to increase their own capital or liquidity levels. Our bank subsidiaries are also subject to restrictions on their ability to lend to or transact with non-bank affiliates, minimum regulatory capital and liquidity requirements, and restrictions on their ability to use funds deposited with them in bank or brokerage accounts to fund their businesses. See "Supervision and Regulation" and "Results of Operations – Liquidity and dividends," as well as Note 19 of the Notes to Consolidated Financial Statements. Further, we evaluate and manage liquidity on a legal entity basis, which may place legal and other limitations on our ability to utilize liquidity from one legal entity to satisfy the liquidity requirements of another, including the Parent.

There are also limitations specific to the IHC's ability to make distributions or extend credit to the Parent. The IHC is not permitted to make distributions to the Parent if certain key capital and liquidity indicators are breached, and if the resolution of the Parent is imminent, the committed lines of credit provided by the IHC to the Parent will automatically terminate, with all outstanding amounts becoming due.

Because the Parent is a holding company, its rights and the rights of its creditors, including the holders of its securities, to a share of the assets of any subsidiary upon the liquidation or recapitalization of the subsidiary, will be subject to the prior claims of the subsidiary's creditors (including, in the case of our banking subsidiaries, their depositors) except to the extent that the Parent may itself be a creditor with recognized claims against the subsidiary. The rights of holders of securities issued by the Parent to benefit from those distributions will also be junior to those prior claims. Consequently, securities issued by the Parent will be effectively subordinated to all existing and future liabilities of our subsidiaries.

Our ability to return capital to shareholders is subject to the discretion of our Board of Directors and may be limited by U.S. banking laws and regulations, including those governing capital and capital planning, applicable provisions of Delaware law and our failure to pay full and timely dividends on our preferred stock.

Holders of our common and preferred stock are only entitled to receive such dividends or other distributions of capital as our Board of Directors may declare out of funds legally available for such payments. Although we have historically declared cash dividends on our common and preferred stock, we are not required to do so. In addition to the Board of Directors' approval, our ability to take certain actions, including our ability to declare dividends or repurchase our common stock, may be subject to the buffers under the Federal Reserve's capital and TLAC rules. The buffers under the capital rules are affected by the results of CCAR. Through the CCAR process, we may be, and have in the past been, required to resubmit our capital plan in the event of a deterioration in the general financial markets or economy or changes in our risk profile (including a material change in business strategy or risk exposure), financial condition or corporate structure. The Federal Reserve is also able, outside the CCAR process, to restrict our ability to make capital distributions and subject us to other supervisory or enforcement actions.

A Federal Reserve determination that our capital planning processes were weak or otherwise fail to meet supervisory expectations could have a variety of adverse consequences, including, without limitation, ratings downgrades, ongoing heightened supervisory scrutiny, expenses associated with remediation activities and potentially an enforcement action.

A failure to increase dividends along with our competitors, or any reduction of, or elimination of, our common stock dividend would likely adversely affect the market price of our common stock, our return on equity and market perceptions of BNY.

Our ability to declare or pay dividends on, or purchase, redeem or otherwise acquire, shares of our common stock will be prohibited, subject to certain exceptions, in the event that we do not declare and pay in full dividends for the then-current dividend period (in the case of dividends) or most recently completed dividend period (in the case of repurchases) of our Series A preferred stock or the last preceding dividend period (in the case of dividends) or most recently completed dividend period (in the case of repurchases) of our Series F, Series G, Series H or Series I preferred stock.

In addition, regulatory capital rules that are or will be applicable to us, including the U.S. capital rules risk-based capital requirements, the SLR, the stress capital buffer, the enhanced SLR, the TLAC rule and the U.S. G-SIB surcharge, may limit or otherwise restrict how we utilize our capital, including common stock dividends and stock repurchases, and may require us to increase or alter the mix of our outstanding regulatory capital instruments. Changes in the composition of our balance sheet, including as a result of changing economic conditions and market values, may further require us to increase or alter the mix of our outstanding regulatory capital, which in turn could impact our ability to return capital to shareholders.

Any requirement to increase our regulatory capital ratios or alter the composition of our capital could require us to liquidate assets or otherwise change our business and/or investment plans, which may negatively affect our financial results. Further, any requirement to maintain higher levels of capital may constrain our ability to return capital to shareholders either in the form of common stock dividends or stock repurchases.

Any material reduction in our credit ratings or the credit ratings of our principal bank subsidiaries, The Bank of New York Mellon, BNY Mellon, N.A. or The Bank of New York Mellon SA/NV, could increase the cost of funding and borrowing to us and our rated subsidiaries and have a material adverse effect on our business, financial condition and results of operations and on the value of the securities we issue.

Our debt and preferred stock and the debt and deposits of our principal bank subsidiaries, The Bank of New York Mellon, BNY Mellon, N.A. and The Bank of New York Mellon SA/NV, are currently rated investment grade by the major rating agencies. These rating agencies regularly evaluate us and our rated subsidiaries. Their credit ratings are based on a number of factors, including our financial strength, performance, prospects and operations, as well as factors not entirely within our control, including conditions affecting the financial services industry generally and the U.S. government. Rating agencies employ different models and formulas to assess the financial strength of a rated company, and from time to time rating agencies have, in their discretion, altered these models. Changes to rating agency models, general economic conditions, regulatory developments or other circumstances outside our control could negatively impact a rating agency's judgment of the rating or outlook it assigns to us or our rated subsidiaries. As a result, we or our rated subsidiaries may not be able to maintain our respective credit ratings or outlook on our securities. For further discussion of our and our principal bank subsidiaries' credit ratings, see "Results of Operations – Liquidity and dividends."

A material reduction in our credit ratings or the credit ratings of our rated subsidiaries, which can occur at any time without notice, could have a material adverse effect on our access to credit markets, the related cost of funding and borrowing, our credit spreads, our liquidity and certain trading revenues, particularly in those businesses where counterparty creditworthiness is critical. In addition, in connection with certain over-the-counter derivatives contracts and other trading agreements, counterparties may require us or our rated subsidiaries to provide additional collateral or to terminate these contracts and agreements and collateral financing arrangements in the event of a credit ratings downgrade below certain ratings levels, which could impair our liquidity. A downgrade by any one rating agency, depending on the agency's relative ratings of the entity at the time of the downgrade, may have an impact comparable to the impact of a downgrade by all rating agencies. If a rating agency downgrade or a review for downgrade were to occur during broader market instability, our options for responding to events may be more limited and more expensive, possibly significantly. An increase in the costs of our funding and borrowing, or an impairment of our liquidity, could have a material adverse effect on our results of operations and financial condition. A material reduction in our credit ratings also could decrease the number of investors and counterparties willing or permitted to do business with or lend to us and adversely affect the value of the securities we have issued or may issue in the future.

We cannot predict what actions rating agencies may take, or what actions we may elect or be required to take in response thereto, which may adversely affect us. For further discussion on the impact of a credit rating downgrade, see "Disclosure of contingent features in OTC derivative instruments" in Note 23 of the Notes to Consolidated Financial Statements.

The application of our Title I preferred resolution strategy or resolution under the Title II orderly liquidation authority could adversely affect the Parent's liquidity and financial condition and the Parent's security holders.

In 2017, in connection with our single point of entry resolution strategy under Title I of the Dodd-Frank Act, the Parent entered into a binding support agreement with certain key subsidiaries to facilitate the provision of capital and liquidity resources to them in the event of material financial distress or failure. The support agreement requires the Parent to transfer cash and other liquid financial assets to the IHC on an ongoing basis, subject to certain amounts retained by the Parent to meet its near-term cash needs, in exchange for unsecured subordinated funding notes issued by the IHC as well as a committed line of credit to the Parent to service its near-term obligations. The Parent's and the IHC's obligations under the support agreement are secured.

If our projected liquidity resources deteriorate so severely that resolution of the Parent becomes imminent, the committed line of credit the IHC provided to the Parent will automatically terminate, with all amounts outstanding becoming due and payable, and the support agreement will require the Parent to transfer most of its remaining assets (other than stock in subsidiaries and a cash reserve to fund bankruptcy expenses) to the IHC. As a result, during a period of severe financial stress, the Parent could become unable to meet its debt and payment obligations (including with respect to its securities), causing the Parent to seek protection under bankruptcy laws earlier than it otherwise would have.

If the Parent were to become subject to a bankruptcy proceeding and our single point of entry strategy is successful, our material entities will not be subject to insolvency proceedings and their creditors would not be expected to suffer losses, while the Parent's security holders, including unsecured debt holders, could face significant losses, potentially including the loss of their entire investment. The single point of entry strategy, in which the Parent would be the only legal entity to enter resolution proceedings, may result in greater risk of loss to holders of the Parent's unsecured senior debt securities and certain other securities than would be the case under a different resolution strategy.

In addition, Title II of the Dodd-Frank Act established an orderly liquidation process in the event of the failure of a large systemically important financial institution, such as BNY, in order to avoid or mitigate serious adverse effects on the U.S. financial system. Specifically, if the Parent is in default or danger of default and certain specified conditions are met, the FDIC may be appointed receiver under the orderly liquidation authority, and we would be resolved under that authority instead of the U.S. Bankruptcy Code.

U.S. supervisors have indicated that a single point of entry strategy may be a desirable strategy to resolve a large financial institution such as BNY under Title II in a manner that would, similar to our preferred strategy under our Title I resolution plan, impose losses on shareholders, unsecured debt holders and other unsecured creditors of the Parent, while permitting the holding company's subsidiaries to continue to operate and remain solvent. Under such a strategy, assuming the Parent entered resolution proceedings and its subsidiaries remained solvent, losses at the subsidiary level would be absorbed by the Parent and ultimately borne by the Parent's security holders (including holders of the Parent's unsecured debt securities), while third-party creditors of the Parent's subsidiaries would not be expected to suffer losses. Accordingly, the Parent's security holders (including holders of unsecured debt securities and other unsecured creditors) could face losses in excess of what otherwise would have been the case.

Strategic Risk

New lines of business, new products and services or transformational or strategic project initiatives subject us to new or additional risks, and the failure to implement these initiatives could affect our results of operations.

From time to time, we have launched new lines of business, offered new products and services within existing lines of business or undertaken transformational or strategic projects. There are substantial risks and uncertainties associated with these efforts, including with respect to projects that involve the adoption of new and evolving technologies such as artificial intelligence. We invest significant time and resources in developing and marketing new lines of business, products and services and executing on our transformational and strategic initiatives. For example, we have devoted significant resources to developing new technology solutions for our clients, including our initiatives related to real-time electronic payments and global collateral management, as well as Wove, our integrative wealth management advisory platform. If these technology solutions do not operate or perform as expected, are not successful, or do not produce the anticipated efficiencies, it could adversely impact our reputation, business and results of operations. Developing and providing new products and services, including those relating to digital assets, increases our operational risk exposures. These risks are often heightened for projects that rely on third-party service providers, or in connection with new technologies and asset classes, such as digital assets, that are not only new for BNY but also relatively new to the financial markets more broadly. Compared with our activities involving traditional assets, digital asset-related products or services may introduce incremental or unique risks, particularly those associated with cybersecurity exposures and third-party dependencies, as well as reputational, technology, legal and regulatory risks.

Regulatory requirements can affect whether initiatives are able to be brought to market in a manner that is timely and attractive to our customers. Initial timetables for the development and introduction of new lines of business or new products or services and price and profitability targets may not be met. Furthermore, our revenues and costs may fluctuate because new businesses or products and services generally require startup costs while revenues may take time to develop, which may adversely impact our results of operations. The introduction of new accounting or regulatory requirements, or changes in those requirements, can also limit our ability to pursue strategic initiatives or result in significant costs. For example, prior to the repeal of Staff Accounting Bulletin 121, we had devoted considerable resources in analyzing the impact of such guidance on our existing and potential digital asset custody offerings.

Significant effort and resources are necessary to manage and oversee the successful completion of transformational or strategic project initiatives. If management makes choices about these initiatives that prove to be incorrect, are based on incomplete, inaccurate or fraudulent information, fail to accurately assess the competitive landscape and industry trends or are unable to address the expectations of various stakeholders, then the value and growth prospects of our business may be affected. Further, these initiatives often place significant demands on management and a limited number of employees with subject matter expertise and may involve significant costs to implement, as well as increase operational risk as we develop and implement related controls, processes and procedures and employees learn to operate under new systems, controls, processes and procedures. The failure to successfully execute or monitor these transformational or strategic initiatives could adversely impact our business, reputation and results of operations.

Legal, regulatory and reputational risks may also exist in connection with dealing with new products, technologies or markets, or clients and customers whose businesses focus on such products, technologies or markets, where there is regulatory uncertainty or different or conflicting regulations depending on the regulator or the jurisdiction. We may invest significant time and resources into the expansion of existing or creation of new compliance and risk management systems with respect to new products, technologies or markets.

Our strategic transactions present risks and uncertainties and could have an adverse effect on our business, financial condition and results of operations.

From time to time, to achieve our strategic objectives, we have acquired, disposed of or invested in (including through joint venture relationships) companies and businesses and have entered into strategic alliances or other collaborations with third-party service providers to deliver products and services to clients, and may do so in the future. Our ability to pursue or complete strategic transactions is in certain instances subject to regulatory approval and we cannot be certain when or if, or on what terms and conditions, any required regulatory approvals would be granted. Moreover, to the extent we pursue a strategic transaction, there can be no guarantee that the transaction will close when anticipated, or at all. If a strategic transaction does not close (including due to failure to obtain regulatory approval), or if the strategic transaction fails to deliver anticipated results, it could have an adverse effect on our business, financial condition and results of operations. Anticipated challenges in obtaining any required governmental approvals, or uncertainty as to the prospects for obtaining such approvals, could also prevent us from pursuing a strategic transaction we may otherwise view as attractive.

Each acquisition poses integration challenges, including successfully retaining and assimilating clients and key employees, capitalizing on certain revenue synergies and integrating the acquired company’s employees, culture, control functions, systems and technology. These risks may be heightened if we are unable to, or fail to, conduct sufficient or appropriate due diligence in connection with a potential acquisition. In some cases, acquisitions involve entry into new businesses or new geographic or other markets, and these situations also present risks and uncertainties in instances where we may be inexperienced in these new areas. We may be required to spend a significant amount of time and resources to integrate these acquisitions. The anticipated integration benefits may take longer to achieve than projected and the time and cost needed to consolidate control functions, platforms and systems may significantly exceed our estimates. If we fail to successfully integrate strategic acquisitions, including doing so in a timely and cost-effective manner, we may not realize the expected benefits, which could have an adverse impact on our business, financial condition and results of operations. In addition, we may incur expenses, costs, losses, penalties, taxes and other liabilities related to the conduct of the acquired businesses prior to the date of our ownership (including in connection with the defense and/or settlement of legal and regulatory claims, investigations and proceedings) which may not be recoverable through insurance, indemnification or otherwise. If the purchase price we pay in an acquisition exceeds the fair value of assets acquired less the liabilities we assume, then we may need to recognize goodwill on our consolidated balance sheet. Goodwill is an intangible asset that is not eligible for inclusion in regulatory capital under applicable requirements. Further, if the value of the acquisition declines, we may be required to record an impairment charge.

Each disposition also poses challenges, including separating the disposed businesses, products and systems in a way that is cost-effective and is not disruptive to us or our customers. The inherent uncertainty involved in the process of evaluating, negotiating or executing a potential sale of one of our companies or businesses may cause the loss of key clients, employees, vendors and other business partners, which could have an adverse impact on our business, financial condition and results of operations. In addition, a portion of the purchase price we expect to receive in a disposition may be contingent or based on an earnout (e.g., dependent on the profitability or results of operation of the business over a period of time after the sale is completed). In such cases, we may not realize all, or any, contingent or earnout payments we anticipate receiving if the future performance of the business does not meet our expectations or if other contingent payment conditions are not satisfied.

Joint ventures, noncontrolling investments, strategic alliances and other collaborations contain potentially increased financial, legal, reputational, operational, regulatory and/or compliance risks. We may be dependent on joint venture partners, firms with which we collaborate, controlling shareholders or management who may have business interests, strategies or goals that are inconsistent with ours. Such dependencies, particularly in the case of establishing de novo joint ventures, may delay the launch of a new venture and result in the loss of a market opportunity. Business decisions or other actions or omissions of the joint venture partner, the firms with which we collaborate, controlling shareholders or management may adversely affect the value of our investment (or, in the case of strategic alliances or other collaborations, the value of our products or services), impact our results of operations, result in litigation or regulatory action against us and otherwise damage our reputation and brand.

We may not realize some or all of the expected benefits of our transition to a platforms operating model.

We are executing on a plan to transition our organization to a platforms operating model. We expect such transition to lead to operating efficiencies, process simplification, cost savings, an increased focus on clients and improvements to the client experience, infrastructure improvements to technology and other systems, among other benefits. Implementing these changes to our operating model involves various execution challenges, complexities and uncertainties, may be costly and disruptive to our business, may result in litigation, regulatory scrutiny, or other negative financial, strategic or reputational impacts. Projections regarding the benefits of the transition are based on current business operations, market conditions and management expectations, among other factors, and are subject to change. We may not be able to obtain the anticipated benefits, cost savings and operational improvements within the projected timing or at all. Additionally, we may experience unintended and unforeseen consequences as a result of such transition, including a loss of continuity, increased complexity, issues concerning employee retention, labor disputes, decreased employee morale, loss of institutional knowledge and expertise of departing employees. Such unintended consequences may increase as the pace of implementation of our platforms operating model accelerates or if we are unsuccessful in executing organizational change management. If we are unable to successfully implement our transition to a platforms operating model, our business, financial condition and results of operations could be adversely affected.

We are subject to competition in all aspects of our business, which could negatively affect our ability to maintain or increase our profitability.

The businesses in which we operate are intensely competitive around the world. Larger and more geographically diverse companies, and financial technology firms that invest substantial resources in developing and designing new technology and that are not subject to the same level of regulation, may be able to offer financial products and services at more competitive prices than we are able to offer. We have also experienced, and anticipate that we will continue to experience, pricing and other competitive pressures in several of our businesses. Pricing pressures, as a result of the willingness of competitors to offer comparable or improved products or services at a lower price, may result in a reduction in the price we can charge for our products and services, which could, and in some cases has, negatively affected our ability to maintain or increase our profitability.

In addition, technological advances have made it possible for other types of non-depository institutions, such as financial technology firms, outsourcing companies and data processing companies, to offer a variety of products and services competitive with certain areas of our business, including with respect to our clearing, settlement, payments and trading activities. In the future, financial technology firms may be able to provide traditional banking products and services by obtaining a bank-like charter or offer cryptocurrencies.

Moreover, new or disruptive technologies may quickly impact markets and the manner in which our clients interact and transact within markets. For example, the emergence, adoption and evolution of new technologies that do not require intermediation, including distributed ledgers, as well as advances in robotic process automation, could significantly affect the competition for payments processing and other financial services. Our failure to either anticipate, or participate in, the transformational change within a given market or adapt these technologies as successfully as our peers, could make us less competitive and result in potential negative financial impact. Increased competition in any of these areas may require us to make additional capital investments in our businesses in order to remain competitive.

Furthermore, regulations could impact our ability to conduct certain of our businesses in a cost-effective manner or at all. The more restrictive laws and regulations applicable to the largest U.S. financial services institutions, including the U.S. capital rules, can put us at a competitive disadvantage relative to both our non-U.S. competitors and U.S. competitors not subject to the same laws and regulations. See “Supervision and Regulation.”

Additional Risks

Our businesses may be negatively affected by adverse events, publicity, government scrutiny or other reputational harm.

We are subject to reputational, legal, compliance and regulatory risk in the ordinary course of our business. Harm to our reputation can result from numerous sources, including adverse publicity or negative information, whether or not true, arising from events occurring at BNY, other financial institutions or in the financial markets, perceived failure to comply with legal and regulatory requirements or deliver appropriate standards of service and quality, or a failure to appropriately describe our products and services, how we address environmental, social and sustainability concerns in our business activities or in our relationships with clients, the purported inappropriate or unlawful actions of our employees or the use of social media by our employees, the consequences of using emerging technologies, such as generative artificial intelligence or blockchain technology, alleged financial reporting irregularities involving ourselves or other large and well-known companies and perceived or actual conflicts of interest. For example, a cybersecurity event impacting us or our customers’ data could have a negative impact on our reputation and customer confidence in BNY and our cybersecurity defenses and business continuity and resiliency capabilities. Our reputation could also be harmed by the failure of an affiliate, joint venture or a vendor or other third party with which we do business to comply with laws or regulations. Our reputation may be significantly damaged by adverse publicity or negative information regarding BNY, whether or not true, that may be published or broadcast by the media or posted on social media, non-mainstream news services or other internet forums. The speed and pervasiveness with which information, misinformation or rumors can be disseminated through these channels, in particular social media, may magnify risks relating to negative publicity or media scrutiny. Damage to our reputation could affect the confidence of clients, rating agencies, regulators, employees, stockholders and other stakeholders and could in turn have an impact on our business and results of operations.

Additionally, governmental scrutiny from regulators, tax authorities, legislative bodies and law enforcement agencies with respect to financial services companies has remained at elevated levels. Press coverage and other public statements, including information posted on social media or other internet forums, that allege some form of wrongdoing (including, in some cases, press coverage and public statements that do not directly involve BNY) often result in some type of investigation or in lawsuits. Certain enforcement authorities have recently required admissions of wrongdoing, and in some cases, criminal pleas, as part of the resolution of matters brought by them against financial institutions. Any such resolution of a matter involving BNY could lead to increased exposure to civil litigation, could adversely affect our reputation and ability to do business in certain products and in certain jurisdictions and could have other negative effects.

Impacts from geopolitical events, acts of terrorism, war, natural disasters, the physical effects of climate change, pandemics and other similar events may have a negative impact on our business and operations.

In conducting our business and maintaining and supporting our global operations, which includes clients, counterparties, vendors and other third parties, we are subject to risks of loss from the outbreak of war, escalation or continuation of hostilities, global conflicts, acts of terrorism, natural disasters, the physical effects of climate change, pandemics and other similar unpredictable or catastrophic events that could have a negative impact on our business and operations. For example, in July 2024, a software update by CrowdStrike Holdings, Inc. ("CrowdStrike"), a cybersecurity technology company, caused widespread crashes of the Windows systems into which it was integrated resulting in operational disruptions to a variety of sectors including aviation, financial services and healthcare. Although we have not experienced any material impacts as a result of the CrowdStrike software update or similar events, we could in the future experience similar third-party software-induced interruptions to our operations, which could adversely affect our business, results of operations and financial condition. We may also be impacted by unfavorable political, economic, legal or other developments, in addition to social or political instability, changes in governmental policies or policies of central banks, sanctions, expropriation, nationalization, confiscation of assets, price, capital and exchange controls, the imposition of tariffs, counter tariffs or other limitations on international trade and travel, which could disrupt world trade and lead to trade retaliation and other supply chain complications, and changes in laws and regulations. These risks may be heightened as a result of uncertainties about changing rules, regulations and policies following the outcome of recent elections and the resulting political administration transitions in the United States and internationally.

For example, as a result of Russia's invasion of Ukraine in the first quarter of 2022, we ceased originating new banking business in Russia and suspended investment management purchases of Russian securities. An escalation or continuation of hostilities, the imposition of additional sanctions or other laws prohibiting or limiting operations in certain jurisdictions or an elevated volume and complexity of cyberattacks as a result of the conflict in Ukraine, or conflicts or tensions in other regions such as the Middle East, could lead to unexpected disruptions to our businesses and could adversely affect the global economy and financial markets generally, diminish levels of economic activity and increase volatility in commodity prices, credit and capital markets. The extent and duration of any such military action, and the responses to such action by governments, central banks and the markets, are difficult to predict and may magnify the impact of other risks described in this section.

Our operations, business, clients, supply chain and other stakeholders, as well as the finance sector and the global economy, could be adversely affected by the physical manifestations of climate change. Climate-related physical risks include the increased frequency or severity of acute weather events, such as hurricanes, floods, heatwaves and wildfires, and chronic shifts in the climate, such as increases in average global temperatures, rising sea levels, persistent changes in precipitation levels, prolonged drought, food and water insecurity, and any resulting population migration. Such changes could have adverse financial, operational and other impacts on us, both directly on our business, operations and employees, and indirectly as a result of impacts to our clients, vendors and other third parties on which we rely or as a result of market volatility. These risks, and the impact on our business and the business of our clients and counterparties, are often difficult to predict or quantify. Climate change risks can also lead to a deterioration in our credit risk exposures, for example, in our wealth management mortgage and commercial real estate portfolios. Further, our headquarters is located in New York near the Hudson River waterfront. Such location and the location of our other properties may subject us to more frequent or severe weather events, which could lead to declines in the asset values of our properties and the reduced availability or increased cost of insurance.

While we have business continuity and disaster recovery plans in place, catastrophic events, whether or not caused by climate change, could damage our facilities, disrupt or delay for prolonged periods normal business operations (including communications, technology and physical access to our facilities) or result in harm to or cause travel limitations on our employees, with a similar impact on our clients, suppliers and counterparties. Notwithstanding our efforts to maintain business continuity and disaster recovery plans, to the extent a catastrophic event occurs and our business continuity and disaster recovery plans fail or are otherwise impaired, for example, because of an internal or external failure of our information technology infrastructure or increased rates of employee illness or unavailability, our business continuity status would be adversely impacted, our ability to service and interact with our clients may suffer and there would be a disruption to our businesses.

Catastrophic events, including those caused by climate change, could also negatively impact the purchase of our products and services if those events result in reduced capital markets activity, lower asset price levels or disruptions in general economic activity, or in financial market settlement functions, which could negatively impact our business and results of operations. In addition, such catastrophic events may lead, and in some cases have led, to higher market volatility, reduced availability or increased cost of insurance for our clients, as well as an increase in delinquencies, bankruptcies or defaults that could result in our experiencing higher levels of nonperforming assets, net charge-offs and provisions for credit losses, negatively impacting our business and operations. Furthermore, we invest in renewable energy projects, which have been and may in the future be adversely affected by extreme weather events, natural disasters and other catastrophic events.

Sustainability concerns, including a focus on climate change and diversity, could adversely affect our business, affect client activity levels, subject us to additional regulatory requirements and damage our reputation.

Global efforts to mitigate climate damage, support climate adaptation, slow the loss of biodiverse natural ecosystems and promote other sustainability causes and standards have led and are likely to continue to lead to new legislative and regulatory requirements, heightened expectations among regulators and supervisors, and changes in consumers' and businesses' behaviors and business preferences. Conversely, there has been increasing sentiment against climate and diversity initiatives in the U.S., which has led and is likely to continue to lead to new policies and legislative and regulatory requirements discouraging or prohibiting these initiatives. As a result, we may face heightened, and potentially conflicting, regulatory, legal and reputational scrutiny in the U.S., the EU and other jurisdictions in which we operate, and our business and financial condition may be adversely impacted.

The governmental and supervisory focus on these and other sustainability-related issues has resulted and could continue to result in our becoming subject to new, conflicting or heightened regulatory requirements or supervisory guidance, such as requirements relating to risk management, operational resiliency or stress testing for various climate stress scenarios, or additional, potentially costly, reporting requirements. In particular, financial institutions have come under increased scrutiny regarding the management and disclosure of climate risks, both directly and indirectly, and new regulations may expand required disclosure of actual and potential climate-related impact on suppliers, clients and other third parties in our value chain. For example, in October 2023, the Federal Reserve, the OCC and the FDIC jointly issued interagency guidance for large financial institutions, including BNY, on principles for climate-related financial risk management, and California enacted three climate-related laws imposing extensive new climate-related disclosure obligations applicable to companies doing business in California, and in 2024, made updates to two of those laws. In 2024, the SEC also adopted rules requiring enhanced disclosures of certain climate-related risks, which was stayed pending litigation. On the other hand, certain states in which we operate have enacted, or have proposed to enact, statutes that prohibit financial institutions from denying or canceling products or services to a person, or otherwise discriminating against a person in making available products or services, on the basis of social credit scores and certain other factors. There is also shifting sentiment in the U.S. against climate, sustainability and diversity programs and initiatives at the federal level, with executive orders directing federal agencies to eliminate programs, grants and mandates that support diversity, equity, inclusion or environmental goals. Any changes in regulatory requirements, including as a result of changes in policies from federal, state or non-U.S. lawmakers and regulators, could result in increased regulatory, compliance or other costs or higher capital requirements, and may subject us to diverging and evolving requirements in the various jurisdictions in which we operate, including potentially conflicting sustainability and anti-sustainability requirements and expectations from local, state and national governments that may impact our ability to conduct certain business within those jurisdictions.

Our Investment Management line of business offers a range of solutions and advice for professional and personal investors to better manage risk-adjusted returns and, where applicable, achieve their sustainable investment goals and invest responsibly. Certain lawmakers and public officials have suggested that sustainability-related investing practices may result in violations of antitrust laws and breaches of fiduciary duty. In addition, we may face compliance risks presented by regulations that are intended to address "greenwashing" or "greenhushing," including the UK FCA Sustainability Disclosure Requirements and other regulations that may be promulgated in the future. We have in the past been, and may in the future become, subject to enforcement actions and investigations by the SEC and other regulators and government officials, including state Attorneys General, regarding our sustainability-related investing practices. Governmental enforcement action could also lead to civil litigation claims by clients, fund shareholders and other third parties asserting violations of law or breaches of fiduciary duties and contractual obligations.

Further, as some regulators seek to mandate additional disclosure of sustainability-related information, our ability to comply with such requirements and to conduct more robust risk-related analyses may be hampered by lack of information and reliable data. Climate data, particularly greenhouse gas emissions for clients and direct and indirect counterparties, may be limited in availability, based on estimated or unverified figures, which may have been derived from information or factors released by third-party sources, collected and reported on a lag, and variable in quality and consistency. Moreover, the methodologies and standards used to measure and report such data are still in early stages, rapidly evolving and subject to change. In addition, modeling capabilities to analyze climate-related risks remain incomplete and there can be no assurance that accurate or effective predictive tools or capabilities will be developed. These and other factors could cause results to differ materially from those expressed in the estimates and beliefs made by third parties and by us, which could also impact our management of risk in this area and could result in us amending or restating our sustainability targets or baselines, including those related to greenhouse gas emissions, carbon neutrality, diversion of waste from landfills, paper neutrality and water consumption.

In the transition to a low carbon economy, changes in public policy, regulatory environment, stakeholder preferences, market pressures and advancements in technology may affect our business practices or result in additional costs or other adverse consequences to our business operations. Such changes could affect whether and on what terms and conditions we will engage in certain activities or offer certain products or services. Failure to adequately consider transition risks in developing and executing on our business strategy could lead to a loss of market share, lower revenues, decreased asset values and higher credit costs, as well as regulatory scrutiny.

Views about sustainability are diverse and changing, and our business, reputation and ability to attract and retain clients and employees may be harmed if our actions are perceived to be ineffective, insufficient or otherwise inappropriate, or if we are unable to achieve our stated objectives and commitments. Moreover, our reputation may be damaged as a result of our association, whether actual or perceived, with, among others, certain industries, companies, individuals or products perceived to be causing or exacerbating climate change or contributing to other sustainability issues. We are also exposed to reputational risk resulting from potential allegations of discrimination against companies in certain sectors, as well as any decisions we make to continue to conduct or change our activities in response to considerations relating to climate change or other sustainability issues. At the same time, certain financial institutions have also been subject to criticism and negative publicity as a result of their decisions to reduce their involvement in certain industries or projects perceived to be causing or exacerbating climate change or contributing to other sustainability issues. Further, political pressure may be placed upon governmental clients not to use certain providers, such as us, if the legislators or governmental officials in such jurisdictions believe our positions are not consistent with the views of such legislators or officials. The continuously evolving societal and political perspectives on sustainability make the ultimate impact on us difficult to predict, identify and monitor and may be detrimental to us.

Tax law changes or challenges to our tax positions with respect to historical transactions may adversely affect our net income, effective tax rate and our overall results of operations and financial condition.

In the course of our business, we receive inquiries and challenges from both U.S. and non-U.S. tax authorities on the amount of taxes we owe. If we are not successful in defending these inquiries and challenges, we may be required to adjust the timing or amount of taxable income or deductions or the allocation of income among tax jurisdictions, all of which can require a greater provision for taxes or otherwise negatively affect earnings. Probabilities and outcomes are reviewed as events unfold, and adjustments to the reserves are made, when necessary, but the reserves may prove inadequate because we cannot necessarily accurately predict the outcome of any challenge, settlement or litigation or the extent to which it will negatively affect us or our business. Future tax laws or the expiration of or changes in existing tax laws, or the interpretation of those laws worldwide, could also have a material impact on our business or net income. Our actions taken in response to, or reliance upon, such changes in the tax laws may impact our tax position in a manner that may result in lower earnings. In addition, upon any change in tax law, we must recognize the effect of the change on our deferred tax assets and liabilities. An increase in the U.S. tax rate would likely result in an increase in our net deferred tax liabilities and a reduction in our net income in the period of enactment of the change. In addition, changes in tax rates or tax law could also impact the method and amount of capital that we return to shareholders. See Note 12 of the Notes to Consolidated Financial Statements for further information.

Changes in accounting standards governing the preparation of our financial statements and future events could have a material impact on our reported financial condition, results of operations, cash flows and other financial data.

From time to time, the Financial Accounting Standards Board ("FASB"), the SEC and bank regulators change the financial accounting and reporting standards governing the preparation of our financial statements or the interpretation of those standards. These changes are difficult to predict and can materially impact how we record and report our financial condition, results of operations, cash flows and other financial data. In some cases, the FASB, the SEC and bank regulators may change financial accounting and reporting standards governing the preparation of our financial statements or the interpretation of those standards that may require us to apply a new or revised standard retrospectively, potentially resulting in the restatement of our prior period financial statements and our related disclosures.

Additionally, our accounting policies and methods are fundamental to how we record and report our financial condition and results of operations. The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates based upon assumptions and use judgments and models about future economic and market conditions, which affect reported amounts and related disclosures in our financial statements. Amounts subject to estimates are items such as the allowance for credit losses, goodwill and other intangibles and litigation and regulatory contingencies. Among other effects, such changes in estimates could result in further impairments of goodwill and intangible assets and establishment of allowances for credit losses as well as litigation and regulatory contingencies. In performing our annual and interim goodwill impairment tests, we may use an income approach to estimate the fair values of each reporting unit. Estimated cash flows used in the income approach are based on management's projections. Estimated cash flows extend far into the future, and, by their nature, are difficult to estimate over such an extended time frame. Factors that may significantly affect the cash flow estimates include, among others, market values of assets we manage, the level and mix of those assets, customer behaviors and attrition, operating margins, changes in revenue growth trends, certain money market fee waiver practices, cost structures and technology, regulatory and legislative changes, specific industry or market sector conditions, competition and changes in interest rates. In the future, small changes in the assumptions, such as changes in the cash flow estimates, discount rate or long-term growth rate, or a prolonged macroeconomic downturn may produce a material non-cash goodwill impairment. If actual or subsequent events occur that are materially different than the assumptions, judgments and estimates we used, our results of operation may be materially and negatively impacted.

The following accounting guidance issued by FASB has not yet been adopted as of Dec. 31, 2024.

ASU 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures

In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*, which requires a company to disclose, on an annual basis, additional disaggregated information related to the existing disclosures for the effective income tax rate reconciliation and income taxes paid.

This ASU is effective on a prospective basis, with a retrospective option, for annual periods beginning after Dec. 15, 2024, and interim periods within fiscal years beginning after Dec. 15, 2025. BNY is currently evaluating this guidance and the impact on the income tax disclosures.

Explanation of GAAP and Non-GAAP financial measures

BNY has included in this Annual Report certain Non-GAAP financial measures on a tangible basis as a supplement to GAAP information, which exclude goodwill and intangible assets, net of deferred tax liabilities. We believe that the return on tangible common equity – Non-GAAP is additional useful information for investors because it presents a measure of those assets that can generate income, and the tangible book value per common share – Non-GAAP is additional useful information because it presents the level of tangible assets in relation to shares of common stock outstanding.

BNY included revenue measures excluding notable items, including a net loss from repositioning the securities portfolio, the reduction in the fair value of a contingent consideration receivable and disposal gains and losses. Expense measures, excluding notable items, including goodwill impairment, FDIC special assessment, severance expense and litigation reserves, are also presented. Litigation reserves represent accruals for loss contingencies that are both probable and reasonably estimable, but exclude standard business-related legal fees. Income before taxes, net income applicable to common shareholders of The Bank of New York Mellon Corporation, diluted earnings per share, return on common equity, return on tangible common equity and pre-tax operating margin, excluding the notable items mentioned above, are also provided. These measures are provided to permit investors to view the financial measures on a basis consistent with how management views the businesses.

The presentation of the growth rates of investment management and performance fees on a constant currency basis permits investors to assess the significance of changes in foreign currency exchange rates. Growth rates on a constant currency basis were determined by applying the current period foreign currency exchange rates to the prior period revenue. We believe that this presentation, as a supplement to GAAP information, gives investors a clearer picture of the related revenue results without the variability caused by fluctuations in foreign currency exchange rates.

BNY has also included the adjusted pre-tax operating margin – Non-GAAP, which is the pre-tax operating margin for the Investment and Wealth Management business segment, net of distribution and servicing expense that was passed to third parties who distribute or service our managed funds. We believe that this measure is useful when evaluating the performance of the Investment and Wealth Management business segment relative to industry competitors.

Forward-looking Non-GAAP financial measures

From time to time we may present or discuss forward-looking Non-GAAP financial measures, such as targets for expenses excluding notable items. We are unable to provide a reconciliation of forward-looking Non-GAAP financial measures to the comparable GAAP financial measures because we are unable to provide, without unreasonable effort, a meaningful or accurate estimation of amounts that would be necessary for the reconciliation due to the inherent difficulty of quantifying future amounts or when they may occur. Such unavailable information could be significant to future results.

Reconciliation of Non-GAAP measures, excluding notable items *(dollars in millions)*	**2024**	2023	**2024 vs. 2023**
Total revenue – GAAP	**$ 18,619**	$ 17,697	**5%**
Less: Reduction in the fair value of a contingent consideration receivable *(a)*	**—**	(144)	
Disposal (loss) *(a)*	**—**	(6)	
Adjusted total revenue – Non-GAAP	**$ 18,619**	$ 17,847	**4%**
Total noninterest expense – GAAP	**$ 12,701**	$ 13,295	**(4)%**
Less: Severance expense *(b)*	**240**	267	
Litigation reserves *(b)*	**44**	94	
FDIC special assessment *(b)*	**(63)**	632	
Adjusted total noninterest expense – Non-GAAP	**$ 12,480**	$ 12,302	**1%**
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – GAAP	**$ 4,336**	$ 3,067	**41%**
Less: Reduction in the fair value of a contingent consideration receivable *(a)*	**—**	(144)	
Disposal (loss) *(a)*	**—**	(5)	
Severance expense *(b)*	**(183)**	(205)	
Litigation reserves *(b)*	**(41)**	(91)	
FDIC special assessment *(b)*	**48**	(482)	
Adjusted net income applicable to common shareholders of The Bank of New York Mellon Corporation – Non-GAAP	**$ 4,512**	$ 3,994	**13%**
Diluted earnings per share – GAAP	**$ 5.80**	$ 3.89	**49%**
Less: Reduction in the fair value of a contingent consideration receivable *(a)*	**—**	(0.18)	
Disposal (loss) *(a)*	**—**	(0.01)	
Severance expense *(b)*	**(0.24)**	(0.26)	
Litigation reserves *(b)*	**(0.05)**	(0.12)	
FDIC special assessment *(b)*	**0.06**	(0.61)	
Total diluted earnings per common share impact of notable items	**$ (0.23)**	$ (1.18)	
Adjusted diluted earnings per share – Non-GAAP	**$ 6.03**	$ 5.07	**19%**

(a) Reflected in investment and other revenue.

(b) Severance expense is reflected in staff expense, litigation reserves in other expense, and FDIC special assessment in bank assessment charges, respectively.

The following table presents the reconciliation of the pre-tax operating margin.

Pre-tax operating margin reconciliation *(dollars in millions)*	**2024**	2023
Income before taxes – GAAP	**$ 5,848**	$ 4,283
Less: Impact of notable items *(a)*	**(221)**	(1,143)
Adjusted income before taxes, excluding notable items – Non-GAAP	**$ 6,069**	$ 5,426
Total revenue – GAAP	**$18,619**	$ 17,697
Less: Impact of notable items *(a)*	**—**	(150)
Adjusted total revenue, excluding notable items – Non-GAAP	**$18,619**	$ 17,847
Pre-tax operating margin – GAAP *(b)*	**31%**	24%
Adjusted pre-tax operating margin – Non-GAAP *(b)*	**33%**	30%

(a) See table above for details of notable items and line items impacted.

(b) Income before taxes divided by total revenue.

The following table presents the reconciliation of the return on common equity and tangible common equity.

Return on common equity and tangible common equity reconciliation *(dollars in millions)*	**2024**	2023	2022
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – GAAP	**$ 4,336**	$ 3,067	$ 2,345
Add: Amortization of intangible assets	**50**	57	67
Less: Tax impact of amortization of intangible assets	**12**	14	16
Adjusted net income applicable to common shareholders of The Bank of New York Mellon Corporation, excluding amortization of intangible assets – Non-GAAP	**$ 4,374**	$ 3,110	$ 2,396
Less: Impact of notable items *(a)*	**(176)**	(927)	(1,378)
Adjusted net income applicable to common shareholders of The Bank of New York Mellon Corporation, excluding amortization of intangible assets and notable items – Non-GAAP	**$ 4,550**	$ 4,037	$ 3,774
Average common shareholders' equity	**$ 36,413**	$ 35,767	$ 36,067
Less: Average goodwill	**16,316**	16,204	17,060
Average intangible assets	**2,839**	2,880	2,939
Add: Deferred tax liability – tax deductible goodwill	**1,221**	1,205	1,181
Deferred tax liability – intangible assets	**665**	657	660
Average tangible common shareholders' equity – Non-GAAP	**$ 19,144**	$ 18,545	$ 17,909
Return on common shareholders' equity – GAAP	**11.9%**	8.6%	6.5%
Adjusted return on common shareholders' equity – Non-GAAP	**12.4%**	11.2%	10.3%
Return on tangible common shareholders' equity – Non-GAAP	**22.8%**	16.8%	13.4%
Adjusted return on tangible common shareholders' equity – Non-GAAP	**23.8%**	21.8%	21.1%

(a) *See page 116 for details of notable items and line items impacted in 2024 and 2023. Notable items in 2022 include goodwill impairment, severance expense, litigation reserves, a revenue reduction related to Russia, primarily the accelerated amortization of deferred costs for depositary receipts services (reflected in investment services fees), a net loss from repositioning the securities portfolio (reflected in investment and other revenue) and gains on disposals (reflected in investment and other revenue).*

The following table presents the reconciliation of book value and tangible book value per common share.

Book value and tangible book value per common share reconciliation	Dec. 31,		
(dollars in millions, except per share amounts and unless otherwise noted)	**2024**	2023	2022
The Bank of New York Mellon Corporation shareholders' equity at year end – GAAP	**$ 41,318**	$ 40,770	$ 40,613
Less: Preferred stock	**4,343**	4,343	4,838
The Bank of New York Mellon Corporation common shareholders' equity at year end – GAAP	**36,975**	36,427	35,775
Less: Goodwill	**16,598**	16,261	16,150
Intangible assets	**2,851**	2,854	2,901
Add: Deferred tax liability – tax deductible goodwill	**1,221**	1,205	1,181
Deferred tax liability – intangible assets	**665**	657	660
The Bank of New York Mellon Corporation tangible common shareholders' equity at year end – Non-GAAP	**$ 19,412**	$ 19,174	$ 18,565
Year-end common shares outstanding *(in thousands)*	**717,680**	759,344	808,445
Book value per common share – GAAP	**$ 51.52**	$ 47.97	$ 44.25
Tangible book value per common share – Non-GAAP	**$ 27.05**	$ 25.25	$ 22.96

The following table presents the impact of changes in foreign currency exchange rates on our consolidated investment management and performance fees.

Constant currency reconciliation – Consolidated *(dollars in millions)*	**2024**	2023	**2024 vs. 2023**
Investment management and performance fees – GAAP	**$ 3,139**	$ 3,058	**3%**
Impact of changes in foreign currency exchange rates	**—**	11	
Adjusted investment management and performance fees – Non-GAAP	**$ 3,139**	$ 3,069	**2%**

The following table presents the impact of changes in foreign currency exchange rates on investment management and performance fees reported in the Investment and Wealth Management business segment.

Constant currency reconciliation – Investment and Wealth Management business segment *(dollars in millions)*	**2024**	2023	**2024 vs. 2023**
Investment management and performance fees – GAAP	**$ 3,144**	$ 3,062	**3%**
Impact of changes in foreign currency exchange rates	—	11	
Adjusted investment management and performance fees – Non-GAAP	**$ 3,144**	$ 3,073	**2%**

The following table presents the reconciliation of the pre-tax operating margin for the Investment and Wealth Management business segment.

Pre-tax operating margin reconciliation – Investment and Wealth Management business segment *(dollars in millions)*	**2024**	2023	2022	**2024 vs. 2023**	2023 vs. 2022
Income before income taxes – GAAP	**$ 605**	$ 383	$ 47	**58%**	715%
Less: Reduction in the fair value of a contingent consideration receivable *(a)*	—	(144)	—		
Disposal (loss) *(a)*	—	—	(11)		
Revenue reduction related to Russia *(b)*	—	—	(6)		
Severance expense *(c)*	**(22)**	(19)	(12)		
Litigation reserves *(c)*	**2**	(1)	—		
Goodwill impairment	—	—	(680)		
Adjusted income before income taxes – Non-GAAP	**$ 625**	$ 547	$ 756	**14%**	(28)%
Total revenue – GAAP	**$ 3,389**	$ 3,155	$ 3,563		
Less: Distribution and servicing expense	**363**	355	345		
Adjusted total revenue, net of distribution and servicing expense – Non-GAAP	**$ 3,026**	$ 2,800	$ 3,218		
Less: Reduction in the fair value of a contingent consideration receivable *(a)*	—	(144)	—		
Disposal (loss) *(a)*	—	—	(11)		
Revenue reduction related to Russia *(b)*	—	—	(6)		
Adjusted total revenue, excluding notable items and net of distribution and servicing expense – Non-GAAP	**$ 3,026**	$ 2,944	$ 3,235		
Pre-tax operating margin – GAAP *(d)*	**18%**	12%	1%		
Adjusted pre-tax operating margin, net of distribution and servicing expense – Non-GAAP *(d)*	**20%**	14%	2%		
Adjusted pre-tax operating margin, net of distribution and servicing expense and excluding notable items – Non-GAAP *(d)*		19%	23%		

(a) Reflected in investment and other revenue.
(b) Primarily reflected in investment management and performance fees.
(c) Severance expense is reflected in staff expense and litigation reserves in other expense.
(d) Income before taxes divided by total revenue.

Rate/volume analysis

Rate/volume analysis *(a)*	2024 over (under) 2023			2023 over (under) 2022		
	Due to change in			Due to change in		
(in millions)	Average balance	Average rate	Net change	Average balance	Average rate	Net change
Interest income						
Interest-earning assets:						
Interest-bearing deposits with the Federal Reserve and other central banks:						
Domestic offices	**$ (3)**	**$ 66**	**$ 63**	$ 289	$ 1,986	$ 2,275
Foreign offices	**(133)**	**144**	**11**	(31)	1,278	1,247
Total interest-bearing deposits with the Federal Reserve and other central banks	**(136)**	**210**	**74**	258	3,264	3,522
Interest-bearing deposits with banks	**(103)**	**14**	**(89)**	(50)	352	302
Federal funds sold and securities purchased under resale agreements	**1,597**	**2,177**	**3,774**	57	5,884	5,941
Loans:						
Domestic offices	**230**	**214**	**444**	(99)	1,884	1,785
Foreign offices	**24**	**10**	**34**	(15)	147	132
Total loans	**254**	**224**	**478**	(114)	2,031	1,917
Securities:						
U.S. government obligations	**(188)**	**189**	**1**	(123)	537	414
U.S. government agency obligations	**65**	**298**	**363**	(65)	603	538
Other securities:						
Domestic offices *(b)*	**19**	**129**	**148**	(65)	239	174
Foreign offices	**187**	**29**	**216**	(18)	559	541
Total other securities *(b)*	**206**	**158**	**364**	(83)	798	715
Total investment securities *(b)*	**83**	**645**	**728**	(271)	1,938	1,667
Trading securities (primarily domestic) *(b)*	**(17)**	**11**	**(6)**	16	156	172
Total securities *(b)*	**66**	**656**	**722**	(255)	2,094	1,839
Total interest income *(b)*	**$ 1,678**	**$ 3,281**	**$ 4,959**	$ (104)	$ 13,625	$ 13,521
Interest expense						
Interest-bearing liabilities:						
Interest-bearing deposits:						
Domestic offices	**$ 710**	**$ 378**	**$ 1,088**	$ 117	$ 3,606	$ 3,723
Foreign offices	**115**	**320**	**435**	(87)	1,901	1,814
Total interest-bearing deposits	**825**	**698**	**1,523**	30	5,507	5,537
Federal funds purchased and securities sold under repurchase agreements	**(1,315)**	**4,590**	**3,275**	824	4,941	5,765
Trading liabilities	**(80)**	**12**	**(68)**	(1)	89	88
Other borrowed funds:						
Domestic offices	**(45)**	**14**	**(31)**	30	7	37
Foreign offices	**(1)**	**3**	**2**	—	1	1
Total other borrowed funds	**(46)**	**17**	**(29)**	30	8	38
Commercial paper	**62**	**—**	**62**	—	—	—
Payables to customers and broker-dealers	**(73)**	**147**	**74**	(28)	438	410
Long-term debt	**44**	**111**	**155**	125	726	851
Total interest expense	**$ (583)**	**$ 5,575**	**$ 4,992**	$ 980	$ 11,709	$ 12,689
Changes in net interest income *(b)*	**$ 2,261**	**$ (2,294)**	**$ (33)**	$ (1,084)	$ 1,916	$ 832

(a) Changes which are solely due to balance changes or rate changes are allocated to such categories on the basis of the respective percentage changes in average balances and average rates. Changes in interest income or interest expense arising from the combination of rate and volume variances are allocated proportionately to rate and volume based on their relative absolute magnitudes.

(b) Presented on an FTE basis.

Some statements in this Annual Report are forward-looking. These include statements about the usefulness of Non-GAAP measures, the future results of BNY, our businesses, financial, liquidity and capital condition, results of operations, capital plans including dividends and repurchases, liquidity, risk and capital management and processes, human capital management (including related ambitions, objectives, aims and goals), strategic priorities and initiatives, acquisitions, related integration and divestiture activity, transition to a platforms operating model, efficiency savings, estimates (including those regarding expenses, interest rate and net interest income sensitivities, losses inherent in our credit portfolios and capital ratios), intentions (including those regarding our capital returns and expenses, including our investments in technology and pension expense), outlook (including those regarding our performance results, fee revenue, net interest income, expenses, impacts of currency fluctuations, capital ratios and effective tax rate) and expectations (including those regarding products, nonperforming assets, legal proceedings and other contingencies, impacts of trends on our businesses, regulatory, technology, market, economic or accounting developments and the impacts of such developments on our businesses).

In this report, any other report, any press release or any written or oral statement that BNY or its executives may make, words, such as "estimate," "forecast," "project," "anticipate," "likely," "target," "expect," "intend," "continue," "seek," "believe," "plan," "goal," "could," "should," "would," "may," "might," "will," "strategy," "synergies," "opportunities," "trends," "momentum," "ambition," "aspiration," "objective," "aim," "future," "potentially," "outlook" and words of similar meaning, may signify forward-looking statements.

These forward-looking statements, and other forward-looking statements contained in other public disclosures of BNY, are not guarantees of future results or occurrences, are inherently uncertain and are based upon current beliefs and expectations of future events, many of which are, by their nature, difficult to predict, outside of our control and subject to change. By identifying these statements in this manner, we are alerting investors to the possibility that our actual results may differ, possibly materially, from the anticipated results expressed or implied in these forward-looking statements as a result of a number of important factors, including those factors described in "Risk Factors," such as:

- errors or delays in our operational and transaction processing, or those of third parties, may materially adversely affect our business, financial condition, results of operations and reputation;
- our risk management framework, policies and processes may not be effective in identifying or mitigating risk and reducing the potential for losses and any inadequacy or lapse in our risk management framework, policies and processes could expose us to unexpected losses that could materially adversely affect our results of operations or financial condition;
- limitations of the models we use to measure, monitor and manage risk could lead to unexpected losses and adverse business impacts;
- a communications or technology disruption or failure within our infrastructure or the infrastructure of third parties that results in a loss of information, delays our ability to access information or impacts our ability to provide services to our clients may materially adversely affect our business, financial condition and results of operations;
- a cybersecurity incident, or a failure in our computer systems, networks and information, or those of third parties, could result in the theft, disclosure, use or alteration of information, unauthorized access to or loss of information, or system or network failures. Any such incident or failure could adversely impact our ability to conduct our businesses, damage our reputation and cause losses;
- the development and use of artificial intelligence present risks and challenges that may adversely impact our business;
- we are subject to extensive government rulemaking, policies, regulation and supervision that impact our operations. Changes to and introduction of new rules and regulations have compelled, and in the future may compel, us to change how we manage our businesses, which could have a material adverse effect on our business, financial condition and results of operations;
- regulatory or enforcement actions or litigation could materially adversely affect our results of operations or harm our businesses or reputation;

- our business may be adversely affected if we are unable to attract, retain, develop and motivate employees;
- a failure or circumvention of our controls, policies and procedures could have a material adverse effect on our business, financial condition, results of operations and reputation;
- weakness and volatility in financial markets and the economy generally may materially adversely affect our business, financial condition and results of operations;
- we are dependent on fee-based business for a substantial majority of our revenue and our fee-based revenues could be adversely affected by slowing market activity, weak financial markets, underperformance and/or negative trends in savings rates or in investment preferences;
- levels of and changes in interest rates have impacted, and will in the future continue to impact, our profitability and capital levels, at times adversely;
- we have experienced, and may continue to experience, unrealized or realized losses on securities related to volatile and illiquid market conditions, reducing our capital levels and/or earnings;
- the failure or perceived weakness of any of our significant clients or counterparties, many of whom are major financial institutions or sovereign entities, and our assumption of credit, counterparty and concentration risk, could expose us to credit losses and adversely affect our business;
- we could incur losses if our allowance for credit losses, including loan and lending-related commitment reserves, is inadequate or if our expectations of future economic conditions deteriorate;
- our business, financial condition and results of operations could be adversely affected if we do not effectively manage our liquidity;
- failure to satisfy regulatory standards, including "well capitalized" and "well managed" status or capital adequacy and liquidity rules more generally, could result in limitations on our activities and adversely affect our business and financial condition;
- the Parent is a non-operating holding company and, as a result, is dependent on dividends from its subsidiaries and extensions of credit from its IHC to meet its obligations, including with respect to its securities, and to provide funds for share repurchases, payment of income taxes and payment of dividends to its stockholders;
- our ability to return capital to shareholders is subject to the discretion of our Board of Directors and may be limited by U.S. banking laws and regulations, including those governing capital and capital planning, applicable provisions of Delaware law and our failure to pay full and timely dividends on our preferred stock;
- any material reduction in our credit ratings or the credit ratings of our principal bank subsidiaries, The Bank of New York Mellon, BNY Mellon, N.A. or The Bank of New York Mellon SA/NV, could increase the cost of funding and borrowing to us and our rated subsidiaries and have a material adverse effect on our business, financial condition and results of operations and on the value of the securities we issue;
- the application of our Title I preferred resolution strategy or resolution under the Title II orderly liquidation authority could adversely affect the Parent's liquidity and financial condition and the Parent's security holders;
- new lines of business, new products and services or transformational or strategic project initiatives subject us to new or additional risks, and the failure to implement these initiatives could affect our results of operations;
- our strategic transactions present risks and uncertainties and could have an adverse effect on our business, financial condition and results of operations;
- we may not realize some or all of the expected benefits of our transition to a platforms operating model;
- we are subject to competition in all aspects of our business, which could negatively affect our ability to maintain or increase our profitability;
- our businesses may be negatively affected by adverse events, publicity, government scrutiny or other reputational harm;
- impacts from geopolitical events, acts of terrorism, war, natural disasters, the physical effects of climate change, pandemics and other

similar events may have a negative impact on our business and operations;

- sustainability concerns, including a focus on climate change and diversity, could adversely affect our business, affect client activity levels, subject us to additional regulatory requirements and damage our reputation;
- tax law changes or challenges to our tax positions with respect to historical transactions may adversely affect our net income, effective tax rate and our overall results of operations and financial condition; and
- changes in accounting standards governing the preparation of our financial statements and future events could have a material impact on our reported financial condition, results of operations, cash flows and other financial data.

Investors should not place undue reliance on any forward-looking statement and should consider all risk factors discussed in the 2024 Annual Report and any subsequent reports filed with the SEC by BNY pursuant to the Exchange Act. All forward-looking statements speak only as of the date on which such statements are made, and BNY undertakes no obligation to update any statement to reflect events or circumstances after the date on which such forward-looking statement is made or to reflect the occurrence of unanticipated events. The contents of BNY's website or any other website referenced herein are not part of this report.

Assets under custody and/or administration ("AUC/A") – Assets that we hold directly or indirectly on behalf of clients under a safekeeping or custody arrangement or for which we provide administrative services for clients. The following types of assets under administration are not and historically have not been included in AUC/A: performance and risk analytics, transfer agency and asset aggregation services. To the extent that we provide more than one AUC/A service for a client's assets, the value of the asset is only counted once in the total amount of AUC/A.

Assets under management ("AUM") – Includes assets beneficially owned by our clients or customers which we hold in various capacities that are either actively or passively managed, as well as the value of hedges supporting customer liabilities. These assets and liabilities are not on our balance sheet.

CAMELS – An international bank-rating system where bank supervisory authorities rate institutions according to six factors. The six factors are Capital adequacy, Asset quality, Management quality, Earnings, Liquidity and Sensitivity to market risk.

Collateral management – A comprehensive program designed to simplify collateralization and expedite securities transfers for buyers and sellers.

Credit valuation adjustment ("CVA") – The market value of counterparty credit risk on OTC derivative transactions.

Debit valuation adjustment ("DVA") – The market value of our credit risk on OTC derivative transactions.

Depositary receipt – A negotiable security that generally represents a non-U.S. company's publicly traded equity.

Economic capital – The amount of capital required to absorb potential losses and reflects the probability of remaining solvent with a target debt rating over a one-year time horizon.

Expense categories:

- Revenue-related expenses generally correlate with changes in client balances, transaction volume or revenue. Examples include sub-custodian and clearing expense, distribution and servicing expenses, bank assessments and incentive compensation.
- Investments in growth, infrastructure and efficiency initiatives are primarily included in staff, software and equipment, and professional, legal and other purchased services expenses.
- Employee merit expenses include the annual assessment of employee salaries and benefits which enable us to attract and retain top industry talent and early talent.
- Efficiency savings include the benefits associated with running the company better and can impact all expense categories. Examples include workforce initiatives and vendor management.

Global systemically important bank ("G-SIB") – A financial institution whose distress or disorderly failure, because of its size, complexity and systemic interconnectedness, would cause significant disruption to the wider financial system and economic activity.

High-quality liquid assets ("HQLA") – Unencumbered assets of the types identified in the U.S. LCR rule, which the U.S. banking agencies describe as able to be convertible into cash with little or no expected loss of value during a period of liquidity stress.

Investment grade – Represents Moody's long-term rating of Baa3 or better; and/or a Standard & Poor's, Fitch or DBRS long-term rating of BBB- or better; or if unrated, an equivalent rating using our internal risk ratings. Instruments that fall below these levels are considered to be non-investment grade.

Real estate investment trust ("REIT") – An investor-owned corporation, trust or association that sells shares to investors and invests in income-producing property.

Repurchase agreement ("Repo") – An instrument used to raise short-term funds whereby securities are sold with an agreement for the seller to buy back the securities at a later date.

Reverse repurchase agreement – The purchase of securities with the agreement to sell them at a higher price at a specific future date.

Sub-custodian – A local provider (e.g., a bank) contracted to provide specific custodial-related services in a selected country or geographic area.

Management of BNY is responsible for establishing and maintaining adequate internal control over financial reporting for BNY, as such term is defined in Rule 13a-15(f) under the Exchange Act.

BNY's management, including its principal executive officer and principal financial officer, has assessed the effectiveness of BNY's internal control over financial reporting as of December 31, 2024. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control – Integrated Framework (2013)*. Based upon such assessment, management believes that, as of December 31, 2024, BNY's internal control over financial reporting is effective based upon those criteria.

KPMG LLP, the independent registered public accounting firm that audited BNY's 2024 financial statements included in this Annual Report under "Financial Statements" and "Notes to Consolidated Financial Statements," has issued a report with respect to the effectiveness of BNY's internal control over financial reporting. This report begins on page 125.

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
The Bank of New York Mellon Corporation:

Opinion on Internal Control Over Financial Reporting

We have audited The Bank of New York Mellon Corporation and subsidiaries' (BNY) internal control over financial reporting as of December 31, 2024, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, BNY maintained, in all material respects, effective internal control over financial reporting as of December 31, 2024, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of BNY as of December 31, 2024 and 2023, the related consolidated statements of income, comprehensive income, cash flows, and changes in equity for each of the years in the three-year period ended December 31, 2024, and the related notes (collectively, the consolidated financial statements), and our report dated February 27, 2025, expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

BNY'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 Report of Management on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on BNY'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 BNY 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 of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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/ KPMG LLP

New York, New York
February 27, 2025

Consolidated Income Statement

	Year ended Dec. 31,		
(in millions)	**2024**	2023	2022
Fee and other revenue			
Investment services fees	**$ 9,419**	$ 8,843	$ 8,529
Investment management and performance fees	**3,139**	3,058	3,299
Foreign exchange revenue	**688**	631	822
Financing-related fees	**216**	192	175
Distribution and servicing fees	**158**	148	130
Total fee revenue	**13,620**	12,872	12,955
Investment and other revenue *(a)*	**687**	480	70
Total fee and other revenue *(a)*	**14,307**	13,352	13,025
Net interest income			
Interest income	**25,607**	20,648	7,118
Interest expense	**21,295**	16,303	3,614
Net interest income	**4,312**	4,345	3,504
Total revenue *(a)*	**18,619**	17,697	16,529
Provision for credit losses	**70**	119	39
Noninterest expense			
Staff	**7,130**	7,095	6,800
Software and equipment	**1,962**	1,817	1,657
Professional, legal and other purchased services	**1,503**	1,527	1,527
Net occupancy	**537**	542	514
Sub-custodian and clearing	**498**	475	485
Distribution and servicing	**361**	353	343
Business development	**188**	183	152
Bank assessment charges	**36**	788	126
Goodwill impairment	**—**	—	680
Amortization of intangible assets	**50**	57	67
Other	**436**	458	659
Total noninterest expense	**12,701**	13,295	13,010
Income			
Income before income taxes *(a)*	**5,848**	4,283	3,480
Provision for income taxes *(a)*	**1,305**	979	937
Net income *(a)*	**4,543**	3,304	2,543
Net (income) loss attributable to noncontrolling interests related to consolidated investment management funds	**(13)**	(2)	13
Net income applicable to shareholders of The Bank of New York Mellon Corporation *(a)*	**4,530**	3,302	2,556
Preferred stock dividends	**(194)**	(235)	(211)
Net income applicable to common shareholders of The Bank of New York Mellon Corporation *(a)*	**$ 4,336**	$ 3,067	$ 2,345

(a) Results for the years ended Dec. 31, 2023 and Dec. 31, 2022 were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (Accounting Standards Update ("ASU") 2023-02). See Note 2 of the Notes to Consolidated Financial Statements for additional information.

Consolidated Income Statement (continued)

Net income applicable to common shareholders of The Bank of New York Mellon Corporation used for the earnings per share calculation *(in millions)*	Year ended Dec. 31, **2024**	2023	2022
Net income applicable to common shareholders of The Bank of New York Mellon Corporation *(a)*	**$ 4,336**	$ 3,067	$ 2,345
Less: Earnings allocated to participating securities	—	—	—
Net income applicable to common shareholders of The Bank of New York Mellon Corporation after required adjustment for the calculation of basic and diluted earnings per common share *(a)*	**$ 4,336**	$ 3,067	$ 2,345

(a) *Results for the years ended Dec. 31, 2023 and Dec. 31, 2022 were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 of the Notes to Consolidated Financial Statements for additional information.*

Average common shares and equivalents outstanding of The Bank of New York Mellon Corporation *(in thousands)*	Year ended Dec. 31, **2024**	2023	2022
Basic	**742,588**	784,069	811,068
Common stock equivalents	**5,513**	3,821	3,904
Less: Participating securities	—	(92)	(177)
Diluted	**748,101**	787,798	814,795
Anti-dilutive securities *(a)*	**288**	1,334	3,142

(a) *Represents restricted stock, restricted stock units and participating securities outstanding but not included in the computation of diluted average common shares because their effect would be anti-dilutive.*

Earnings per share applicable to common shareholders of The Bank of New York Mellon Corporation *(a)* *(in dollars)*	Year ended Dec. 31, **2024**	2023	2022
Basic	**$ 5.84**	$ 3.91	$ 2.89
Diluted	**$ 5.80**	$ 3.89	$ 2.88

(a) *Results for the years ended Dec. 31, 2023 and Dec. 31, 2022 were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 of the Notes to Consolidated Financial Statements for additional information.*

See accompanying Notes to Consolidated Financial Statements.

Consolidated Comprehensive Income Statement

	Year ended Dec. 31,		
(in millions)	**2024**	2023	2022
Net income *(a)*	**$ 4,543**	$ 3,304	$ 2,543
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments	**(191)**	272	(603)
Unrealized gain (loss) on assets available-for-sale:			
Unrealized gain (loss) arising during the period	**365**	829	(3,245)
Reclassification adjustment	**64**	52	338
Total unrealized gain (loss) on assets available-for-sale	**429**	881	(2,907)
Defined benefit plans:			
Net (loss) arising during the period	**(9)**	(75)	(306)
Foreign exchange adjustment	**—**	(1)	—
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost	**12**	(10)	56
Total defined benefit plans	**3**	(86)	(250)
Net unrealized (loss) gain on cash flow hedges	**(6)**	6	(6)
Total other comprehensive income (loss), net of tax *(b)*	**235**	1,073	(3,766)
Total comprehensive income (loss) *(a)*	**4,778**	4,377	(1,223)
Net (income) loss attributable to noncontrolling interests	**(13)**	(2)	13
Other comprehensive loss attributable to noncontrolling interests	**2**	—	13
Comprehensive income (loss) applicable to shareholders of The Bank of New York Mellon Corporation *(a)*	**$ 4,767**	$ 4,375	$ (1,197)

(a) Results for the years ended Dec. 31, 2023 and Dec. 31, 2022 were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 of the Notes to Consolidated Financial Statements for additional information.

(b) Other comprehensive income (loss) attributable to The Bank of New York Mellon Corporation shareholders was $237 million for the year ended Dec. 31, 2024, $1,073 million for the year ended Dec. 31, 2023 and $(3,753) million for the year ended Dec. 31, 2022.

See accompanying Notes to Consolidated Financial Statements.

Consolidated Balance Sheet

(dollars in millions, except per share amounts)	Dec. 31, 2024	Dec. 31, 2023
Assets		
Cash and due from banks, net of allowance for credit losses of $23 and $18	**$ 4,178**	$ 4,922
Interest-bearing deposits with the Federal Reserve and other central banks	**89,546**	111,550
Interest-bearing deposits with banks, net of allowance for credit losses of $1 and $2 (includes restricted of $1,399 and $3,420)	**9,612**	12,139
Federal funds sold and securities purchased under resale agreements	**41,146**	28,900
Securities:		
Held-to-maturity, at amortized cost, net of allowance for credit losses of less than $1 and $1 (fair value of $44,020 and $44,711)	**48,596**	49,578
Available-for-sale, at fair value (amortized cost of $89,627 and $80,678, net of allowance for credit losses of $— and less than $1)	**88,031**	76,817
Total securities	**136,627**	126,395
Trading assets	**13,981**	10,058
Loans	**71,570**	66,879
Allowance for credit losses	**(294)**	(303)
Net loans	**71,276**	66,576
Premises and equipment	**3,266**	3,163
Accrued interest receivable	**1,293**	1,150
Goodwill	**16,598**	16,261
Intangible assets	**2,851**	2,854
Other assets, net of allowance for credit losses on accounts receivable of $2 and $3 (includes $2,151 and $1,261, at fair value) *(a)*	**25,690**	25,909
Total assets *(a)*	**$ 416,064**	$ 409,877
Liabilities		
Deposits:		
Noninterest-bearing deposits (principally U.S. offices)	**$ 58,267**	$ 58,274
Interest-bearing deposits in U.S. offices	**139,109**	132,616
Interest-bearing deposits in non-U.S. offices	**92,148**	92,779
Total deposits	**289,524**	283,669
Federal funds purchased and securities sold under repurchase agreements	**14,064**	14,507
Trading liabilities	**4,865**	6,226
Payables to customers and broker-dealers	**20,073**	18,395
Commercial paper	**301**	—
Other borrowed funds	**225**	479
Accrued taxes and other expenses *(a)*	**5,270**	5,411
Other liabilities (including allowance for credit losses on lending-related commitments of $72 and $87, also includes $422 and $195, at fair value) *(a)*	**9,124**	9,028
Long-term debt	**30,854**	31,257
Total liabilities *(a)*	**374,300**	368,972
Temporary equity		
Redeemable noncontrolling interests	**87**	85
Permanent equity		
Preferred stock – par value $0.01 per share; authorized 100,000,000 shares; issued 43,826 and 43,826 shares	**4,343**	4,343
Common stock – par value $0.01 per share; authorized 3,500,000,000 shares; issued 1,409,633,842 and 1,402,429,447 shares	**14**	14
Additional paid-in capital	**29,321**	28,908
Retained earnings *(a)*	**42,537**	39,549
Accumulated other comprehensive loss, net of tax	**(4,656)**	(4,893)
Less: Treasury stock of 691,953,574 and 643,085,355 common shares, at cost	**(30,241)**	(27,151)
Total The Bank of New York Mellon Corporation shareholders' equity *(a)*	**41,318**	40,770
Nonredeemable noncontrolling interests of consolidated investment management funds	**359**	50
Total permanent equity *(a)*	**41,677**	40,820
Total liabilities, temporary equity and permanent equity *(a)*	**$ 416,064**	$ 409,877

(a) Prior period balances were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 of the Notes to Consolidated Financial Statements for additional information.

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statement of Cash Flows

	Year ended Dec. 31,		
(in millions)	**2024**	2023	2022
Operating activities			
Net income *(a)*	**$ 4,543**	$ 3,304	$ 2,543
Net (income) loss attributable to noncontrolling interests	**(13)**	(2)	13
Net income applicable to shareholders of The Bank of New York Mellon Corporation *(a)*	**4,530**	3,302	2,556
Adjustments to reconcile net income to net cash provided by (used for) operating activities:			
Provision for credit losses	**70**	119	39
Pension plan contributions	**(5)**	(6)	(7)
Depreciation and amortization *(a)*	**1,803**	1,887	1,778
Goodwill impairment	**—**	—	680
Deferred tax (benefit) *(a)*	**(345)**	(383)	183
Net securities losses	**85**	68	443
Change in trading assets and liabilities	**(5,639)**	436	7,015
Change in accruals and other, net *(a)*	**188**	489	2,381
Net cash provided by operating activities	**687**	5,912	15,068
Investing activities			
Change in interest-bearing deposits with banks	**(91)**	1,943	1,540
Change in interest-bearing deposits with the Federal Reserve and other central banks	**20,056**	(18,730)	7,812
Purchases of securities held-to-maturity	**(4,525)**	(341)	(2,497)
Paydowns of securities held-to-maturity	**4,400**	4,675	7,168
Maturities of securities held-to-maturity	**4,775**	1,766	1,610
Purchases of securities available-for-sale	**(43,621)**	(23,422)	(32,336)
Sales of securities available-for-sale	**6,812**	11,229	14,990
Paydowns of securities available-for-sale	**7,573**	3,898	5,215
Maturities of securities available-for-sale	**15,239**	19,748	11,573
Net change in loans	**(4,888)**	(801)	1,423
Change in federal funds sold and securities purchased under resale agreements	**(12,282)**	(4,597)	5,294
Purchases of premises and equipment/capitalized software	**(1,469)**	(1,220)	(1,346)
Other, net	**(1,458)**	42	(572)
Net cash (used for) provided by investing activities	**(9,479)**	(5,810)	19,874
Financing activities			
Change in deposits	**9,895**	3,456	(37,009)
Change in federal funds purchased and securities sold under repurchase agreements	**(481)**	2,148	790
Change in payables to customers and broker-dealers	**1,678**	(5,030)	(1,488)
Change in other borrowed funds	**(242)**	73	(344)
Change in commercial paper	**301**	—	—
Net proceeds from the issuance of long-term debt	**5,737**	6,487	9,929
Repayments of long-term debt	**(5,963)**	(6,059)	(4,000)
Proceeds from the exercise of stock options	**—**	—	9
Issuance of common stock	**17**	16	14
Treasury stock acquired	**(3,064)**	(2,604)	(124)
Preferred stock redemption	**—**	(500)	—
Common cash dividends paid	**(1,348)**	(1,262)	(1,165)
Preferred cash dividends paid	**(194)**	(225)	(211)
Amortization of preferred stock discount	**—**	5	—
Other, net	**2**	(24)	(55)
Net cash provided by (used for) financing activities	**6,338**	(3,519)	(33,654)
Effect of exchange rate changes on cash	**(311)**	230	358
Change in cash and due from banks and restricted cash			
Change in cash and due from banks and restricted cash	**(2,765)**	(3,187)	1,646
Cash and due from banks and restricted cash at beginning of period	**8,342**	11,529	9,883
Cash and due from banks and restricted cash at end of period	**$ 5,577**	$ 8,342	$ 11,529
Cash and due from banks and restricted cash			
Cash and due from banks at end of period (unrestricted cash)	**$ 4,178**	$ 4,922	$ 5,030
Restricted cash at end of period	**1,399**	3,420	6,499
Cash and due from banks and restricted cash at end of period	**$ 5,577**	$ 8,342	$ 11,529
Supplemental disclosures			
Interest paid	**$ 21,374**	$ 16,021	$ 3,307
Income taxes paid	**1,276**	882	449
Income taxes refunded	**61**	17	11

(a) Results for the years ended Dec. 31, 2023 and Dec. 31, 2022 were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 of the Notes to Consolidated Financial Statements for additional information.

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statement of Changes in Equity

	The Bank of New York Mellon Corporation shareholders								
(in millions, except per share amount)	Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive (loss) income, net of tax	Treasury stock	Nonredeemable noncontrolling interests of consolidated investment management funds	Total permanent equity	Redeemable non-controlling interests/ temporary equity
Balance at Dec. 31, 2023 *(a)*	$ 4,343	$ 14	$ 28,908	$ 39,549	$ (4,893)	$(27,151)	$ 50	$ 40,820 *(b)*	$ 85
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—	**42**
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—	**(48)**
Other net changes in noncontrolling interests	—	—	**(9)**	—	—	—	**296**	**287**	**10**
Net income	—	—	—	**4,530**	—	—	**13**	**4,543**	—
Other comprehensive income (loss)	—	—	—	—	**237**	—	—	**237**	**(2)**
Dividends:									
Common stock at $1.78 per share *(c)*	—	—	—	**(1,348)**	—	—	—	**(1,348)**	—
Preferred stock	—	—	—	**(194)**	—	—	—	**(194)**	—
Repurchase of common stock	—	—	—	—	—	**(3,064)**	—	**(3,064)**	—
Common stock issued under employee benefit plans	—	—	**22**	—	—	—	—	**22**	—
Stock-based compensation	—	—	**423**	—	—	—	—	**423**	—
Excise tax on share repurchases	—	—	—	—	—	**(26)**	—	**(26)**	—
Other	—	—	**(23)**	—	—	—	—	**(23)**	—
Balance at Dec. 31, 2024	**$ 4,343**	**$ 14**	**$ 29,321**	**$ 42,537**	**$ (4,656)**	**$(30,241)**	**$ 359**	**$ 41,677** *(b)*	**$ 87**

(a) Retained earnings was restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 of the Notes to Consolidated Financial Statements for additional information.

(b) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $36,427 million at Dec. 31, 2023 and $36,975 million at Dec. 31, 2024.

(c) Includes dividend-equivalents on share-based awards.

Consolidated Statement of Changes in Equity (continued)

(in millions, except per share amount)	The Bank of New York Mellon Corporation shareholders: Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive (loss) income, net of tax	Treasury stock	Nonredeemable noncontrolling interests of consolidated investment management funds	Total permanent equity		Redeemable non-controlling interests/ temporary equity
Balance at Dec. 31, 2022 *(a)*	$ 4,838	$ 14	$ 28,508	$ 37,743	$ (5,966)	$(24,524)	$ 7	$ 40,620	*(b)*	$ 109
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—		38
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—		(54)
Other net changes in noncontrolling interests	—	—	16	—	—	—	41	57		(12)
Net income *(a)*	—	—	—	3,302	—	—	2	3,304		—
Other comprehensive income	—	—	—	—	1,073	—	—	1,073		—
Dividends:										
Common stock at $1.58 per share *(c)*	—	—	—	(1,262)	—	—	—	(1,262)		—
Preferred stock	—	—	—	(225)	—	—	—	(225)		—
Repurchase of common stock	—	—	—	—	—	(2,604)	—	(2,604)		—
Common stock issued under employee benefit plans	—	—	20	—	—	—	—	20		—
Preferred stock redemption	(500)	—	—	—	—	—	—	(500)		—
Stock-based compensation	—	—	364	—	—	—	—	364		—
Amortization of preferred stock discount	5	—	—	(5)	—	—	—	—		—
Excise tax on share repurchases	—	—	—	—	—	(23)	—	(23)		—
Excise tax on preferred stock redemption	—	—	—	(5)	—	—	—	(5)		—
Other	—	—	—	1	—	—	—	1		4
Balance at Dec. 31, 2023 *(a)*	$ 4,343	$ 14	$ 28,908	$ 39,549	$ (4,893)	$(27,151)	$ 50	$ 40,820	*(b)*	$ 85

(a) Retained earnings and net income were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 of the Notes to Consolidated Financial Statements for additional information.

(b) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $35,775 million at Dec. 31, 2022 and $36,427 million at Dec. 31, 2023.

(c) Includes dividend-equivalents on share-based awards.

Consolidated Statement of Changes in Equity (continued)

	The Bank of New York Mellon Corporation shareholders								
(in millions, except per share amount)	Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive (loss), net of tax	Treasury stock	Nonredeemable noncontrolling interests of consolidated investment management funds	Total permanent equity	Redeemable non-controlling interests/ temporary equity
Balance at Dec. 31, 2021 *(a)*	$ 4,838	$ 14	$ 28,128	$ 36,563	$ (2,213)	$(24,400)	$ 196	$ 43,126 *(b)*	$ 161
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—	31
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—	(31)
Other net changes in noncontrolling interests	—	—	44	—	—	—	(176)	(132)	(37)
Net income (loss) *(a)*	—	—	—	2,556	—	—	(13)	2,543	—
Other comprehensive (loss)	—	—	—	—	(3,753)	—	—	(3,753)	(13)
Dividends:									
Common stock at $1.42 per share *(c)*	—	—	—	(1,165)	—	—	—	(1,165)	—
Preferred stock	—	—	—	(211)	—	—	—	(211)	—
Repurchase of common stock	—	—	—	—	—	(124)	—	(124)	—
Common stock issued under employee benefit plans	—	—	20	—	—	—	—	20	—
Stock awards and options exercised	—	—	316	—	—	—	—	316	—
Other	—	—	—	—	—	—	—	—	(2)
Balance at Dec. 31, 2022 *(a)*	$ 4,838	$ 14	$ 28,508	$ 37,743	$ (5,966)	$(24,524)	$ 7	$ 40,620 *(b)*	$ 109

(a) Retained earnings and net income were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 of the Notes to Consolidated Financial Statements for additional information.

(b) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $38,092 million at Dec. 31, 2021 and $35,775 million at Dec. 31, 2022.

(c) Includes dividend-equivalents on share-based awards.

See accompanying Notes to Consolidated Financial Statements.

Note 1–Summary of significant accounting and reporting policies

In this Annual Report, references to "our," "we," "us," "BNY," the "Company" and similar terms refer to The Bank of New York Mellon Corporation and its consolidated subsidiaries. The term "Parent" refers to The Bank of New York Mellon Corporation but not its subsidiaries.

Nature of operations

BNY is a global leader in providing a broad range of financial products and services in domestic and international markets. Through our three principal business segments, Securities Services, Market and Wealth Services and Investment and Wealth Management, we serve institutions, corporations and high-net-worth individuals. See Note 24 for the primary products and services of our lines of business and other information.

Basis of presentation

The accounting and financial reporting policies of BNY, a global financial services company, conform to U.S. generally accepted accounting principles ("GAAP") and prevailing industry practices.

In the opinion of management, all adjustments necessary for a fair presentation of financial position, results of operations and cash flows for the periods presented have been made.

Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates based upon assumptions about future economic and market conditions which affect reported amounts and related disclosures in our financial statements. Our most significant estimates pertain to our allowance for credit losses, goodwill and other intangibles and litigation and regulatory contingencies. Although our current estimates contemplate current conditions and how we expect them to change in the future, it is reasonably possible that actual conditions could be worse than anticipated in those estimates, which could materially affect our results of operations and financial condition.

Foreign currency translation

Assets and liabilities denominated in foreign currencies are translated to U.S. dollars at the rate of exchange on the balance sheet date. Translation gains and losses on investments in foreign entities with functional currencies that are not the U.S. dollar are recorded as foreign currency translation adjustments in other comprehensive income ("OCI"). Revenue and expense transactions are translated at the applicable daily rate or the weighted average monthly exchange rate when applying the daily rate is not practical. For transactions that are denominated in a currency other than the functional currency, the effects of exchange rate changes are included in foreign exchange revenue in the income statement.

Acquisitions and divestitures

The income statement and balance sheet include results of acquired businesses accounted for under the acquisition method of accounting pursuant to Accounting Standards Codification ("ASC") 805, *Business Combinations*, and equity investments from the dates of acquisition. Contingent purchase consideration is measured at its fair value and recorded on the purchase date. Any subsequent changes in the fair value of a contingent consideration liability are recorded to other noninterest expense. Gains or losses on divested business are reflected in investment and other revenue. For businesses that are determined to be held-for-sale and the fair value less costs to sell is less than its carrying value, a loss is recognized for that difference. Contingent consideration received is measured at fair value and recorded at the date of sale. Any subsequent changes in the fair value of a contingent consideration receivable are recorded to investment and other revenue.

Consolidation

We evaluate an entity for possible consolidation in accordance with ASC 810, *Consolidation*. We first determine whether or not we have variable interests in the entity, which are investments or other interests that absorb portions of an entity's expected losses or receive portions of the entity's expected returns. Our variable interests may include decision-maker or service provider fees, direct and indirect investments and investments made by related parties, including related parties under common control. If it is determined that we do not have a variable interest in the entity, no further analysis is required and the entity is not consolidated.

If we hold a variable interest in the entity, further analysis is performed to determine if the entity is a variable interest entity ("VIE") or a voting model entity ("VME").

We consider the underlying facts and circumstances of individual entities when assessing whether or not an entity is a VIE. An entity is determined to be a VIE if the equity investors:

- do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support; or
- lack one or more of the following characteristics of a controlling financial interest:
  - the power, through voting rights or similar rights, to direct the activities of an entity that most significantly impact the entity's economic performance;
  - the obligation to absorb the expected losses of the entity; and
  - the right to receive the expected residual returns of the entity.

We reconsider and reassess whether or not we are the primary beneficiary of a VIE when governing documents or contractual arrangements are changed that would reallocate the obligation to absorb expected losses or receive expected residual returns between BNY and the other investors. This could occur when BNY disposes of any portion of its variable interests in the VIE, when we acquire additional variable interests in the VIE, when additional variable interests are issued to other investors or when other investors liquidate their variable interest in the VIE.

We consolidate a VIE if it is determined that we have a controlling financial interest in the entity. We have a controlling financial interest in a VIE when we have both (1) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and (2) the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to that VIE.

For entities that do not meet the definition of a VIE, the entity is considered a VME. We consolidate these entities if we can exert control over the financial and operating policies of an investee, which typically occurs if we have a 50% or more voting interest in the entity.

See Note 14 for additional disclosures related to our variable interests.

Equity method investments

Equity investments of less than a majority but at least 20% ownership or where we are deemed to have significant influence are accounted for by the equity method and included in other assets. Earnings on these investments are reflected as investment services fees, investment management and performance fees or investment and other revenue, as appropriate, in the period earned.

A loss in value of an equity investment that is determined to be other-than-temporary is recognized by reducing the carrying value of the equity investment to its fair value.

Effective in 2024, but applied retrospectively, the Company's investments in renewable energy projects through limited liability companies are accounted for using the proportional amortization method, when certain established criteria are met. Previously, these investments were accounted for as equity method investments utilizing the hypothetical liquidation at book value approach. See "Tax credit investments" below for information on the proportional amortization method. See Note 2 for additional information on the impact of adopting the new accounting guidance for the amount of our renewable energy investments.

Below are our most significant equity method investments.

Equity method investments at Dec. 31, 2024

(dollars in millions)	Percentage ownership	Book value
CIBC Mellon Trust Company ("CIBC Mellon")	**50%**	**$ 583**
Siguler Guff	**20%**	**$ 228**

Restricted cash and securities

Cash and securities may be segregated under federal and other regulatory requirements and primarily consists of excess client funds held by our broker-dealer entities. Restricted cash is included in interest-bearing deposits with banks on the balance sheet and with cash and due from banks when reconciling the beginning and end-of-period balances on the consolidated statement of cash flows.

Securities purchased under resale agreements and securities sold under repurchase agreements

Securities purchased under resale agreements and securities sold under repurchase agreements are accounted for as collateralized financings. Generally, these agreements are recorded at the amounts at which the securities will be subsequently resold or repurchased, plus accrued interest.

Securities purchased under resale agreements are fully collateralized with high-quality liquid securities. Collateral requirements are monitored and additional collateral is received or provided, as required. As such, these transactions carry minimal credit risk and are generally not allocated an allowance for credit losses.

Where an enforceable netting agreement exists, resale and repurchase agreements executed with the same counterparty and the same maturity date are reported on a net basis on the balance sheet.

Securities – Debt

Debt securities are classified as available-for-sale, held-to-maturity or trading securities when they are purchased. Debt securities are classified as available-for-sale when we intend to hold them for an indefinite period of time or when they may be used for tactical asset/liability purposes and may be sold from time to time to effectively manage interest rate exposure, prepayment risk and liquidity needs. Debt securities are classified as held-to-maturity when we intend and have the ability to hold them until maturity. Debt securities are classified as trading when we intend to resell them.

Available-for-sale securities are measured at fair value. The difference between fair value and amortized cost representing unrealized gains or losses is recorded net of tax as an addition to, or deduction from, OCI, unless an expected credit loss is recognized. Realized gains and losses on sales of available-for-sale securities are reported in investment and other revenue on the income statement. The cost of debt securities sold is determined on a specific identification method. Held-to-maturity securities are measured at amortized cost, net of expected credit loss, if any.

From time to time our intention to hold available-for-sale securities has changed such that we intend, and have the ability, to hold the securities to maturity. Transfers of securities from available-for-sale to held-to-maturity are accounted for at fair value and create a new cost basis. The unrealized gains or losses at date of transfer continue to be recorded in accumulated OCI and are subsequently amortized into net interest income over the contractual lives of the securities.

The Company's policy for recognition of expected credit losses for securities available-for-sale and securities held-to-maturity is contained within "Allowance for credit losses – Securities – Debt" and "Allowance for credit losses – Other" below.

Trading securities are measured at fair value and included in trading assets on the balance sheet. Trading revenue, which is reflected in investment and other revenue, includes both realized and unrealized gains and losses. The liability incurred on short-sale transactions, representing the obligation to deliver securities, is included in trading liabilities at fair value.

Income on securities purchased is adjusted for amortization of premium and accretion of discount on a level yield basis, generally over their contractual life.

Debt securities that are beneficial interests in securitized financial assets and are not high credit quality are discounted at the current yield used to accrete the beneficial interest. A credit loss is recognized when there is an adverse change in expected cash flows.

If we intend to sell a debt security or it is more likely than not that we will be required to sell a debt security prior to recovery of its cost basis, the security is written down to fair value and the credit and non-credit components of the unrealized loss are recognized in earnings and subsequently accreted to interest income on an effective yield basis over the life of the security. Subsequent increases in the fair value of the security after the write-down are included in OCI.

Securities – Equity

Investments in equity securities that do not result in consolidation and are not accounted for under the equity method are measured at fair value with changes in the fair value recognized through earnings, unless one of two available exceptions applies. The first exception, a scope exception, allows Federal Reserve Bank stock, Federal Home Loan Bank stock and exchange memberships to remain accounted for at cost, less impairment. The second practicability exception is an election available for equity investments that do not have readily determinable fair values. For certain investments where the Company has chosen the practicability exception, such investments are accounted for in other assets on the balance sheet at cost adjusted for impairment, if any, plus or minus observable price changes in orderly transactions for an identical or similar investment of the same issuer with any such changes reflected in investment and other revenue. Equity securities with readily determinable fair values are classified in trading assets with changes in fair value reflected in other trading revenue, which is included in investment and other revenue in the consolidated income statement.

Loans

Loans are reported at amortized cost, net of any unearned income and deferred fees and costs. Certain loan origination and upfront commitment fees, as well as certain direct loan origination and commitment costs, are deferred and amortized as a yield adjustment over the lives of the related loans. Loans held for sale are carried at the lower of cost or fair value.

Loan modifications

A loan may be modified if the debtor is experiencing financial difficulties and the modification results in more than an insignificant delay in payment. A determination of whether a debtor is experiencing financial difficulty is based on payment status, and for commercial borrowers, the determination also considers debtor risk ratings. The determination of whether the modification results in more than an insignificant delay in payment is based on analysis of the payment amount subject to delay, the time span of the modified terms, as well as a review of modification activity in the previous 12-month period.

Credit losses related to modified loans are generally accounted for under an individual evaluation methodology (see "Allowance for credit losses" below).

Nonperforming assets

Commercial loans are placed on nonaccrual status when principal or interest is past due 90 days or more, or when there is reasonable doubt that interest or principal will be collected.

When a first or second lien residential mortgage loan reaches 90 days delinquent, it is subject to an individual evaluation of credit loss and placed on nonaccrual status.

When a loan is placed on nonaccrual status, previously accrued and uncollected interest is reversed against current period interest income. Interest receipts on nonaccrual loans are recognized as interest income or are applied to principal when we believe the ultimate collectability of principal is in doubt. Nonaccrual loans generally are restored to an accrual basis when principal and interest become current and remain current for a specified period.

"Allowance for credit losses" below provides additional information regarding the individual evaluation of credit losses for nonperforming loans.

Allowance for credit losses

The accounting policy for determining the allowances has been identified as a "critical accounting estimate" as it requires us to make numerous complex and subjective estimates and assumptions relating to amounts which are judgmental and inherently uncertain.

The allowance for credit losses represents management's estimate of expected credit losses over the expected contractual life of the financial instruments as of the balance sheet date. The allowance methodology is designed to provide procedural discipline in assessing the appropriateness of the allowance.

A quantitative methodology and qualitative framework is used to estimate the allowance for credit losses. The qualitative framework is described in further detail within "Allowance for credit losses – Other" below. The quantitative component of our estimate uses models and methodologies that categorize financial assets based on product type, collateral type, and other credit trends and risk characteristics, including relevant information about past events, current conditions and reasonable and supportable forecasts of future economic conditions that affect the collectability of the recorded amounts. The allowance may be determined using various methods, including discounted cash flow methods, loss-rate methods, probability of default methods or other methods that we determine to be appropriate. We estimate our expected credit losses using the probability of default method for the majority of our financial assets. We measure expected credit losses of financial assets on a collective (pool) basis when similar risk characteristics exist. For a financial asset that does not share risk characteristics with other assets, expected credit losses are measured based on an individual evaluation method.

In our estimate, with the exception of our small home equity line of credit portfolio, available-for-sale debt securities, and individually evaluated financial assets, we utilize a multi-scenario macroeconomic forecast which includes a weighting of three scenarios: a baseline and upside and downside scenarios and allows us to develop our estimate using a wide span of economic variables. Our baseline scenario reflects a view on likely performance of each global region and the other two scenarios are designed relative to the baseline scenario. This approach incorporates a reasonable and supportable forecast period spanning the life of the asset, and this period includes both an initial estimated economic outlook component as well as a reversion component for each economic input variable. The length of each of the two components depends on the underlying financial instrument, scenario and underlying economic input variable. In general, the initial economic outlook period for each economic input variable under each scenario ranges between several months and two years. The speed at which the scenario-specific forecasts revert to long-term historical mean is based on observed historical patterns of mean reversion at the economic variable input level that are reflected in our model parameter estimates. Certain macroeconomic variables such as unemployment or home prices take longer to revert after a contraction, though specific recovery times are scenario-specific. Reversion will usually take longer the further away the scenario-specific forecast is from the historical mean. On a quarterly basis, within a developed governance structure, we update these scenarios for current economic conditions and may adjust the scenario weighting based on our economic outlook.

Allowance for credit losses – Loans and lending-related commitments

The allowance for credit losses on loans is presented as a valuation allowance to loans, and the allowance for credit losses on lending-related commitments is recorded in other liabilities. The components of the allowance for credit losses on loans and lending-related commitments consist of the following three elements:

- a pooled allowance component for higher risk-rated and pass-rated commercial and institutional credits and loans secured by commercial real estate;
- a pooled allowance component for residential mortgage loans; and
- an asset-specific allowance component involving individually evaluated credits of $1 million or greater which no longer share risk characteristics with other loans.

The first element, a pooled allowance component for higher risk-rated and pass-rated commercial and institutional credits and loans secured by commercial real estate, is based on our expected credit loss model using the probability of default method, which has been adjusted for the forecast of economic conditions. Individual credit analyses are performed on such loans before being assigned a credit rating. Segmentation is established based on risk characteristics of the loans and how risk is monitored. In estimating the terms of the exposures and resulting effect on the measurement of expected credit loss, we consider the impact of potential prepayments as well as the effect of borrower extension options. Borrower ratings are reviewed at least annually and are mapped to third-party databases, including rating agency and default and recovery databases, to support ongoing consistency and validity. Higher risk-rated loans and lending-related commitments are reviewed quarterly.

For the higher-risk rated and pass-rated commercial and institutional credits, the loss expected in each loan incorporates the borrower's credit rating, facility rating and maturity. The loss given default, derived from the facility rating, incorporates a recovery expectation, and for unfunded lending exposures, an estimate of the use of the facility at default (usage given default). The borrower's probability of default is derived from the associated credit rating. The probability of default and the loss given default are applied to the estimated facility amount at default to determine the quantitative component of the allowance. For each of the different parameters, specific credit models are developed for each segment of our portfolio, including commercial loans and lease financing, financial institutions and other. We use both internal and external data in the development of these parameters.

For loans secured by commercial real estate, a separate modeled approach is used that considers collateral specific data and loan maturity, as well as commercial real estate market factors by geographical region and property type under different macroeconomic scenarios. A statistical method is used to simulate the property value and income of each property, and to estimate the probability of default, loss given default and expected credit loss for each loan. The model outputs are established by using a baseline, upside and downside macroeconomic scenario to generate projected property values and incomes.

The second element, a pooled allowance component for residential mortgage loans, is determined by first segregating our mortgage pools into two categories: (i) our wealth management mortgages and other residential mortgages purchased primarily in 2023 and (ii) our legacy mortgage portfolio disclosed as other residential mortgages. We then apply models to each portfolio to predict prepayments, default rates and loss severity. We consider historical loss experience and use a loan-level, multi-period default model which further segments each portfolio by product type, including first lien fixed rate mortgages, first lien adjustable rate mortgages, second lien mortgages and interest-only mortgages. We calculate the mortgage loss up to loan contractual maturity and embed a reasonable and supportable forecast and macroeconomic variable inputs which are described above. For home equity lines of credit, probability of default and loss given default are based on external data from third-party databases due to the small size of the portfolio and limited internal data. Our legacy mortgage portfolio and home equity line of credit portfolios represent small sub-segments of our mortgage loans.

The third element, individually evaluated credits, is based on individual analysis of loans of $1 million and greater which no longer share risk characteristics with other loans. Factors we consider in measuring the extent of expected credit loss include the payment status, collateral value, the borrower's financial condition, guarantor support, the probability of collecting scheduled principal and interest payments when due, modifications of payment structure or term for troubled borrowers, and recoveries if they can be reasonably estimated. We measure the expected credit loss as the difference between the amortized cost basis of the loan and the present value of the expected future cash flows from the borrower which is generally discounted at the loan's effective interest rate, or the fair value of the collateral, if the loan is collateral dependent. We generally individually evaluate nonperforming loans as well as loans that have been modified given the risk characteristics of such loans.

Allowance for credit losses – Securities – Debt

When estimating expected credit losses, we segment our available-for-sale and held-to-maturity debt securities portfolios by major asset class. This is influenced by whether the security is structured or non-structured (i.e., direct obligation), as well as the issuer type.

For available-for-sale debt securities with an unrealized loss at the balance sheet date, if we determine that a credit loss exists, the amount is recognized as an allowance for credit losses in securities – available-for-sale, with a corresponding adjustment to the provision for credit losses. We evaluate credit losses at the individual security level and do not recognize credit losses if the fair value exceeds amortized cost, and if we determine that a credit loss exists, we limit the recognition of the loss to the difference between fair value and amortized cost. In our determination of whether an expected credit loss exists for a non-structured security, we routinely conduct periodic reviews and examine various quantitative and qualitative factors that are unique to each portfolio, including the severity of the unrealized loss position, agency rating, credit enhancement, cash flow deterioration and other factors. For a structured security, a credit loss model is utilized and the components of the credit loss calculation for each major portfolio or asset class include a probability of default and loss given default (severity). These values depend on forecasted behavior of variables in the macroeconomic environment that are incorporated into our baseline forecast scenario described in "Allowance for credit losses" above. Generally, cash flows are discounted at the effective interest rate implicit in the debt security. Changes to the present value of cash flows due to the passage of time are recognized within the allowance for credit losses.

We estimate expected credit losses for held-to-maturity debt securities using a similar multi-scenario macroeconomic forecast methodology as described in "Allowance for credit losses" above. The allowance for credit losses on held-to-maturity debt securities is recorded in securities – held-to-maturity. The components of the modeled credit loss calculation for each major portfolio or asset class include a probability of default and loss given default and their values depend on the forecast behavior of variables in the macroeconomic environment. For structured debt securities, we estimated expected credit losses at the individual security level and use a cash flow model to project principal losses. Generally, cash flows are discounted at the effective interest rate implicit in the debt security. The difference is reflected in the allowance for credit losses, and changes to the present value of cash flows due to the passage of time are recognized within the allowance for credit losses.

We currently do not require an estimate of expected credit losses to be measured and recorded for U.S. Treasury securities, agency debt securities, and other debt securities that meet certain conditions that are based on a combination of factors such as guarantees, credit ratings and other credit quality factors. These assets are monitored within our established governance structure on a recurring basis to determine if any changes are warranted.

Allowance for credit losses – Other financial instruments

We also estimate expected credit losses associated with margin loans, reverse repurchase agreements, security lending indemnifications, and deposits with third-party financial institutions using a similar risk rating-based modeling approach as described in the first allowance element within "Allowance for credit losses – Loans and lending-related commitments" above. The allowance for credit losses on reverse repurchase agreements is recorded in federal funds sold and securities purchased under resale agreements; the allowance for credit losses on securities lending indemnifications is recorded in other liabilities and the allowance for credit losses on deposits with third-party financial institutions is recorded in cash and due from banks or interest-bearing deposits with banks. Our reverse repurchase agreements are short term and subject to continuous over-collateralization by our counterparties and timely collateral replenishment, when necessary. As a result, we estimate the expected credit loss related to the uncollateralized portion of the asset at the balance sheet date, if any, and when there is a reasonable expectation that the counterparty will not replenish the collateral in compliance with the terms of the repurchase agreement. This method is also applied to margin lending arrangements and securities lending indemnifications.

Allowance for credit losses – Other

We do not apply our credit loss measurement methodologies to accrued interest receivable balances related to our loan, debt securities and deposits with third-party financial institution assets given our nonaccrual policy that requires charge-off of interest receivable when deemed uncollectible. Accrued interest receivable related to these instruments, along with other interest-bearing instruments, is included on the consolidated balance sheet. Accrued interest receivable related to each major loan class is disclosed in our credit quality disclosure in Note 5.

Our policy for credit losses related to purchased financial assets requires an evaluation to be performed prior to the effective purchase date to determine if more than an insignificant decline in credit quality has occurred during the period between the origination and purchase date, or, in the case of debt securities, the period between the issuance and purchase date. If we purchase a financial asset with more than insignificant deterioration in credit quality, the measurement of expected credit loss is performed using the methodologies described above, and the credit loss is recorded as an allowance for credit losses on the purchase date. Subsequent to purchase, changes (favorable and unfavorable) in expected cash flows are recognized immediately in net income by adjusting the allowance. We evaluate various factors in the determination of whether a more than an insignificant decline in credit quality has occurred and these factors vary depending upon the type of asset purchased. Such factors include changes in risk rating and/or agency rating, collateral deterioration, payment status, purchase price, credit spreads and other factors. We did not purchase any such assets in 2024 or 2023 and did not own such assets as of Dec. 31, 2024 or Dec. 31, 2023.

We apply a separate credit loss methodology to accounts receivables to estimate the expected credit losses associated with these short-term receivables which historically have not resulted in significant credit losses. The allowance for credit losses on accounts receivables is reflected in other assets.

The qualitative component of our estimate for the allowance for credit losses is intended to capture expected losses that may not have been fully captured in the quantitative component. Through an established governance structure, management determines the qualitative allowance each period based on an evaluation of various internal and environmental factors that include: scenario weighting and sensitivity risk, credit concentration risk, economic conditions and other considerations. We may also make adjustments for idiosyncratic risks. Once determined in the aggregate, our qualitative allowance is then allocated to each of our financial instrument portfolios except for debt securities and those instruments carried in other assets based on the respective instruments' quantitative allowance balances. The allocation of this additional allowance for credit losses is inherently judgmental, and the entire allowance for credit losses is available to absorb credit losses regardless of the nature of the loss.

The credit quality of our financial assets is assessed on an ongoing basis. Write-offs of financial assets, which may be full or partial, are deducted from the allowance for credit losses and are recorded in the period in which the financial asset(s) are deemed uncollectible.

Premises and equipment

Premises and equipment are carried at cost less accumulated depreciation and amortization. Depreciation and amortization is computed using the straight-line method over the estimated useful life of the owned asset and, for leasehold improvements, over the lesser of the remaining term of the leased facility or the estimated economic life of the improvement. For owned and capitalized assets, estimated useful lives range from two to 40 years. Maintenance and repairs are charged to expense as incurred, while major improvements are capitalized and amortized to operating expense over their identified useful lives.

Leasing

We determine if an arrangement is a lease at inception. Right-of-use ("ROU") assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments. The ROU assets and lease liabilities are recognized based on the present value of the future minimum lease payments over the lease term at commencement date or at lease modification date for certain lease modifications. For all leases, we use a discount rate that represents a collateralized borrowing rate based on similar terms and information available at lease commencement date or at the modification date for certain lease modifications in determining the present value of lease payments. In addition to the lease payments, the determination of an ROU asset may also include certain adjustments related to lease incentives and initial direct costs incurred. Options to extend or terminate a lease are included in the determination of the ROU asset and lease liability only when it is reasonably certain that we will exercise that option.

Lease expense for operating leases is recognized on a straight-line basis over the lease term, while the lease expense for finance leases is recognized using the effective interest method. ROU assets are reviewed for impairment when events or circumstances indicate that the carrying amount may not be recoverable. For operating leases, if deemed impaired, the ROU asset is written down and the remaining balance is subsequently amortized on a straight-line basis which results in lease expense recognition that is similar to finance leases.

For all leases, we have elected to account for the contractual lease and non-lease components as a single lease component and include them in the calculation of the lease liability. The non-lease variable components, such as maintenance expense and other variable costs, including non-index or rate escalations, have been excluded from the calculation and disclosed separately. Additionally, for certain equipment leases, we apply a portfolio approach to account for the operating lease ROU assets and liabilities.

For subleasing activities, the rental income is reported as part of net occupancy expense, as this activity is not a significant business activity and is part of the Company's customary business practice.

For direct finance leases, unearned revenue is accreted over the lives of the leases in decreasing amounts to provide a constant rate of return on the net investment in the leases. We have leveraged lease transactions that were entered into prior to Dec. 31, 2018. These leases are grandfathered under ASC 842, *Leases*, which became effective Jan. 1, 2019, and will continue to be accounted for under the prior guidance unless the leases are subsequently modified. Revenue on leveraged leases is recognized on a basis to achieve a constant yield on the outstanding investment in the lease, net of the related deferred tax liability, in the years in which the net investment is positive. Gains and losses on residual values of leased equipment sold are included in investment and other revenue. Impairment of leveraged lease residual values that is deemed other-than-temporary is reflected in net interest income. Considering the nature of these leases and the number of significant assumptions, there is risk associated with the income recognition on these leases should any of the assumptions change materially in future periods.

Software

We capitalize costs relating to acquired software and internal-use software development projects that provide new or significantly improved functionality. We capitalize projects that are expected to result in longer-term operational benefits, such as replacement systems or new applications that result in significantly increased operational efficiencies or functionality. All other costs incurred in connection with an internal-use software project are expensed as incurred. Capitalized software is recorded in other assets on the balance sheet. We record amortization of capitalized software in software and equipment expense on the income statement.

Identified intangible assets and goodwill

Identified intangible assets with estimable lives are amortized in a pattern consistent with the assets' identifiable cash flows or using a straight-line method over their remaining estimated benefit periods if the pattern of cash flows is not estimable. Intangible assets with estimable lives are reviewed for possible impairment when events or changed circumstances may affect the underlying basis of the asset. Goodwill and intangibles with indefinite lives are not amortized, but are assessed annually for impairment, or more often if events and circumstances indicate it is more likely than not they may be impaired and to determine if the lives are no longer indefinite and should be amortized. The amount of goodwill impairment, if any, is determined by the excess of the carrying value of the reporting unit over its fair value. The accounting policy for valuing and impairment testing of identified intangible assets and goodwill has been identified as a "critical accounting estimate" as it requires us to make numerous complex and subjective estimates.

Tax credit investments

Investments in renewable energy projects and investments in qualified affordable housing projects through a limited liability entity are accounted for utilizing the proportional amortization method. Under the proportional amortization method, the initial cost of the investment is amortized to the provision for income taxes in proportion to the tax credits and other tax benefits received. The net investment performance, including tax credits and other benefits received, is recognized in the income statement as a component of the provision for income taxes. Additionally, the value of the commitments to fund renewable energy projects and qualified affordable housing projects is included in other assets on the balance sheet and a liability is recorded for the unfunded portion.

Seed capital

Seed capital investments are generally classified as other assets and carried at fair value unless we are required to consolidate the investee due to having a controlling financial interest. Unrealized gains and losses on seed capital investments are recorded in investment and other revenue.

Noncontrolling interests

Noncontrolling interests represent the portion of consolidated entities that are owned by parties other than BNY. Noncontrolling interests included in permanent equity are adjusted for the income or loss attributable to the noncontrolling interest holders and any distributions to those shareholders. Redeemable noncontrolling interests are reported as temporary equity and represent the redemption value resulting from equity-classified share-based payment arrangements that are currently redeemable or are expected to become redeemable. We recognize changes in the redemption value of the redeemable noncontrolling interests as they occur and adjust the carrying value to be equal to the redemption value.

Fee revenue

Investment services fee revenue and investment management and performance fee revenue are based on terms specified in a contract with a customer and are shown net of fee waivers and exclude any amounts collected on behalf of third parties. Revenue is recognized when, or as, a performance obligation is satisfied by transferring control of a good or service to a customer. A performance obligation may be satisfied over time or at a point in time. Revenue from a performance obligation satisfied over time is recognized by measuring our progress in satisfying the performance obligation in a manner that reflects the transfer of goods and services to the customer. Revenue from a performance obligation satisfied at a point in time is recognized at the point in time the customer obtains control of the promised good or service. The amount of revenue recognized reflects the consideration we expect to be entitled to in exchange for the promised goods and services. Taxes assessed by a governmental authority, that are both imposed on, and concurrent with, a specific revenue-producing transaction, are collected from a customer and are excluded from revenue.

Performance fees are recognized in the period in which the performance fees are earned and become determinable. Performance fees are constrained until all uncertainties are resolved and reversal of previously recorded amounts is not probable. Performance fees are generally calculated as a percentage of the applicable portfolio's performance in excess of a benchmark index or a peer group's performance. When a portfolio underperforms its benchmark or fails to generate positive performance, subsequent years' performance must generally exceed this shortfall prior to fees being earned. Amounts billable, which are subject to a clawback if future performance thresholds in current or future years are not met, are not recognized since the fees are potentially uncollectible. These fees are recognized when it is determined that they will be collected. When a multi-year performance contract provides that fees earned are billed ratably over the performance period, only the portion of the fees earned that are non-refundable are recognized.

Additionally, we recognize revenue from non-refundable, implementation fees under outsourcing contracts using a straight-line method, commencing in the period the ongoing services are performed through the expected term of the contractual relationship. Incremental direct set-up costs of implementation, up to the related customer margin or minimum fee revenue amount, are deferred and amortized over the same period that the related implementation fees are recognized. If a client terminates an outsourcing contract prematurely, the unamortized deferred incremental direct set-up costs and the unamortized deferred implementation fees related to that contract are recognized in the period the contract is terminated.

We record foreign exchange revenue, financing-related fees and other revenue when the services are provided and earned based on contractual terms, when amounts are determined and collectability is reasonably assured.

Net interest income

Revenue on interest-earning assets and expense on interest-bearing liabilities are recognized based on the effective yield of the related financial instrument. The amortization of premiums and accretion of discounts are included in interest income and are adjusted for prepayments when they occur, such that the effective yield remains constant throughout the contractual life of the security. Negative interest incurred on assets or charged on liabilities is presented as contra interest income and contra interest expense, respectively.

Pension

The measurement date for BNY's pension plans is December 31. Plan assets are determined based on fair value generally representing observable market prices. The projected benefit obligation is determined based on the present value of projected benefit distributions at an assumed discount rate. The discount rate utilized is based on the yield curves of high-quality corporate bonds available in the marketplace. The net periodic pension expense or credit includes service costs (if applicable), interest costs based on an assumed discount rate, an expected return on plan assets based on an actuarially derived market-related value, amortization of prior service cost and amortization of prior years' actuarial gains and losses.

Actuarial gains and losses include gains or losses related to changes in the amount of the projected benefit obligation or plan assets resulting from demographic or investment experience different than assumed, changes in the discount rate or other assumptions. To the extent an actuarial gain or loss exceeds 10% of the greater of the projected benefit obligation or the market-related value of plan assets, the excess is generally recognized over the future service periods of active employees. Benefit accruals under the U.S. pension plans and the largest foreign pension plan in the UK are frozen. Future unrecognized actuarial gains and losses for these frozen plans that exceed a threshold amount are amortized over the average future life expectancy of plan participants with a maximum of 15 years.

Our expected long-term rate of return on plan assets is based on anticipated returns for each applicable asset class. Anticipated returns are weighted for the expected allocation for each asset class and are based on forecasts for prospective returns in the equity and fixed-income markets, which should track the long-term historical returns for these markets. We also consider the growth outlook for U.S. and global economies, as well as current and prospective interest rates.

The market-related value utilized to determine the expected return on plan assets is based on the fair value of plan assets adjusted for the difference between expected returns and actual performance of plan assets. The difference between actual experience and expected returns on plan assets is included as an adjustment in the market-related value over a five-year period.

Stock-based compensation

Compensation expense relating to share-based payments is generally recognized in staff expense on the income statement, on a straight-line basis, over the applicable vesting period.

Certain stock compensation grants vest when the employee retires. New grants with this feature are expensed by the first date the employee is eligible to retire. We estimate forfeitures when recording compensation cost related to share-based payment awards.

A portion of performance share unit awards are granted with performance conditions and for which the ultimate payout is subject to the discretion of the Human Resources and Compensation Committee. These awards are classified as equity and marked-to-market to earnings over the vesting period due to this discretion. A portion of performance share unit awards contain market conditions. The grant date fair value of this portion of the awards is recognized on a straight-line-basis to staff expense unless the requisite service period is not rendered.

Severance

BNY provides separation benefits to eligible U.S.-based employees separated from their jobs for business reasons not related to individual performance. Basic separation benefits are generally based on the employee's years of continuous benefited service. Severance expense for employees based outside of the U.S. is determined in accordance with local agreements and legal requirements. Severance expense is recorded when management commits to an action that will result in separation and the amount of the liability can be reasonably estimated.

Income taxes

We record current tax liabilities or assets through charges or credits to the current tax provision for the estimated taxes payable or refundable for the current year. Deferred tax assets and liabilities are recorded for future tax consequences attributable to differences between the financial statement carrying amounts of assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. A deferred tax valuation allowance is established if it is more likely than not that all or a portion of the deferred tax assets will not be realized. A tax position that fails to meet a more-likely-than-not recognition threshold will result in either reduction of current or deferred tax assets, and/or recording of current or deferred tax liabilities. Interest and penalties related to income taxes are recorded as income tax expense.

Derivative financial instruments

Derivatives are recorded on the balance sheet at fair value and include futures, forwards, interest rate swaps, foreign currency swaps, options and similar products. Derivatives in an unrealized gain position are recognized as assets while derivatives in an unrealized loss position are recognized as liabilities. Derivatives are reported net by counterparty and after consideration of cash collateral, to the extent subject to legally enforceable netting agreements. Derivatives designated and effective in qualifying hedging relationships are classified in other assets or other liabilities on the balance sheet. All other derivatives are classified within trading assets or trading liabilities on the balance sheet. Gains and losses on trading derivatives are generally included in foreign exchange revenue or investment and other revenue, as applicable.

We enter into various derivative financial instruments for non-trading purposes primarily as part of our asset/liability management process. These non-trading derivatives are designated as one of three types of hedge activities: fair value, cash flow or net investment hedges.

To qualify for hedge accounting, each hedge relationship is required to be highly effective at reducing the risk associated with the exposure being hedged, both prospectively and retrospectively. We formally document all relationships, including hedging instruments and hedged items, as well as our risk management objectives and strategy for undertaking each hedging transaction. At inception, the potential cause of ineffectiveness related to each of our hedges is assessed to determine if we can expect the hedge to be highly effective over the life of the hedging relationship. At hedge inception, we document the methodology to be utilized for evaluating effectiveness on an ongoing basis, and we monitor ongoing hedge effectiveness at least quarterly.

For qualifying fair value hedges, changes in the fair value of the derivative, and changes in the value of the hedged item associated with the designated risks being hedged, are recognized in earnings. Certain amounts excluded from the assessment of effectiveness are recorded in OCI and recognized in earnings through an amortization approach over the life of the derivative. We discontinue hedge accounting prospectively when we determine that the hedge is no longer effective or the derivative expires, is sold, or management discontinues the derivative's hedge designation. Subsequent gains and losses on these derivatives are included in foreign exchange revenue or other trading revenue, as applicable. For discontinued fair value hedges, the accumulated gain or loss on the hedged item is amortized on a yield basis over the remaining life of the hedged item.

For qualifying cash flow hedges, changes in the fair value of the derivative are recorded in OCI, until reclassified into earnings in the same period the hedged item impacts earnings. If the hedge relationship is terminated, then the change in value will be reclassified from OCI to earnings when the cash flows that were previously hedged affect earnings. If cash flow hedge accounting is discontinued as a result of a forecasted transaction no longer being probable to occur, then the amount reported in OCI is immediately reclassified to current earnings.

Derivative amounts affecting earnings are recognized in the same income statement line as the hedged item affects earnings, principally interest income, interest expense, foreign exchange revenue and staff expense.

Foreign currency transaction gains and losses related to qualifying hedges of net investments in a foreign operation are recorded with cumulative foreign currency translation adjustments within OCI net of their tax effect. We evaluate the effectiveness of foreign currency derivatives designated as hedges of net investments utilizing the forward rate method.

Earnings per common share

Basic earnings per common share is calculated by dividing net income allocated to common shareholders of BNY by the weighted average common shares outstanding and vested stock-based compensation awards where recipients have satisfied either the explicit vesting terms or retirement-eligibility requirements.

Diluted earnings per common share is computed under the treasury stock method by dividing net income allocated to common shareholders of BNY by the weighted average number of common shares outstanding for the period plus the shares representing the dilutive effect of equity-based awards.

Prior to 2024, we had stock-based awards that were considered participating securities. As a result, earnings per common share was calculated using the two-class method under which earnings are allocated to common shareholders and holders of participating securities. Unvested stock-based compensation awards that contain non-forfeitable rights to dividends or dividend equivalents are considered participating securities under the two-class method.

Under the two-class method, we increased the average number of shares of common stock outstanding by the assumed number of shares of common stock that would be issued assuming the exercise of stock options and the issuance of shares related to stock-based compensation awards using the treasury stock method, if dilutive. Diluted earnings per share was calculated by dividing net income allocated to common shareholders of BNY by the adjusted average number of common shares outstanding.

Statement of cash flows

We have defined cash as cash and due from banks. Distributions received from equity method investees are classified as cash inflows from operating activities on the statement of cash flows. Excess returns on investments of equity method investments are classified as cash flows from investing activities on the statement of cash flows.

Note 2–Accounting changes and new accounting guidance

The following accounting guidance was adopted in 2024.

ASU 2023-02, Investments—Equity Method and Joint Ventures (Topic 323): Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method

In March 2023, the Financial Accounting Standards Board ("FASB") issued ASU 2023-02, *Investments—Equity Method and Joint Ventures (Topic 323): Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method*, which permits reporting entities to elect to account for their tax equity investments, regardless of the tax credit program from which the income tax credits are received, using the proportional amortization method if certain conditions are met. Under the proportional amortization method, an entity amortizes the initial cost of the investment in proportion to the income tax credits and other income tax benefits received, and recognizes the net amortization and income tax credits and other income tax benefits in the income statement as a component of the provision for income taxes.

We adopted this guidance on Jan. 1, 2024. The impact of adopting this new guidance for our renewable energy investments that met the eligibility criteria was an increase in investment and other revenue and an increase in the provision for income taxes on the consolidated income statement. Renewable energy investments are recorded in other assets on the balance sheet. In 2024, we restated the prior period financial statements to reflect the impact of the retrospective application of the new accounting guidance. The required disclosures are included in Note 8.

The table below presents the impact of the new accounting guidance on our previously reported income statement amounts.

Consolidated Income Statement	Previously reported		Adjustment		Restated	
(in millions)	2023	2022	2023	2022	2023	2022
Investment and other revenue	$ 285	$ (82)	$ 195	$ 152	$ 480	$ 70
Total fee and other revenue	13,157	12,873	195	152	13,352	13,025
Total revenue	17,502	16,377	195	152	17,697	16,529
Income before income taxes	4,088	3,328	195	152	4,283	3,480
Provision for income taxes	800	768	179	169	979	937
Net income	3,288	2,560	16	(17)	3,304	2,543
Net income applicable to shareholders of The Bank of New York Mellon Corporation	3,286	2,573	16	(17)	3,302	2,556
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	3,051	2,362	16	(17)	3,067	2,345

The table below presents the impact of the new accounting guidance on our previously reported earnings per share applicable to common shareholders.

Earnings per share applicable to common shareholders of The Bank of New York Mellon Corporation	Previously reported		Restated	
(in dollars)	2023	2022	2023	2022
Basic	$ 3.89	$ 2.91	$ 3.91	$ 2.89
Diluted	3.87	2.90	3.89	2.88

The table below presents the impact of the new accounting guidance on our previously reported balance sheet amounts.

Consolidated Balance Sheet	Dec. 31, 2023		
(in millions)	Previously Reported	Adjustment	Restated
Other assets	$ 25,985	$ (76)	$ 25,909
Total assets	409,953	(76)	409,877
Accrued taxes and other expenses	5,567	(156)	5,411
Other liabilities	8,844	184	9,028
Total liabilities	368,944	28	368,972
Retained earnings	39,653	(104)	39,549
Total The Bank of New York Mellon Corporation shareholders' equity	40,874	(104)	40,770
Total permanent equity	40,924	(104)	40,820
Total liabilities, temporary equity and permanent equity	409,953	(76)	409,877

ASU 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures*, which requires a public entity to disclose, on an annual and interim basis, significant segment expenses that are regularly provided to the chief operating decision maker ("CODM") and included within each reported measure of segment profit or loss (collectively referred to as the "significant expense principle"). In addition, disclosure will be required of the title and position of CODM, and how the CODM uses the reported measure of segment profit or loss in assessing segment performance and deciding how to allocate resources.

We adopted this guidance as of Dec. 31, 2024. The impact of adopting this ASU did not have a material effect on BNY's business segment disclosures. The required disclosures are included in Note 24.

Staff Accounting Bulletin No. 122

In January 2025, the SEC staff released Staff Accounting Bulletin No. 122 ("SAB 122"), which rescinds the interpretative guidance included in SAB 121 which had expressed the staff's views regarding the accounting for entities that have obligations to safeguard "crypto-assets" held for their platform users. SAB 121 provided that these entities should present a liability and corresponding asset in respect of the crypto-assets safeguarded for their platform users. We have elected to early adopt SAB 122 on a retrospective basis as of and for the year-ended Dec. 31, 2024. Adopting SAB 122 had no impact to our balance sheet. We will continue to determine whether to recognize a liability related to the risk of loss related to our obligation to safeguard client assets based on incurring a loss contingency that is both probable and reasonably estimable.

Note 3–Acquisitions and dispositions

We sometimes structure our acquisitions and divestitures with both an initial payment or receipt and later contingent payments or receipts tied to post-closing revenue or income growth.

At Dec. 31, 2024, we are potentially obligated to pay additional consideration which is recorded at fair value totaling approximately $5 million and, using reasonable assumptions and estimates, could range from $0 million to $5 million over the next year. During 2024, we made contingent payments that totaled $14 million. We recorded a decrease of $3 million to contingent earnout payables reflected in other expense in 2024.

At Dec. 31, 2024, we could potentially receive additional consideration which is recorded at fair value totaling approximately $15 million and, using reasonable assumptions and estimates, could range from $5 million to $25 million over the next three years. During 2024, contingent receipts totaled $18 million.

Transactions in 2024

On Nov. 1, 2024, we acquired all of the outstanding ownership interests in Archer Holdco, LLC, a leading technology-enabled service provider of managed account solutions to the asset and wealth management industry, for cash. Non-tax deductible goodwill, software and a customer contract intangible asset were recorded related to this acquisition, and are included in the Securities Services business segment.

Transactions in 2022

On Nov. 1, 2022, BNY completed the sale of BNY Alcentra Group Holdings, Inc. (together with its subsidiaries, "Alcentra") for $350 million cash consideration at close and contingent consideration dependent on the achievement of certain performance thresholds. We recorded an $11 million pre-tax loss and a $40 million after-tax loss on this transaction. At Oct. 31, 2022, Alcentra had $32 billion in assets under management ("AUM") concentrated in senior secured loans, high yield bonds, private credit, structured credit, special situations and multi-strategy credit strategies. In addition, goodwill related to Alcentra of $434 million was removed from the consolidated balance sheet as a result of this sale.

On Aug. 1, 2022, BNY completed the sale of HedgeMark Advisors, LLC ("HedgeMark"), and recorded a $37 million pre-tax gain. As part of the sale, BNY received an equity interest in the acquiring firm. In addition, goodwill related to HedgeMark of $13 million was removed from the consolidated balance sheet as result of this sale.

Note 4–Securities

The following tables present the amortized cost, the gross unrealized gains and losses and the fair value of securities at Dec. 31, 2024 and Dec. 31, 2023.

Securities at Dec. 31, 2024 *(in millions)*	Amortized cost	Gross unrealized Gains	Gross unrealized Losses	Fair value
Available-for-sale *(a)***:**				
Non-U.S. government *(b)*	$ 25,042	$ 61	$ 356	$ 24,747
Agency residential mortgage-backed securities ("RMBS")	20,459	16	575	19,900
U.S. Treasury	16,575	9	181	16,403
Agency commercial mortgage-backed securities ("MBS")	7,467	5	247	7,225
Foreign covered bonds	7,129	33	94	7,068
Collateralized loan obligations ("CLOs")	5,809	10	—	5,819
Non-agency commercial MBS	2,641	2	156	2,487
U.S. government agencies	2,304	4	19	2,289
Non-agency RMBS	1,639	2	163	1,478
Other asset-backed securities ("ABS")	654	1	40	615
Total available-for-sale securities excluding portfolio level basis adjustments *(c)*	89,719	143	1,831	88,031
Portfolio level basis adjustments *(d)*	(92)	—	(92)	—
Total available-for-sale securities	**$ 89,627**	**$ 143**	**$ 1,739**	**$ 88,031**
Held-to-maturity:				
Agency RMBS	$ 25,824	$ 4	$ 3,545	$ 22,283
U.S. Treasury	8,833	—	443	8,390
Non-U.S. government *(b)*	4,479	8	36	4,451
U.S. government agencies	3,669	—	322	3,347
Agency commercial MBS	3,395	—	243	3,152
CLOs	1,816	2	—	1,818
Foreign covered bonds	555	1	1	555
Non-agency RMBS	14	—	—	14
Other debt securities	11	—	1	10
Total held-to-maturity securities *(e)*	**$ 48,596**	**$ 15**	**$ 4,591**	**$ 44,020**
Total securities	**$ 138,223**	**$ 158**	**$ 6,330**	**$ 132,051**

(a) Beginning Dec. 31, 2024, we are reporting basis adjustments related to the hedges of available-for-sale securities as an adjustment to the amortized cost, which results in the unrealized gains and losses being reflected net of hedges. See Note 23 for additional information on our hedging activities and related impacts.

(b) Includes supranational securities.

(c) The amortized cost of available-for-sale and held-to-maturity securities is net of the allowance for credit losses. There was no allowance for credit losses on available-for-sale securities at Dec. 31, 2024. The allowance for credit losses on held-to-maturity securities was less than $1 million at Dec. 31, 2024 and related to other debt securities.

(d) Represents fair value hedge basis adjustments related to active portfolio layer method hedges of available-for-sale securities, which are not allocated to individual securities in the portfolio. See Note 23 for additional information on our hedging activities.

(e) Held-to-maturity securities transferred from available-for-sale are initially recorded at fair value as of the date of transfer. The amortized cost of held-to-maturity securities includes the net unamortized portion of unrealized gains and losses related to securities transferred, which are offset in OCI. See Note 16 for additional information.

Securities at Dec. 31, 2023 *(in millions)*	Amortized cost	Gross unrealized Gains	Gross unrealized Losses	Fair value
Available-for-sale:				
Non-U.S. government *(a)*	$ 18,998	$ 68	$ 684	$ 18,382
U.S. Treasury	18,193	63	1,652	16,604
Agency RMBS	13,457	119	465	13,111
Agency commercial MBS	8,191	69	531	7,729
Foreign covered bonds	6,489	25	180	6,334
CLOs	6,142	5	10	6,137
Non-agency commercial MBS	3,245	1	311	2,935
U.S. government agencies	3,053	42	194	2,901
Non-agency RMBS	1,883	32	175	1,740
Other ABS	1,026	1	84	943
Other debt securities	1	—	—	1
Total available-for-sale securities *(b)*	$ 80,678	$ 425	$ 4,286	$ 76,817
Held-to-maturity:				
Agency RMBS	$ 29,740	$ 1	$ 3,493	$ 26,248
U.S. Treasury	9,123	—	612	8,511
U.S. government agencies	4,146	—	401	3,745
Agency commercial MBS	3,411	1	296	3,116
Non-U.S. government *(a)*	2,137	3	67	2,073
CLOs	983	—	1	982
Non-agency RMBS	26	1	1	26
Other debt securities	12	—	2	10
Total held-to-maturity securities *(c)*	$ 49,578	$ 6	$ 4,873	$ 44,711
Total securities	$ 130,256	$ 431	$ 9,159	$ 121,528

(a) Includes supranational securities.

(b) The amortized cost of available-for-sale securities is net of the allowance for credit loss of less than $1 million. The allowance for credit loss primarily relates to non-agency RMBS.

(c) Held-to-maturity securities transferred from available-for-sale are initially recorded at fair value as of the date of transfer. The amortized cost of held-to-maturity securities includes the net unamortized portion of unrealized gains and losses related to securities transferred, which are offset in OCI. See Note 16 for additional information.

The following table presents the realized gains and losses, on a gross basis.

Net securities gains (losses) *(in millions)*	**2024**	2023	2022
Realized gross gains	**$ 44**	$ 20	$ 92
Realized gross losses	**(129)**	(88)	(535)
Total net securities (losses)	**$ (85)**	$ (68)	$ (443)

The following table presents pre-tax net securities gains (losses) by type.

Net securities gains (losses) *(in millions)*	**2024**	2023	2022
U.S. Treasury	**$ (24)**	$ (76)	$ 12
Non-agency RMBS	**24**	2	49
Non-U.S. government	**(46)**	2	3
Other ABS	**(13)**	—	1
Other	**(26)**	4	(508) *(a)*
Total net securities (losses)	**$ (85)**	$ (68)	$ (443)

(a) Includes net securities losses from repositioning the securities portfolio which was comprised of $337 million related to state and political subdivisions and $177 million related to corporate bonds.

In 2024, U.S. Treasury securities and CLOs with an aggregate amortized cost of $4.0 billion and fair value of $3.7 billion were transferred from available-for-sale securities to held-to-maturity securities. This transfer reduced the impact of changes in interest rates on accumulated OCI.

Allowance for credit losses – Securities

The allowance for credit losses related to securities was less than $1 million at Dec. 31, 2024 and related to other debt securities. The allowance for credit losses related to securities was $1 million at Dec. 31, 2023, and related to non-agency RMBS and other debt securities.

Credit quality indicators – Securities

At Dec. 31, 2024, the gross unrealized losses on the securities portfolio were primarily attributable to an increase in interest rates from the date of purchase, and for certain securities that were transferred from available-for-sale to held-to-maturity, an increase in interest rates through the date they were transferred. As the transfers created a new cost basis for the securities, if these securities have experienced unrealized losses since the date of transfer, the corresponding unrealized losses would be reflected in the held-to-maturity securities portfolio in the following tables.

The following tables show the aggregate fair value of available-for-sale securities with a continuous unrealized loss position for less than 12 months and those that have been in a continuous unrealized loss position for 12 months or more without an allowance for credit losses.

Available-for-sale securities in an unrealized loss position without an allowance for credit losses at Dec. 31, 2024 *(in millions)*	Less than 12 months		12 months or more		Total	
	Fair value	Unrealized losses	Fair value	Unrealized losses	Fair value	Unrealized losses
Agency RMBS	$ 10,469	$ 249	$ 7,003	$ 326	$ 17,472	$ 575
Non-U.S. government *(a)*	7,283	59	7,305	297	14,588	356
U.S. Treasury	4,154	15	8,334	166	12,488	181
Agency commercial MBS	554	5	5,841	242	6,395	247
Foreign covered bonds	892	2	2,287	92	3,179	94
Non-agency commercial MBS	58	—	2,127	156	2,185	156
U.S. government agencies	576	9	905	10	1,481	19
Non-agency RMBS	139	2	995	161	1,134	163
Other ABS	3	—	536	40	539	40
Total securities available-for-sale	**$ 24,128**	**$ 341**	**$ 35,333**	**$ 1,490**	**$ 59,461**	**$ 1,831**

(a) Includes supranational securities.

Available-for-sale securities in an unrealized loss position without an allowance for credit losses at Dec. 31, 2023 *(in millions)*	Less than 12 months		12 months or more		Total	
	Fair value	Unrealized losses	Fair value	Unrealized losses	Fair value	Unrealized losses
U.S. Treasury	$ 694	$ 48	$ 14,862	$ 1,604	$ 15,556	$ 1,652
Non-U.S. government *(a)*	2,756	24	11,767	660	14,523	684
Agency RMBS	2,753	27	6,793	438	9,546	465
Agency commercial MBS	328	5	7,060	526	7,388	531
CLOs	784	—	3,158	10	3,942	10
Foreign covered bonds	268	1	3,603	179	3,871	180
Non-agency commercial MBS	187	2	2,607	309	2,794	311
U.S. government agencies	573	4	1,779	190	2,352	194
Non-agency RMBS	30	1	1,300	174	1,330	175
Other ABS	—	—	832	84	832	84
Total securities available-for-sale	$ 8,373	$ 112	$ 53,761	$ 4,174	$ 62,134	$ 4,286

(a) Includes supranational securities.

The following tables show the credit quality of the held-to-maturity securities. We have included certain credit ratings information because the information can indicate the degree of credit risk to which we are exposed. Significant changes in ratings classifications could indicate increased credit risk for us and could be accompanied by an increase in the allowance for credit losses and/or a reduction in the fair value of our securities portfolio.

Held-to-maturity securities portfolio at Dec. 31, 2024			Ratings *(a)*				
(dollars in millions)	Amortized cost	Net unrealized gain (loss)	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Not rated
Agency RMBS	$ 25,824	$ (3,541)	100%	—%	—%	—%	—%
U.S. Treasury	8,833	(443)	100	—	—	—	—
Non-U.S. government *(b)(c)*	4,479	(28)	100	—	—	—	—
U.S. government agencies	3,669	(322)	100	—	—	—	—
Agency commercial MBS	3,395	(243)	100	—	—	—	—
CLOs	1,816	2	100	—	—	—	—
Foreign covered bonds	555	—	100	—	—	—	—
Non-agency RMBS	14	—	23	77	—	—	—
Other debt securities	11	(1)	—	—	—	—	100
Total held-to-maturity securities	**$ 48,596**	**$ (4,576)**	**100%**	**—%**	**—%**	**—%**	**—%**

(a) Represents ratings by Standard & Poor's ("S&P") or the equivalent.
(b) Includes supranational securities.
(c) Primarily consists of exposure to UK, Germany, the Netherlands, Austria and France.

Held-to-maturity securities portfolio at Dec. 31, 2023			Ratings *(a)*				
(dollars in millions)	Amortized cost	Net unrealized gain (loss)	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Not rated
Agency RMBS	$ 29,740	$ (3,492)	100%	—%	—%	—%	—%
U.S. Treasury	9,123	(612)	100	—	—	—	—
U.S. government agencies	4,146	(401)	100	—	—	—	—
Agency commercial MBS	3,411	(295)	100	—	—	—	—
Non-U.S. government *(b)(c)*	2,137	(64)	100	—	—	—	—
CLOs	983	(1)	100	—	—	—	—
Non-agency RMBS	26	—	25	54	2	17	2
Other debt securities	12	(2)	—	—	—	—	100
Total held-to-maturity securities	$ 49,578	$ (4,867)	100%	—%	—%	—%	—%

(a) Represents ratings by S&P or the equivalent.
(b) Includes supranational securities.
(c) Primarily consists of exposure to Germany, France, UK and the Netherlands.

Maturity distribution

The following table shows the maturity distribution by carrying amount and yield (on a tax equivalent basis) of our securities portfolio.

Maturity distribution and yields on securities at Dec. 31, 2024	Within 1 year		1-5 years		5-10 years		After 10 years		Total	
(dollars in millions)	Amount	Yield *(a)*	Amount	Yield *(a)*	Amount	Yield *(a)*	Amount	Yield *(a)*	Amount	Yield *(a)*
Available-for-sale:										
U.S. Treasury	$ 563	1.80%	$ 12,759	2.42%	$ 1,210	3.03%	$ 1,871	2.92%	**$ 16,403**	**2.52%**
Non-U.S. government *(b)*	4,503	2.54	17,318	3.21	2,894	2.65	32	3.42	**24,747**	**3.02**
Foreign covered bonds	805	3.47	5,943	3.26	320	2.79	—	—	**7,068**	**3.27**
U.S. government agencies	278	3.85	1,287	3.51	724	2.57	—	—	**2,289**	**3.22**
Mortgage-backed securities:										
Agency RMBS									**19,900**	**4.78**
Non-agency RMBS									**1,478**	**3.51**
Agency commercial MBS									**7,225**	**3.05**
Non-agency commercial MBS									**2,487**	**2.95**
CLOs									**5,819**	**6.04**
Other ABS									**615**	**2.33**
Total securities available-for-sale	$ 6,149	2.65%	$ 37,307	2.95%	$ 5,148	2.74%	$ 1,903	2.92%	**$ 88,031**	**3.54%**
Held-to-maturity:										
U.S. Treasury	$ 1,081	0.86%	$ 6,653	1.22%	$ 1,099	0.96%	$ —	—%	**$ 8,833**	**1.14%**
U.S. government agencies	1,008	1.46	1,971	1.52	477	1.51	213	1.99	**3,669**	**1.53**
Non-U.S. government *(b)*	709	1.23	3,530	2.58	240	2.24	—	—	**4,479**	**2.35**
Foreign covered bonds	—	—	555	2.54	—	—	—	—	**555**	**2.54**
Other debt securities	—	—	—	—	11	4.75	—	—	**11**	**4.75**
Mortgage-backed securities:										
Agency RMBS									**25,824**	**2.34**
Non-agency RMBS									**14**	**5.52**
Agency commercial MBS									**3,395**	**2.61**
CLOs									**1,816**	**6.06**
Total securities held-to-maturity	$ 2,798	1.17%	$ 12,709	1.70%	$ 1,827	1.30%	$ 213	1.99%	**$ 48,596**	**2.22%**
Total securities	$ 8,947	2.19%	$ 50,016	2.64%	$ 6,975	2.38%	$ 2,116	2.85%	**$136,627**	**3.08%**

(a) Yields are based upon the amortized cost of securities and consider the contractual coupon, amortization of premiums and accretion of discounts, excluding the effect of related hedging derivatives.
(b) Includes supranational securities.

Pledged assets

At Dec. 31, 2024, BNY had pledged assets of $138 billion, including $88 billion pledged as collateral for potential borrowing at the Federal Reserve Discount Window and $10 billion pledged as collateral for borrowing at the Federal Home Loan Bank. The components of the assets pledged at Dec. 31, 2024 included $117 billion of securities, $15 billion of loans, $5 billion of trading assets and $1 billion of interest-bearing deposits with banks.

If there has been no borrowing at the Federal Reserve Discount Window, the Federal Reserve generally allows banks to freely move assets in and out of their pledged assets account to sell or repledge the assets for other purposes. BNY regularly moves assets in and out of its pledged assets account at the Federal Reserve.

At Dec. 31, 2023, BNY had pledged assets of $134 billion, including $93 billion pledged as collateral for potential borrowing at the Federal Reserve Discount Window and $9 billion pledged as collateral for borrowing at the Federal Home Loan Bank. The components of the assets pledged at Dec. 31, 2023 included $116 billion of securities, $13 billion of loans, $4 billion of trading assets and $1 billion of interest-bearing deposits with banks.

At Dec. 31, 2024 and Dec. 31, 2023, pledged assets included $23 billion and $24 billion, respectively, for which the recipients were permitted to sell or repledge the assets delivered.

We also obtain securities as collateral, including receipts under resale agreements, securities borrowed, derivative contracts and custody agreements, on terms which permit us to sell or repledge the securities to others. At Dec. 31, 2024 and Dec. 31, 2023, the market value of the securities received that can be sold or repledged was $300 billion and $212 billion, respectively. We routinely sell or repledge these securities through delivery to third parties. As of Dec. 31, 2024 and Dec. 31, 2023, the market value of securities collateral sold or repledged was $264 billion and $180 billion, respectively.

Restricted cash and securities

Cash and securities may be segregated under federal and other regulations or requirements. At Dec. 31, 2024 and Dec. 31, 2023, cash segregated under federal and other regulations or requirements was $1 billion and $3 billion, respectively. Restricted cash is primarily included in interest-bearing deposits with banks on the consolidated balance sheet. Securities segregated under federal and other regulations or requirements were $5 billion at Dec. 31, 2024 and $3 billion at Dec. 31, 2023. Restricted securities were sourced from securities purchased under resale agreements and securities borrowings and are included in federal funds sold and securities purchased under resale agreements on the consolidated balance sheet.

Note 5–Loans and asset quality

Loans

The table below provides the details of our loan portfolio.

Loans	Dec. 31,	
(in millions)	**2024**	2023
Commercial	**$ 1,420**	$ 2,112
Commercial real estate	**6,782**	6,760
Financial institutions	**13,167**	10,521
Lease financings	**603**	599
Wealth management loans	**8,698**	9,109
Wealth management mortgages	**8,950**	9,131
Other residential mortgages	**1,068**	1,166
Capital call financing	**5,163**	3,700
Other	**3,063**	2,717
Overdrafts	**3,519**	3,053
Margin loans	**19,137**	18,011
Total loans *(a)*	**$ 71,570**	$ 66,879

(a) Net of unearned income of $230 million at Dec. 31, 2024 and $268 million at Dec. 31, 2023, primarily related to lease financings.

We disclose information related to our loans and asset quality by the class of financing receivable in the following tables.

Allowance for credit losses

Activity in the allowance for credit losses on loans and lending-related commitments is presented below. This does not include activity in the allowance for credit losses related to other financial instruments, including cash and due from banks, interest-bearing deposits with banks, federal funds sold and securities purchased under resale agreements, held-to-maturity securities, available-for-sale securities and accounts receivable.

Allowance for credit losses activity for the year ended Dec. 31, 2024 *(a)* *(in millions)*	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans	Wealth management mortgages	Other residential mortgages	Capital call financing	Total
Beginning balance	$ 27	$ 325	$ 19	$ 1	$ 1	$ 9	$ 4	$ 4	$ 390
Charge-offs	—	(82)	—	—	—	(1)	(1)	—	(84)
Recoveries	—	—	—	—	—	—	1	—	1
Net (charge-offs)	—	(82)	—	—	—	(1)	—	—	(83)
Provision *(b)*	(7)	72	—	(1)	—	(2)	(2)	(1)	59
Ending balance	**$ 20**	**$ 315**	**$ 19**	**$ —**	**$ 1**	**$ 6**	**$ 2**	**$ 3**	**$ 366**
Allowance for:									
Loan losses	$ 7	$ 265	$ 11	$ —	$ 1	$ 6	$ 2	$ 2	$ 294
Lending-related commitments	13	50	8	—	—	—	—	1	72
Individually evaluated for impairment:									
Loan balance *(c)*	$ —	$ 237	$ —	$ —	$ —	$ 9	$ 1	$ —	$ 247
Allowance for loan losses	—	49	—	—	—	—	—	—	49

(a) *There was no activity in the other loan portfolio.*
(b) *Does not include provision for credit losses related to other financial instruments of $11 million for the year ended Dec. 31, 2024.*
(c) *Includes collateral dependent loans of $247 million with $258 million of collateral value.*

Allowance for credit losses activity for the year ended Dec. 31, 2023 *(in millions)*	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans	Wealth management mortgages	Other residential mortgages	Capital call financing	Other	Total
Beginning balance	$ 18	$ 184	$ 24	$ 1	$ 1	$ 12	$ 8	$ 6	$ —	$ 254
Charge-offs	—	—	—	—	—	—	(3)	—	—	(3)
Recoveries	1	—	—	—	—	—	2	—	5	8
Net recoveries (charge-offs)	1	—	—	—	—	—	(1)	—	5	5
Provision *(a)*	8	141	(5)	—	—	(3)	(3)	(2)	(5)	131
Ending balance	$ 27	$ 325	$ 19	$ 1	$ 1	$ 9	$ 4	$ 4	$ —	$ 390
Allowance for:										
Loan losses	$ 12	$ 266	$ 9	$ 1	$ 1	$ 8	$ 4	$ 2	$ —	$ 303
Lending-related commitments	15	59	10	—	—	1	—	2	—	87
Individually evaluated for impairment:										
Loan balance *(b)*	$ —	$ 290	$ —	$ —	$ —	$ 12	$ 1	$ —	$ —	$ 303
Allowance for loan losses	—	76	—	—	—	—	—	—	—	76

(a) *Does not include provision for credit losses benefit related to other financial instruments of $12 million for the year ended Dec. 31, 2023.*
(b) *Includes collateral dependent loans of $303 million with $348 million of collateral at fair value.*

Allowance for credit losses activity for the year ended Dec. 31, 2022 *(a)* *(in millions)*	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans	Wealth management mortgages	Other residential mortgages	Capital call financing	Total
Beginning balance	$ 12	$ 199	$ 13	$ 1	$ 1	$ 6	$ 7	$ 2	$ 241
Charge-offs	—	—	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	—	4	—	4
Net recoveries	—	—	—	—	—	—	4	—	4
Provision *(b)*	6	(15)	11	—	—	6	(3)	4	9
Ending balance	$ 18	$ 184	$ 24	$ 1	$ 1	$ 12	$ 8	$ 6	$ 254
Allowance for:									
Loan losses	$ 4	$ 137	$ 10	$ 1	$ 1	$ 11	$ 8	$ 4	$ 176
Lending-related commitments	14	47	14	—	—	1	—	2	78
Individually evaluated for impairment:									
Loan balance *(c)*	$ —	$ 62	$ —	$ —	$ —	$ 16	$ 1	$ —	$ 79
Allowance for loan losses	—	—	—	—	—	—	—	—	—

(a) *There was no activity in the other loan portfolio.*
(b) *Does not include provision for credit losses related to other financial instruments of $30 million for the year ended Dec. 31, 2022.*
(c) *Includes collateral dependent loans of $79 million with $126 million of collateral at fair value.*

Nonperforming assets

The table below presents our nonperforming assets.

Nonperforming assets	**Dec. 31, 2024**			Dec. 31, 2023		
	Recorded investment			Recorded investment		
(in millions)	With an allowance	Without an allowance	Total	With an allowance	Without an allowance	Total
Nonperforming loans:						
Commercial real estate	**$ 104**	**$ 39**	**$ 143**	$ 189	$ —	$ 189
Other residential mortgages	**18**	**1**	**19**	23	1	24
Wealth management mortgages	**6**	**9**	**15**	7	12	19
Total nonperforming loans	**128**	**49**	**177**	219	13	232
Other assets owned	**—**	**2**	**2**	—	5	5
Total nonperforming assets	**$ 128**	**$ 51**	**$ 179**	$ 219	$ 18	$ 237

Past due loans

The table below presents our past due loans.

Past due loans and still accruing interest	**Dec. 31, 2024**				Dec. 31, 2023			
	Days past due			Total	Days past due			Total
(in millions)	30-59	60-89	≥90	past due	30-59	60-89	≥90	past due
Wealth management loans	**$ 47**	**$ —**	**$ —**	**$ 47**	$ 52	$ —	$ —	$ 52
Wealth management mortgages	**34**	**2**	**—**	**36**	26	3	—	29
Commercial real estate	**15**	**—**	**—**	**15**	9	3	—	12
Other residential mortgages	**7**	**1**	**—**	**8**	7	1	—	8
Financial institutions	**—**	**—**	**—**	**—**	339 *(a)*	—	—	339
Total past due loans	**$ 103**	**$ 3**	**$ —**	**$ 106**	$ 433	$ 7	$ —	$ 440

(a) The past due financial institutions loans have been collected since Dec. 31, 2023.

Loan modifications

Modified loans are evaluated to determine whether a modification or restructuring with a borrower experiencing financial difficulty results in principal forgiveness, an interest rate reduction, an other-than-insignificant payment delay, or a term extension. The modification could result in a new loan or a continuation of the existing loan.

In 2024, we modified five commercial real estate loans, with an aggregate recorded investment of $212 million and unfunded lending commitments of $20 million, by extending the maturity dates, and, in certain instances, changing the interest rate or providing other payment modifications. Commercial real estate loans of $118 million were repaid prior to Dec. 31, 2024, and unfunded lending commitments of $16 million were canceled prior to Dec. 31, 2024.

Also in 2024, we also modified four other residential mortgage loans, with an aggregate recorded investment of $1 million, by providing payment modifications.

At Dec. 31, 2024, other residential mortgage loans that were modified in the previous 12 months and that are now past due by more than 90 days totaled $1 million.

In 2023, we modified two commercial real estate loans, with an aggregate recorded investment of $71 million and an unfunded lending commitment of $15 million, by extending the maturity dates. One of these loans matured in 2023 after the modification.

Also in 2023, we modified six other residential mortgage loans, with an aggregate recorded investment of $2 million, by providing payment modifications, extending maturity dates, reducing the interest rate, or a combination of these modifications.

Credit quality indicators

Our credit strategy is to focus on investment-grade clients that are active users of our non-credit services. Each customer is assigned an internal credit rating, which is mapped to an external rating agency grade equivalent, if possible, based upon a number of dimensions, which are continually evaluated and may change over time.

The tables below provide information about the credit profile of the loan portfolio by the period of origination.

Credit profile of the loan portfolio							**Dec. 31, 2024**			
							Revolving loans			
	Originated, at amortized cost									
(in millions)	**2024**	2023	2022	2021	2020	Prior to 2020	Amortized cost	Converted to term loans – Amortized cost	Total *(a)*	Accrued interest receivable
Commercial:										
Investment grade	**$ 41**	$ 69	$ 20	$ 55	$ —	$ 116	**$ 1,010**	**$ —**	**$ 1,311**	
Non-investment grade	**14**	29	—	17	—	—	**49**	**—**	**109**	
Total commercial	**55**	98	20	72	—	116	**1,059**	**—**	**1,420**	**$ 2**
Commercial real estate *(b)*:										
Investment grade	**396**	567	762	392	460	1,384	**126**	**—**	**4,087**	
Non-investment grade	**335**	315	751	351	214	617	**94**	**18**	**2,695**	
Total commercial real estate	**731**	882	1,513	743	674	2,001	**220**	**18**	**6,782**	**28**
Financial institutions:										
Investment grade	**491**	370	20	26	42	—	**10,363**	**—**	**11,312**	
Non-investment grade	**131**	—	10	—	—	—	**1,714**	**—**	**1,855**	
Total financial institutions	**622**	370	30	26	42	—	**12,077**	**—**	**13,167**	**157**
Wealth management loans:										
Investment grade	**3**	29	33	110	33	109	**8,261**	**100**	**8,678**	
Non-investment grade	**—**	—	—	—	—	—	**20**	**—**	**20**	
Total wealth management loans	**3**	29	33	110	33	109	**8,281**	**100**	**8,698**	**50**
Wealth management mortgages *(b)*	**495**	798	1,585	1,812	818	3,423	**19**	**—**	**8,950**	**23**
Lease financings	**—**	—	—	10	31	562	**—**	**—**	**603**	**—**
Other residential mortgages *(b)*	**15**	148	529	184	5	187	**—**	**—**	**1,068**	**4**
Capital call financing	**91**	—	—	—	—	—	**5,072**	**—**	**5,163**	**28**
Other loans	**—**	—	—	—	—	—	**3,063**	**—**	**3,063**	**6**
Margin loans	**7,732**	—	—	—	—	—	**11,405**	**—**	**19,137**	**38**
Total loans	**$ 9,744**	$ 2,325	$ 3,710	$ 2,957	$ 1,603	$ 6,398	**$ 41,196**	**$ 118**	**$ 68,051**	**$ 336**

(a) Excludes overdrafts of $3,519 million. Overdrafts occur on a daily basis primarily in the custody and securities clearance business and are generally repaid within two business days.
(b) The gross write-offs related to commercial real estate loans were $82 million, other residential mortgage loans were $1 million and wealth management mortgage loans were less than $1 million in 2024.

Credit profile of the loan portfolio	Dec. 31, 2023									
	Originated, at amortized cost						Revolving loans			
(in millions)	2023	2022	2021	2020	2019	Prior to 2019	Amortized cost	Converted to term loans – Amortized cost	Total *(a)*	Accrued interest receivable
Commercial:										
Investment grade	$ 193	$ 114	$ 70	$ —	$ —	$ 45	$ 1,483	$ —	$ 1,905	
Non-investment grade	52	18	—	—	—	—	137	—	207	
Total commercial	245	132	70	—	—	45	1,620	—	2,112	$ 3
Commercial real estate:										
Investment grade	1,518	864	585	152	271	875	136	22	4,423	
Non-investment grade	1,172	685	154	43	47	152	84	—	2,337	
Total commercial real estate	2,690	1,549	739	195	318	1,027	220	22	6,760	30
Financial institutions:										
Investment grade	616	74	57	—	—	10	6,948	—	7,705	
Non-investment grade	134	10	—	—	—	—	2,672	—	2,816	
Total financial institutions	750	84	57	—	—	10	9,620	—	10,521	120
Wealth management loans:										
Investment grade	39	30	110	26	7	167	8,542	101	9,022	
Non-investment grade	—	2	—	—	—	—	85	—	87	
Total wealth management loans	39	32	110	26	7	167	8,627	101	9,109	57
Wealth management mortgages	850	1,689	1,909	863	736	3,066	18	—	9,131	22
Lease financings	230	—	—	40	7	322	—	—	599	—
Other residential mortgages *(b)*	184	561	200	5	—	216	—	—	1,166	5
Capital call financing	10	—	—	—	—	—	3,690	—	3,700	15
Other loans	—	—	—	—	—	—	2,717	—	2,717	7
Margin loans	7,283	—	—	—	—	—	10,728	—	18,011	41
Total loans	$ 12,281	$ 4,047	$ 3,085	$ 1,129	$ 1,068	$ 4,853	$ 37,240	$ 123	$ 63,826	$ 300

(a) Excludes overdrafts of $3,053 million. Overdrafts occur on a daily basis primarily in the custody and securities clearance business and are generally repaid within two business days.

(b) The gross write-offs related to other residential mortgage loans were $3 million in 2023.

Commercial loans

The commercial loan portfolio is divided into investment grade and non-investment grade categories based on the assigned internal credit ratings, which are generally consistent with those of the public rating agencies. Customers with ratings consistent with BBB- (S&P)/Baa3 (Moody's) or better are considered to be investment grade. Those clients with ratings lower than this threshold are considered to be non-investment grade.

Commercial real estate

Our income-producing commercial real estate facilities are focused on experienced owners and are structured with moderate leverage based on existing cash flows. Our commercial real estate lending activities also include construction and renovation facilities.

Financial institutions

Financial institution exposures are high-quality, with 96% of the exposures meeting the investment grade equivalent criteria of our internal credit rating classification at Dec. 31, 2024. In addition, 67% of the financial institutions exposure is secured. For example, securities industry clients and asset managers often borrow against marketable securities held in custody. The exposure to financial institutions is generally short-term, with 84% expiring within one year.

Wealth management loans

Wealth management loans are not typically rated by external rating agencies. A majority of the wealth management loans are secured by the customers' investment management accounts or custody accounts. Eligible assets pledged for these loans are typically investment grade fixed-income securities, equities and/or mutual funds. Internal ratings for this portion of the wealth management loan portfolio, therefore, would equate to investment grade external ratings. Wealth management loans are provided to select customers based on the pledge of other types of assets. For the loans collateralized by other assets, the credit quality of the obligor is carefully analyzed, but we do not consider this portion of wealth management loan portfolio to be investment grade.

Wealth management mortgages

Credit quality indicators for wealth management mortgages are not correlated to external ratings. Wealth management mortgages are typically loans to high-net-worth individuals, which are secured primarily by residential property. These loans are primarily interest-only, adjustable rate mortgages with a weighted-average loan-to-value ratio of 61% at origination. Delinquency rate is a key indicator of credit quality in the wealth management portfolio. At Dec. 31, 2024, less than 1% of the mortgages were past due.

At Dec. 31, 2024, the wealth management mortgage portfolio consisted of the following geographic concentrations: California – 21%; New York – 14%; Florida – 11%; Massachusetts – 8%; and other – 46%.

Lease financings

At Dec. 31, 2024, all of leasing exposure was investment grade, or investment grade equivalent and consisted of exposures backed by well-diversified assets. The largest components of our lease residual value exposure related to real estate and large-ticket transportation equipment. Assets are both foreign and domestic-based, with primary concentrations in Germany and the U.S.

Other residential mortgages

The other residential mortgage portfolio primarily consists of 1-4 family residential mortgage loans and totaled $1.1 billion at Dec. 31, 2024 and $1.2 billion at Dec. 31, 2023. These loans are not typically correlated to external ratings.

Capital call financing

Capital call financing includes loans to private equity funds that are secured by the fund investors' capital commitments and the funds' right to call capital.

Other loans

Other loans primarily include loans to consumers that are fully collateralized with equities, mutual funds and fixed-income securities.

Margin loans

We had $19.1 billion of secured margin loans at Dec. 31, 2024, compared with $18.0 billion at Dec. 31, 2023. Margin loans are collateralized with marketable securities, and borrowers are required to maintain a daily collateral margin in excess of 100% of the value of the loan. We have rarely suffered a loss on these types of loans.

Overdrafts

Overdrafts primarily relate to custody and securities clearance clients and totaled $3.5 billion at Dec. 31, 2024 and $3.1 billion at Dec. 31, 2023. Overdrafts occur on a daily basis and are generally repaid within two business days.

Reverse repurchase agreements

Reverse repurchase agreements at Dec. 31, 2024 and Dec. 31, 2023 were fully secured with high-quality collateral. As a result, there was no allowance for credit losses related to these assets at Dec. 31, 2024 and Dec. 31, 2023.

Note 6–Leasing

We have operating leases for corporate offices, data centers and certain equipment. Our leases have remaining lease terms up to 14 years, some of which include options to extend or terminate the lease. In some of our corporate office locations, we may enter into sublease arrangements for portions or all of the space and/or lease term.

The table below presents the consolidated balance sheet information related to operating leases.

Operating leases *(dollars in millions)*	Dec. 31, **2024**	2023
ROU assets *(a)*	**$ 1,076**	$ 1,125
Lease liability *(b)*	**$ 1,321**	$ 1,356
Weighted average:		
Remaining lease term	**9.0 years**	9.4 years
Discount rate *(annualized)*	**3.50%**	3.11%

(a) Included in premises and equipment on the consolidated balance sheet.
(b) Operating lease liabilities are included in other liabilities on the consolidated balance sheet.

The table below presents the components of lease expense.

Lease expense *(in millions)*	Year ended Dec. 31, **2024**	2023	2022
Operating lease expense	**$ 229**	$ 215	$ 224
Variable lease expense	**44**	43	36
Sublease income	**(31)**	(34)	(33)
Finance lease expense:			
Amortization of ROU assets	**—**	—	6
Total lease expense	**$ 242**	$ 224	$ 233

The table below presents cash flow information related to leases.

Cash flow information *(in millions)*	Year ended Dec. 31, **2024**	2023	2022
Cash paid for amounts included in measurement of liabilities:			
Operating cash flows from operating leases	**$ 217**	$ 224	$ 224
Financing cash flows from finance leases	**$ —**	$ —	$ 23

See Note 26 for information on non-cash operating lease transactions.

The table below presents the maturities of our operating lease liabilities.

Maturities of operating lease liabilities *(in millions)*	
For the year ended Dec. 31,	
2025	$ 204
2026	199
2027	177
2028	150
2029	139
2030 and thereafter	669
Total lease payments	1,538
Less: Imputed interest	217
Total	$ 1,321

Note 7–Goodwill and intangible assets

Goodwill

The table below provides a breakdown of goodwill by business segment.

Goodwill by business segment *(in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management	Consolidated
Balance at Dec. 31, 2023				
Goodwill	$ 7,004	$ 1,429	$ 8,508	$ 16,941
Accumulated impairment losses	—	—	(680)	(680)
Net goodwill	$ 7,004	$ 1,429	$ 7,828	$ 16,261
Business realignment *(a)*	(51)	48	3	—
Acquisition	426	—	—	426
Foreign currency translation	(48)	(2)	(39)	(89)
Balance at Dec. 31, 2024				
Goodwill	$ 7,331	$ 1,475	$ 8,472	$ 17,278
Accumulated impairment losses	—	—	(680)	(680)
Net goodwill	**$ 7,331**	**$ 1,475**	**$ 7,792**	**$ 16,598**

(a) In 2024, we made certain realignments of similar products and services within our lines of business. See Note 24 for additional information.

Goodwill by business segment *(in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management	Consolidated
Balance at Dec. 31, 2022				
Goodwill	$ 6,973	$ 1,424	$ 8,433	$ 16,830
Accumulated impairment losses	—	—	(680)	(680)
Net goodwill	$ 6,973	$ 1,424	$ 7,753	$ 16,150
Foreign currency translation	31	5	75	111
Balance at Dec. 31, 2023				
Goodwill	$ 7,004	$ 1,429	$ 8,508	$ 16,941
Accumulated impairment losses	—	—	(680)	(680)
Net goodwill	$ 7,004	$ 1,429	$ 7,828	$ 16,261

Goodwill impairment testing

The goodwill impairment test is performed at least annually at the reporting unit level. BNY's business segments include seven reporting units for which goodwill impairment testing is performed. An interim goodwill impairment test is performed when events or circumstances occur that may indicate that it is more likely than not that the fair value of any reporting unit may be less than its carrying value.

In each quarter of 2024, we completed an interim goodwill impairment test of the Investment Management reporting unit, which had $6.0 billion of allocated goodwill as of Dec. 31, 2024. In all cases, we determined the fair value of the Investment Management reporting unit exceeded its carrying value and no goodwill impairment was recorded.

For the Dec. 31, 2024 test, the fair value of the Investment Management reporting unit exceeded its carrying value by approximately 11%. We determined the fair value of the Investment Management reporting unit using an income approach based on management's projections as of Dec. 31, 2024. The discount rate applied to these cash flows was 10.5%.

The cash flow estimates for the Investment Management reporting unit are impacted by projections of the level and mix of assets under management, market values, operating margins and long-term growth rates.

In the second quarter of 2024, we performed our annual goodwill impairment test on the remaining six reporting units using an income approach to estimate the fair values of each reporting unit. Estimated cash flows used in the income approach were based on management's projections as of April 1, 2024. The discount rate applied to these cash flows was 10%.

As a result of the annual goodwill impairment test, no goodwill impairment was recognized. The fair values of the Company's remaining six reporting units were substantially in excess of the respective reporting units' carrying value.

Determining the fair value of a reporting unit is subject to uncertainty as it is reliant on estimates of cash flows that extend far into the future, and, by their nature, are difficult to estimate over such an extended time frame. In the future, changes in the assumptions or the discount rate could produce a material non-cash goodwill impairment.

In the third quarter 2022, based on results of an interim goodwill impairment test we recorded an impairment charge of $680 million. This goodwill impairment represents a non-cash charge and did not affect BNY's liquidity position, tangible common equity or regulatory capital ratios.

Intangible assets

The table below provides a breakdown of intangible assets by business segment.

Intangible assets – net carrying amount by business segment *(in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management	Other	Consolidated
Balance at Dec. 31, 2022	$ 193	$ 384	$ 1,475	$ 849	$ 2,901
Amortization	(31)	(6)	(20)	—	(57)
Foreign currency translation	2	—	8	—	10
Balance at Dec. 31, 2023	$ 164	$ 378	$ 1,463	$ 849	$ 2,854
Acquisition	53	—	—	—	53
Amortization	(28)	(4)	(18)	—	(50)
Foreign currency translation	(3)	—	(3)	—	(6)
Balance at Dec. 31, 2024	**$ 186**	**$ 374**	**$ 1,442**	**$ 849**	**$ 2,851**

The table below provides a breakdown of intangible assets by type.

Intangible assets	**Dec. 31, 2024**				Dec. 31, 2023		
(dollars in millions)	Gross carrying amount	Accumulated amortization	Net carrying amount	Remaining weighted-average amortization period	Gross carrying amount	Accumulated amortization	Net carrying amount
Subject to amortization *(a)*:							
Customer contracts—Securities Services	**$ 779**	**$ (593)**	**$ 186**	**12 years**	$ 731	$ (567)	$ 164
Customer contracts—Market and Wealth Services	**269**	**(266)**	**3**	**2 years**	280	(273)	7
Customer relationships—Investment and Wealth Management	**553**	**(495)**	**58**	**7 years**	553	(479)	74
Other	**42**	**(14)**	**28**	**12 years**	41	(12)	29
Total subject to amortization	**$ 1,643**	**$ (1,368)**	**$ 275**	**11 years**	$ 1,605	$ (1,331)	$ 274
Not subject to amortization *(b)*:							
Tradenames	**$ 1,291**	**N/A**	**$ 1,291**	**N/A**	$ 1,292	N/A	$ 1,292
Customer relationships	**1,285**	**N/A**	**1,285**	**N/A**	1,288	N/A	1,288
Total not subject to amortization	**$ 2,576**	**N/A**	**$ 2,576**	**N/A**	$ 2,580	N/A	$ 2,580
Total intangible assets	**$ 4,219**	**$ (1,368)**	**$ 2,851**	**N/A**	$ 4,185	$ (1,331)	$ 2,854

(a) Excludes fully amortized intangible assets.
(b) Intangible assets not subject to amortization have an indefinite life.
N/A – Not applicable.

Estimated annual amortization expense for current intangibles for the next five years is as follows:

For the year ended Dec. 31,	Estimated amortization expense *(in millions)*
2025	$ 45
2026	36
2027	30
2028	27
2029	23

Intangible asset impairment testing

Intangible assets not subject to amortization are tested for impairment annually or more often if events or circumstances indicate they may be impaired.

Note 8–Other assets

The following table provides the components of other assets presented on the consolidated balance sheet.

Other assets *(in millions)*	Dec. 31, **2024**	2023
Corporate/bank-owned life insurance	**$ 5,552**	$ 5,480
Accounts receivable *(a)*	**4,931**	6,567
Tax credit investments	**2,821**	2,186
Software	**2,676**	2,430
Prepaid pension assets	**2,035**	1,818
Fails to deliver	**1,292**	1,514
Assets of consolidated investment management funds	**891**	526
Equity method investments	**852**	873
Fair value of hedging derivatives	**781**	236
Prepaid expense	**736**	737
Other equity investments *(b)*	**679**	741
Federal Reserve Bank stock	**478**	480
Cash collateral receivable on derivative transactions	**292**	621
Income taxes receivable	**255**	270
Seed capital *(c)*	**196**	232
Other *(d)*	**1,223**	1,198
Total other assets	**$ 25,690**	$ 25,909

(a) Includes receivables for securities sold or matured that have not yet settled.
(b) Includes strategic equity, private equity and other investments.
(c) Includes investments in BNY funds that hedge deferred incentive awards.
(d) At Dec. 31, 2024 and Dec. 31, 2023, other assets include $57 million and $7 million, respectively, of Federal Home Loan Bank stock, at cost.

Non-readily marketable equity securities

Non-readily marketable equity securities do not have readily determinable fair values. These investments are valued using a measurement alternative where the investments are carried at cost, less any impairment, and plus or minus changes resulting from observable price changes in orderly transactions for an identical or similar investment of the same issuer. The observable price changes are recorded in investment and other revenue on the consolidated income statement. Our non-readily marketable equity securities totaled $413 million at Dec. 31, 2024 and $479 million at Dec. 31, 2023, and are included in other equity investments in the table above.

The following table presents the adjustments on the non-readily marketable equity securities.

Adjustments on non-readily marketable equity securities *(in millions)*	**2024**	2023	2022	Life-to-date
Upward adjustments	**$ 1**	$ 52	$ 125	$ 336
Downward adjustments	**(2)**	(41)	(8)	(55)
Net adjustments	**$ (1)**	$ 11	$ 117	$ 281

Tax credit investments

Tax credit investments include affordable housing projects and renewable energy investments. We invest in affordable housing projects primarily to satisfy the Company's requirements under the Community Reinvestment Act. We invest in renewable energy projects to receive an expected after-tax return, which consists of allocated renewable energy tax credits, tax deductions and cash distributions based on the operations of the project. On Jan. 1, 2024, we adopted ASU 2023-02, *Investments—Equity Method and Joint Ventures (Topic 323): Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method* for our renewable energy projects that met the eligibility criteria. See Note 2 for additional information.

Our tax credit investments totaled $2.8 billion at Dec. 31, 2024 and $2.2 billion at Dec. 31, 2023. Commitments to fund future investments totaled $951 million at Dec. 31, 2024 and $780 million at Dec. 31, 2023 and are recorded in other liabilities on the consolidated balance sheet. A summary of the commitments to fund future investments is as follows: 2025 – $455 million; 2026 – $113 million; 2027 – $103 million; 2028 – $79 million; 2029 – $31 million; and 2030 and thereafter – $170 million.

Tax credits and other tax benefits recognized were $418 million in 2024, $373 million in 2023 and $325 million in 2022.

Amortization expense included in the provision for income taxes was $343 million in 2024, $293 million in 2023 and $255 million in 2022.

Investments valued using net asset value ("NAV") per share

In our Investment and Wealth Management business segment, we make seed capital investments in certain funds we manage. We also hold private equity investments, primarily small business investment companies ("SBICs"), which are compliant with the Volcker Rule, and certain other corporate investments. Seed capital, private equity and other corporate investments are included in other assets on the consolidated balance sheet. The fair value of certain of these investments was estimated using the NAV per share for our ownership interest in the funds.

The table below presents information on our investments valued using NAV.

Investments valued using NAV	**Dec. 31, 2024**		Dec. 31, 2023	
(in millions)	Fair value	Unfunded commitments	Fair value	Unfunded commitments
Seed capital *(a)*	**$ 7**	**$ —**	$ 3	$ —
Private equity investments *(b)*	**137**	**59**	143	42
Other	**8**	**—**	7	—
Total	**$ 152**	**$ 59**	$ 153	$ 42

(a) Seed capital investments at Dec. 31, 2024 are generally redeemable on request. Distributions are received as the underlying investments in the funds, which have redemption notice periods of up to seven days, are liquidated.
(b) Private equity investments primarily include Volcker Rule-compliant investments in SBICs that invest in various sectors of the economy. Private equity investments do not have redemption rights. Distributions from such investments will be received as the underlying investments in the private equity investments, which have a life of 10 years, are liquidated.

Note 9–Deposits

Time deposits in denominations of $250,000 or more totaled $2.1 billion at Dec. 31, 2024 and $1.5 billion at Dec. 31, 2023.

At Dec. 31, 2024, the scheduled maturities of total time deposits are $4.1 billion in 2025, $557 million in 2026, $330 million in 2027, $361 million in 2028 and $251 million in 2029. No time deposits are scheduled to mature after 2029.

Note 10–Contract revenue

Fee and other revenue in the Securities Services, Market and Wealth Services and Investment and Wealth Management business segments is primarily variable, based on levels of assets under custody and/or administration ("AUC/A"), AUM and the level of client-driven transactions, as specified in fee schedules.

Investment services fees are based primarily on the market value of AUC/A; client accounts, balances and the volume of transactions; securities lending volume and spreads; and fees for other services. Certain fees based on the market value of assets are calculated in arrears on a monthly or quarterly basis. Investment services fees also include transaction-based fees, which are driven by customer actions and are delivered at a point-in-time. These transaction-based fees are generally recognized on trade date. Other contractual investment services fees are driven by the amount of AUC/A or the number of accounts or securities positions and are billed on a monthly or quarterly basis.

Substantially all services within the Securities Services and Market and Wealth Services business segments are provided over time. Revenue on these services is recognized using the time elapsed method, equal to the expected invoice amount, which typically represents the value provided to the customer for our performance completed to date.

Investment management fees are dependent on the overall level and mix of AUM. The management fees, expressed in basis points, are charged for managing those assets. Management fees are typically subject to fee schedules contained in an investment management agreement or fund documents based on the overall level of assets managed and products in which those assets are invested.

Investment management fee revenue also includes transactional- and account-based fees. These fees, along with distribution and servicing fees, are recognized when the services have been completed. Clients are generally billed for services performed on a monthly or quarterly basis.

Performance fees are generally calculated as a percentage of the applicable portfolio's performance in excess of a benchmark index or a peer group's performance. Performance fees are recognized at the end of the measurement period when they are determinable.

See Note 24 for additional information on our principal business segments, Securities Services, Market and Wealth Services and Investment and Wealth Management, and the primary services provided.

Disaggregation of contract revenue

Contract revenue is included in fee and other revenue on the consolidated income statement. The following tables present fee and other revenue related to contracts with customers, disaggregated by type of fee revenue, for each business segment. Business segment data has been determined on an internal management basis of accounting, rather than GAAP which is used for consolidated financial reporting.

Disaggregation of contract revenue by business segment

	Year ended Dec. 31,									
	2024					2023 *(a)*				
(in millions)	Securities Services	Market and Wealth Services	Investment and Wealth Management	Other	Total	Securities Services	Market and Wealth Services	Investment and Wealth Management	Other	Total
Fee and other revenue – contract revenue:										
Investment services fees	**$ 5,204**	**$ 4,103**	**$ 105**	**$ (68)**	**$ 9,344**	$ 4,959	$ 3,805	$ 99	$ (63)	$ 8,800
Investment management and performance fees	**—**	**7**	**3,149**	**(13)**	**3,143**	—	8	3,067	(12)	3,063
Financing-related fees	**51**	**24**	**1**	**—**	**76**	37	14	1	—	52
Distribution and servicing fees	**4**	**(123)**	**275**	**2**	**158**	6	(98)	241	—	149
Investment and other revenue	**248**	**251**	**(379)**	**4**	**124**	236	207	(323)	1	121
Total fee and other revenue – contract revenue	**5,507**	**4,262**	**3,151**	**(75)**	**12,845**	5,238	3,936	3,085	(74)	12,185
Fee and other revenue – not in scope of ASC 606 *(b)(c)(d)*	**941**	**273**	**62**	**173**	**1,449**	791	224	(98)	248	1,165
Total fee and other revenue	**$ 6,448**	**$ 4,535**	**$ 3,213**	**$ 98**	**$ 14,294**	$ 6,029	$ 4,160	$ 2,987	$ 174	$ 13,350

(a) Results for the year ended Dec. 31, 2023 were revised to reflect certain realignments of similar products and services within our lines of business in 2024. See Note 24 for additional information.
(b) Primarily includes investment services fees, foreign exchange revenue, financing-related fees and investment and other revenue, all of which are accounted for using other accounting guidance.
(c) The Investment and Wealth Management business segment is net of income attributable to noncontrolling interests related to consolidated investment management funds of $13 million in 2024 and $2 million in 2023.
(d) Fee and other revenue – not in scope of ASC 606 for the year ended Dec. 31, 2023 for the Other segment was restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 for additional information.

Disaggregation of contract revenue by business segment	Year ended Dec. 31, 2022 *(a)*				
(in millions)	Securities Services	Market and Wealth Services	Investment and Wealth Management	Other	Total
Fee and other revenue – contract revenue:					
Investment services fees	$ 4,824	$ 3,630	$ 99	$ (65)	$ 8,488
Investment management and performance fees	—	10	3,303	(14)	3,299
Financing-related fees	30	23	1	1	55
Distribution and servicing fees	4	(66)	192	—	130
Investment and other revenue	215	143	(245)	1	114
Total fee and other revenue – contract revenue	5,073	3,740	3,350	(77)	12,086
Fee and other revenue – not in scope of ASC 606 *(b)(c)(d)*	901	149	(15)	(83)	952
Total fee and other revenue	$ 5,974	$ 3,889	$ 3,335	$ (160)	$ 13,038

(a) Results for the year ended Dec. 31, 2022 were revised to reflect certain realignments of similar products and services within our lines of business in 2024. See Note 24 for additional information.
(b) Primarily includes investment services fees, foreign exchange revenue, financing-related fees and investment and other revenue, all of which are accounted for using other accounting guidance.
(c) The Investment and Wealth Management business segment is net of (loss) attributable to noncontrolling interests related to consolidated investment management funds of $(13) million in 2022.
(d) Fee and other revenue – not in scope of ASC 606 for the year ended Dec. 31, 2022 for the Other segment was restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 for additional information.

Contract balances

Our clients are billed based on fee schedules that are agreed upon in each customer contract. Receivables from customers were $2.5 billion at Dec. 31, 2024 and $2.6 billion at Dec. 31, 2023.

Contract assets represent accrued revenues that have not yet been billed to the customers due to certain contractual terms other than the passage of time and were $34 million at Dec. 31, 2024 and $27 million at Dec. 31, 2023. Accrued revenues recorded as contract assets are usually billed on an annual basis.

Both receivables from customers and contract assets are included in other assets on the consolidated balance sheet.

Contract liabilities represent payments received in advance of providing services under certain contracts and were $171 million at Dec. 31, 2024 and $172 million at Dec. 31, 2023. Contract liabilities are included in other liabilities on the consolidated balance sheet. Revenue recognized in 2024 relating to contract liabilities as of Dec. 31, 2023 was $116 million.

Changes in contract assets and liabilities primarily relate to either party's performance under the contracts.

Contract costs

Incremental costs for obtaining contracts that are deemed recoverable are capitalized as contract costs. Such costs result from the payment of sales incentives, primarily in the Wealth Management business, and totaled $44 million at Dec. 31, 2024 and $46 million at Dec. 31, 2023. Capitalized sales incentives are amortized based on the transfer of goods or services to which the assets relate. The amortization of capitalized sales incentives, which is primarily included in staff expense on the consolidated income statement, totaled $14 million in 2024, $16 million in 2023 and $19 million in 2022.

Costs to fulfill a contract are capitalized when they relate directly to an existing contract or a specific anticipated contract, generate or enhance resources that will be used to fulfill performance obligations, and are recoverable. Such costs generally represent set-up costs, which include any direct cost incurred at the inception of a contract which enables the fulfillment of the performance obligation, and totaled $98 million at Dec. 31, 2024 and $90 million at Dec. 31, 2023. These capitalized costs are amortized on a straight-line basis over the expected contract period.

Unsatisfied performance obligations

We do not have any unsatisfied performance obligations other than those that are subject to a practical expedient election under ASC 606, *Revenue From Contracts With Customers*. The practical expedient election applies to (i) contracts with an original expected length of one year or less, and (ii) contracts for which we recognize revenue at the amount to which we have the right to invoice for services performed.

Note 11–Net interest income

The following table provides the components of net interest income presented on the consolidated income statement.

Net interest income	Year ended Dec. 31,		
(in millions)	**2024**	2023	2022
Interest income			
Deposits with the Federal Reserve and other central banks	**$ 4,615**	$ 4,541	$ 1,019
Deposits with banks	**434**	523	221
Federal funds sold and securities purchased under resale agreements	**10,915**	7,141	1,200
Loans	**4,394**	3,916	1,999
Securities:			
Taxable	**4,941**	4,213	2,502
Exempt from federal income taxes	**1**	1	35
Total securities	**4,942**	4,214	2,537
Trading securities	**307**	313	142
Total interest income	**25,607**	20,648	7,118
Interest expense			
Deposits in domestic offices	**5,791**	4,703	980
Deposits in foreign offices	**2,856**	2,421	607
Federal funds purchased and securities sold under repurchase agreements	**9,974**	6,699	934
Trading liabilities	**88**	156	68
Other borrowed funds	**18**	47	9
Commercial paper	**62**	—	—
Customer payables	**640**	566	156
Long-term debt	**1,866**	1,711	860
Total interest expense	**21,295**	16,303	3,614
Net interest income	**4,312**	4,345	3,504
Provision for credit losses	**70**	119	39
Net interest income after provision for credit losses	**$ 4,242**	$ 4,226	$ 3,465

Note 12–Income taxes

The components of the income tax provision are as follows:

Provision for income taxes	Year ended Dec. 31,		
(in millions)	**2024**	2023 *(a)*	2022 *(a)*
Current tax expense:			
Federal	**$ 902**	$ 727	$ 331
Foreign	**595**	443	404
State and local	**153**	192	19
Total current tax expense	**1,650**	1,362	754
Deferred tax expense (benefit):			
Federal	**(277)**	(344)	130
Foreign	**(30)**	31	(5)
State and local	**(38)**	(70)	58
Total deferred tax expense (benefit)	**(345)**	(383)	183
Provision for income taxes	**$ 1,305**	$ 979	$ 937

(a) The provision for income taxes for the years ended Dec. 31, 2023 and Dec. 31, 2022 was restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 for additional information.

In accordance with ASU 2023-02, *Investments—Equity Method and Joint Ventures (Topic 323): Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method*, we elected to account for investments in renewable energy projects that met the eligibility requirement using the proportional amortization method on a retrospective basis.

For additional information, see Note 2 and Note 8.

The components of income before taxes are as follows:

Income before taxes	Year ended Dec. 31,		
(in millions)	**2024**	2023	2022
Domestic *(a)*	**$ 3,462**	$ 2,196	$ 1,849
Foreign	**2,386**	2,087	1,631
Income before taxes *(a)*	**$ 5,848**	$ 4,283	$ 3,480

(a) Domestic income before taxes for the years ended Dec. 31, 2023 and Dec. 31, 2022 was restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 for additional information.

The components of our net deferred tax liability are as follows:

Net deferred tax liability *(in millions)*	Dec. 31, **2024**	2023
Depreciation and amortization	**$ 1,700**	$ 1,811
Pension obligation	**421**	388
Other liabilities	**189**	149
Equity investments	**55**	56
Securities valuation	**(39)**	(29)
Leasing	**(41)**	(41)
Other assets	**(62)**	(55)
Credit losses on loans	**(98)**	(106)
Reserves not deducted for tax	**(236)**	(314)
Employee benefits	**(269)**	(252)
U.S. foreign tax credits	**(101)**	(96)
Valuation allowance	**135**	130
Net deferred tax liability *(a)*	**$ 1,654**	$ 1,641

(a) *The deferred tax liability for the year ended Dec. 31, 2023 was restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 for additional information.*

As of Dec. 31, 2024, BNY had $101 million of U.S. foreign tax credit carryforwards which will begin to expire in 2029. In addition, we have an unrealized capital loss of $34 million. We believe it is more likely than not that the benefit from these items will not be realized. Accordingly, we have recorded a valuation allowance of $135 million. We believe it is more likely than not that we will fully realize our remaining deferred tax assets. This conclusion is based on historical financial results and profit forecasts.

As of Dec. 31, 2024, we had approximately $1.4 billion of earnings attributable to foreign subsidiaries that have been permanently reinvested abroad and for which no local distribution tax provision has been recorded. If these earnings were to be repatriated, the estimated tax liability as of Dec. 31, 2024 would be up to $170 million.

The statutory federal income tax rate is reconciled to our effective income tax rate below:

Effective tax rate	Year ended Dec. 31, **2024**	2023 *(a)*	2022 *(a)*
Federal rate	**21.0%**	21.0%	21.0%
State and local income taxes, net of federal income tax benefit	**1.6**	2.2	1.9
Foreign operations	**1.3**	1.1	2.1
Tax credits	**(1.3)**	(2.3)	(2.1)
Tax-exempt income	**(0.6)**	(0.7)	(1.0)
Federal Deposit Insurance Corporation (“FDIC”) assessment	**0.3**	0.4	0.4
Stock compensation	**(0.2)**	(0.1)	(0.6)
Goodwill impairment	—	—	3.7
Divestiture of stock in subsidiary	—	0.7	0.9
Other – net	**0.2**	0.6	0.6
Effective tax rate	**22.3%**	22.9%	26.9%

(a) *The effective tax rate for the years ended Dec. 31, 2023 and Dec. 31, 2022 was restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 for additional information.*

Unrecognized tax positions *(in millions)*	**2024**	2023	2022
Beginning balance at Jan. 1, – gross	**$ 109**	$ 106	$ 138
Prior period tax positions:			
Increases	**2**	—	—
Decreases	**(2)**	(5)	(11)
Current period tax positions	**8**	8	8
Settlements	—	—	(16)
Statute expiration	**(8)**	—	(13)
Ending balance at Dec. 31, – gross	**$ 109**	$ 109	$ 106

Our total tax reserves as of Dec. 31, 2024 were $109 million compared with $109 million at Dec. 31, 2023. If these tax reserves were unnecessary, $109 million would affect the effective tax rate in future periods. We recognize accrued interest and penalties, if applicable, related to income taxes in income tax expense. Included in the balance sheet at Dec. 31, 2024 is accrued interest, where applicable, of $41 million. The additional tax expense related to interest for the year ended Dec. 31, 2024 was $2 million, compared with $6 million for the year ended Dec. 31, 2023.

It is reasonably possible the total reserve for uncertain tax positions could decrease within the next 12 months by approximately $25 million as a result of adjustments related to tax years that are still subject to examination.

Our federal income tax returns are open to examination from 2017 through 2019 and 2021 and forward. Our New York State income tax returns are open to examination after 2015 and our New York City income tax returns are open to examination after 2014. Our UK income tax returns are open to examination after 2020.

Note 13–Long-term debt

The table below presents information on our long-term debt.

Long-term debt	**Dec. 31, 2024**			Dec. 31, 2023	
(dollars in millions)	**Rate**	**Maturity**	**Amount**	Rate	Amount
Senior debt:					
Fixed rate	**0.75 - 6.47%**	**2025 - 2035**	**$ 28,006**	0.50 - 6.47%	$ 28,886
Floating rate	**4.94 - 5.32%**	**2025 - 2038**	**1,226**	5.39 - 6.00%	1,226
Subordinated debt *(a)*	**3.00 - 5.61%**	**2028 - 2039**	**1,622**	3.00 - 3.30%	1,145
Total			**$ 30,854**		$ 31,257

(a) Fixed rate.

Total long-term debt maturing during the next five years is as follows: 2025 – $3.3 billion; 2026 – $5.0 billion; 2027 – $3.1 billion; 2028 – $6.1 billion; and 2029 – $3.2 billion.

Note 14–Variable interest entities

We have variable interests in VIEs, which include investments in retail, institutional and alternative investment funds.

We earn management fees from these funds, as well as performance fees in certain funds, and may also provide start-up capital for new funds. The funds are primarily financed by our customers' investments in the funds' equity or debt.

Additionally, we invest in qualified affordable housing and renewable energy projects, which are designed to generate a return primarily through the realization of tax credits. The projects, which are structured as limited partnerships and limited liability companies, are also VIEs, but are not consolidated.

The following table presents the incremental assets and liabilities included on the consolidated balance sheet as of Dec. 31, 2024 and Dec. 31, 2023. The net assets of any consolidated VIE are solely available to settle the liabilities of the VIE and to settle any investors' ownership liquidation requests, including any seed capital we invested in the VIE.

Consolidated investment management funds	Dec. 31,	
(in millions)	**2024**	2023
Trading assets	**$ 846**	$ 510
Other assets	**45**	16
Total assets *(a)*	**$ 891**	$ 526
Other liabilities	**$ 5**	$ 1
Total liabilities *(b)*	**$ 5**	$ 1
Nonredeemable noncontrolling interests *(c)*	**$ 359**	$ 50

(a) Includes VMEs with assets of $43 million at Dec. 31, 2024 and $91 million at Dec. 31, 2023.
(b) Includes VMEs with liabilities of less than $1 million at Dec. 31, 2024 and $1 million at Dec. 31, 2023.
(c) Includes VMEs with nonredeemable noncontrolling interests of $7 million at Dec. 31, 2024 and $12 million at Dec. 31, 2023.

We have not provided financial or other support that was not otherwise contractually required to be provided to our VIEs. Additionally, creditors of any consolidated VIEs do not have any recourse to the general credit of BNY.

Non-consolidated VIEs

As of Dec. 31, 2024 and Dec. 31, 2023, assets and liabilities related to the VIEs where we are not the primary beneficiary were included in other assets and other liabilities on the consolidated balance sheet and primarily related to accounting for our investments in qualified affordable housing and renewable energy projects.

The maximum loss exposure indicated in the following table relates solely to our investments in, and unfunded commitments to, the VIEs.

Non-consolidated VIEs *(in millions)*	**Dec. 31, 2024**	Dec. 31, 2023
Other assets	**$ 2,905**	$ 2,261
Other liabilities	**951**	780
Maximum loss exposure	**3,856**	3,041

Note 15–Shareholders' equity

Common stock

BNY has 3.5 billion authorized shares of common stock with a par value of $0.01 per share. At Dec. 31, 2024, 717,680,268 shares of common stock were outstanding.

In July 2024, our Board of Directors approved a 12% increase in the quarterly cash dividend on common stock, from $0.42 to $0.47 per share. We began paying the increased quarterly cash dividend in the third quarter of 2024.

Common stock repurchase program

In January 2023, we announced a share repurchase program approved by our Board of Directors providing for the repurchase of up to $5.0 billion of common shares beginning Jan. 1, 2023. This share repurchase plan replaced all previously authorized share repurchase plans.

In April 2024, we announced a new authorization providing for the repurchase of $6.0 billion of common shares in addition to any remaining capacity under the existing January 2023 authorization.

In 2024, we repurchased 48.9 million common shares at an average price of $62.70 per common share for a total of $3.1 billion.

Share repurchases may be executed through open market repurchases, in privately negotiated transactions or by other means, including through repurchase plans designed to comply with Rule 10b5-1 and other derivative, accelerated share repurchase and other structured transactions. The timing and exact amount of any common stock repurchases will depend on various factors, including market conditions and the common stock trading price; the Company's capital position, liquidity and financial performance; alternative uses of capital; and legal and regulatory limitations and considerations.

Preferred stock

The Parent has 100 million authorized shares of preferred stock with a par value of $0.01 per share. The following table summarizes the Parent's preferred stock issued and outstanding at Dec. 31, 2024 and Dec. 31, 2023.

Preferred stock summary *(a)*		Total shares issued and outstanding		Carrying value *(b)* *(in millions)*	
	Per annum dividend rate *(c)*	**Dec. 31, 2024**	Dec. 31, 2023	**Dec. 31, 2024**	Dec. 31, 2023
Series A	Greater of (i) SOFR plus 0.565% and (ii) 4.000%	**5,001**	5,001	**$ 500**	$ 500
Series F	4.625% to but excluding Sept. 20, 2026, then SOFR plus 3.131%	**10,000**	10,000	**990**	990
Series G	4.700% to but excluding Sept. 20, 2025, then a floating rate equal to the five-year treasury rate plus 4.358%	**10,000**	10,000	**990**	990
Series H	3.700% to but excluding March 20, 2026, then a floating rate equal to the five-year treasury rate plus 3.352%	**5,825**	5,825	**576**	576
Series I	3.750% to but excluding Dec. 20, 2026, then a floating rate equal to the five-year treasury rate plus 2.630%	**13,000**	13,000	**1,287**	1,287
Total		**43,826**	43,826	**$ 4,343**	$ 4,343

(a) All outstanding preferred stock is noncumulative perpetual preferred stock with a liquidation preference of $100,000 per share.
(b) The carrying value of the Series F, Series G, Series H and Series I preferred stock is recorded net of issuance costs.
(c) References to SOFR are to a floating rate equal to the three-month CME Term SOFR (plus a spread adjustment of 0.26161% per annum).

Holders of the Series A preferred stock are entitled to receive dividends, if declared by the Parent's Board of Directors, on each March 20, June 20, September 20 and December 20. Holders of the Series F preferred stock are entitled to receive dividends, if declared by the Parent's Board of Directors, on each March 20 and September 20, to and including Sept. 20, 2026; and on each March 20, June 20, September 20 and December 20, from and including Dec. 20, 2026. Holders of the Series G preferred stock are entitled to receive dividends, if declared by the Parent's Board of Directors, on each March 20 and September 20. Holders of the Series H preferred stock are entitled to receive dividends, if declared by the Parent's Board of Directors, on each March 20, June 20, September 20 and December 20, commencing on March 20, 2021. Holders of the Series I preferred stock are entitled to receive dividends, if declared by the Parent's Board of Directors, on each March 20, June 20, September 20 and December 20, commencing on March 20, 2022.

BNY's ability to declare or pay dividends on, or purchase, redeem or otherwise acquire, shares of our common stock or any of our shares that rank junior to the preferred stock as to the payment of dividends and/or the distribution of any assets on any liquidation, dissolution or winding-up of the Parent will be prohibited, subject to certain exceptions, in the event that we do not declare and pay in full preferred dividends for the then-current dividend period (in the case of dividends) or most recently completed dividend period (in the case of repurchases) of the Series A preferred stock or the last preceding dividend period (in the case of dividends) or most recently completed dividend period (in the case of repurchases) of the Series F, Series G, Series H and Series I preferred stock.

All of the outstanding shares of the Series A preferred stock are owned by Mellon Capital IV, a 100% owned financing subsidiary of the Parent, which will pass through any dividend on the Series A preferred stock to the holders of its Normal Preferred Capital Securities. The Parent's obligations under the trust and other agreements relating to Mellon Capital IV have the effect of providing a full and unconditional guarantee, on a subordinated basis, of payments due on the Normal Preferred Capital Securities. No other subsidiary of the Parent guarantees the securities of Mellon Capital IV. All of the outstanding shares of the Series F, Series G, Series H and Series I preferred stock are held by the depositary of the depositary shares, which will pass through the applicable portion of any dividend on the Series F, Series G, Series H and Series I preferred stock to the holders of record of their respective depositary shares.

In December 2023, the Parent redeemed all outstanding shares of its Series D preferred stock, $100,000 liquidation preference per share. Deferred fees of approximately $10 million were realized as preferred stock dividends upon redemption.

The table below presents the Parent's preferred dividends.

Preferred dividends			**2024**		2023			2022	
(dollars in millions, except per share amounts)	Depositary shares per share		Per share	Total dividend	Per share	Total dividend		Per share	Total dividend
Series A	100	*(a)*	**$ 6,143.97**	**$ 30**	$ 5,866.23	$ 29		$ 4,088.49	$ 20
Series D	100		**N/A**	**N/A**	6,339.20	42	*(b)*	4,500.00	23
Series F	100		**4,625.00**	**46**	4,625.00	46		4,625.00	46
Series G	100		**4,700.00**	**47**	4,700.00	47		4,700.00	47
Series H	100		**3,700.00**	**22**	3,700.00	22		3,700.00	22
Series I	100		**3,750.00**	**49**	3,750.00	49		4,083.33	53
Total				**$ 194**		$ 235			$ 211

(a) Represents Normal Preferred Capital Securities.
(b) Includes deferred fees of approximately $10 million related to the redemption of the Series D preferred stock.
N/A – Not applicable.

The preferred stock is not subject to the operation of a sinking fund and is not convertible into, or exchangeable for, shares of our common stock or any other class or series of our other securities. We may redeem the Series A preferred stock, in whole or in part, at our option. We may also, at our option, redeem the shares of the Series F preferred stock on any dividend payment date, in whole or in part, on or after the dividend payment date in September 2026, the Series G preferred stock on any dividend payment date, in whole or in part, on or after the dividend payment date in September 2025, the Series H preferred stock on any dividend payment date, in whole or in part, on or after the dividend payment date in March 2026 and the Series I preferred stock on any dividend payment date, in whole or in part, on or after the dividend payment date in December 2026. The Series F, Series G, Series H or Series I preferred stock can be redeemed, in whole but not in part, at any time within 90 days following a regulatory capital treatment event. Redemption of the preferred stock is subject to the prior approval of the Federal Reserve.

Temporary equity

Temporary equity was $87 million at Dec. 31, 2024 and $85 million at Dec. 31, 2023. Temporary equity represents the redemption value recorded for redeemable noncontrolling interests resulting from equity-classified share-based payment arrangements that are currently redeemable or are expected to become redeemable.

Capital adequacy

Regulators establish certain levels of capital for bank holding companies ("BHCs") and banks, including BNY and our bank subsidiaries, in accordance with established quantitative measurements. For the Parent to maintain its status as a financial holding company, our U.S. bank subsidiaries and BNY must, among other things, qualify as "well capitalized." As of Dec. 31, 2024 and Dec. 31, 2023, BNY and our U.S. bank subsidiaries were "well capitalized."

The regulatory capital ratios of our consolidated and largest bank subsidiary, The Bank of New York Mellon, are shown below.

Consolidated and largest bank subsidiary regulatory capital ratios *(a)*	Dec. 31,	
	2024	2023
Consolidated regulatory capital ratios:		
Common Equity Tier 1 ("CET1") ratio	**11.2%**	11.5%
Tier 1 capital ratio	**13.7**	14.2
Total capital ratio	**14.8**	14.9
Tier 1 leverage ratio	**5.7**	6.0
Supplementary leverage ratio ("SLR") *(b)*	**6.5**	7.3
The Bank of New York Mellon regulatory capital ratios:		
CET1 ratio	**16.1%**	16.2%
Tier 1 capital ratio	**16.1**	16.2
Total capital ratio	**16.3**	16.3
Tier 1 leverage ratio	**6.3**	6.6
SLR *(b)*	**7.6**	8.5

(a) For our CET1, Tier 1 capital and Total capital ratios, our effective capital ratios under U.S. capital rules are the lower of the ratios as calculated under the Standardized and Advanced Approaches. The Tier 1 leverage ratio is based on Tier 1 capital and quarterly average total assets. For BNY to qualify as "well capitalized," its Tier 1 capital and Total capital ratios must be at least 6% and 10%, respectively. For The Bank of New York Mellon, our largest bank subsidiary, to qualify as "well capitalized," its CET1, Tier 1 capital, Total capital and Tier 1 leverage ratios must be at least 6.5%, 8%, 10% and 5%, respectively.

(b) The SLR is based on Tier 1 capital and total leverage exposure, which includes certain off-balance sheet exposures. For The Bank of New York Mellon to qualify as "well capitalized," its SLR must be at least 6%.

Failure to satisfy regulatory standards, including "well capitalized" status or capital adequacy rules more generally, could result in limitations on our activities and adversely affect our financial condition. If a BHC such as BNY, or a bank such as The Bank of New York Mellon or BNY Mellon, N.A., fails to satisfy minimum capital requirements or qualify as "adequately capitalized," regulatory sanctions and limitations will be imposed.

The following table presents our capital components and risk-weighted assets determined under the Standardized and Advanced Approaches, the average assets used for leverage capital purposes and leverage exposure used for SLR purposes.

Capital components and risk-weighted assets *(in millions)*	Dec. 31, **2024**	2023
CET1:		
Common shareholders' equity	**$ 36,975**	$ 36,427
Adjustments for:		
Goodwill and intangible assets *(a)*	**(17,563)**	(17,253)
Net pension fund assets	**(333)**	(297)
Embedded goodwill	**(254)**	(275)
Deferred tax assets	**(62)**	(62)
Other	**(4)**	(6)
Total CET1	**18,759**	18,534
Other Tier 1 capital:		
Preferred stock	**4,343**	4,343
Other	**(63)**	(14)
Total Tier 1 capital	**$ 23,039**	$ 22,863
Tier 2 capital:		
Subordinated debt	**$ 1,398**	$ 1,148
Allowance for credit losses	**392**	414
Other	**(11)**	(11)
Total Tier 2 capital – Standardized Approach	**1,779**	1,551
Excess of expected credit losses	**109**	85
Less: Allowance for credit losses	**392**	414
Total Tier 2 capital – Advanced Approaches	**$ 1,496**	$ 1,222
Total capital:		
Standardized Approach	**$ 24,818**	$ 24,414
Advanced Approaches	**$ 24,535**	$ 24,085
Risk-weighted assets:		
Standardized Approach	**$ 167,786**	$ 156,178
Advanced Approaches:		
Credit Risk	**$ 90,076**	$ 87,223
Market Risk	**4,808**	3,380
Operational Risk	**65,588**	70,925
Total Advanced Approaches	**$ 160,472**	$ 161,528
Average assets for Tier 1 leverage ratio	**$ 402,069**	$ 383,705
Total leverage exposure for SLR	**$ 353,523**	$ 313,555

(a) Reduced by deferred tax liabilities associated with intangible assets and tax deductible goodwill.

The following table presents the amount of capital by which BNY and our largest bank subsidiary, The Bank of New York Mellon, exceeded the capital thresholds determined under U.S. capital rules.

Capital above thresholds at Dec. 31, 2024 *(in millions)*	**Consolidated** *(a)*	**The Bank of New York Mellon**	
CET1	$ 4,497	$ 11,890	*(a)*
Tier 1 capital	6,260	9,926	*(a)*
Total capital	4,684	7,521	*(a)*
Tier 1 leverage ratio	6,956	4,378	*(b)*
SLR	5,363	4,330	*(b)*

(a) Based on minimum required standards, with applicable buffers.
(b) Based on well capitalized standards.

Note 16–Other comprehensive income (loss)

Components of other comprehensive income (loss) (in millions)	2024 Pre-tax amount	2024 Tax (expense) benefit	2024 After-tax amount	2023 Pre-tax amount	2023 Tax (expense) benefit	2023 After-tax amount	2022 Pre-tax amount	2022 Tax (expense) benefit	2022 After-tax amount
Foreign currency translation:									
Foreign currency translation adjustments arising during the period *(a)*	**$ (29)**	**$ (162)**	**$ (191)**	$ 204	$ 68	$ 272	$ (455)	$ (148)	$ (603)
Total foreign currency translation	**(29)**	**(162)**	**(191)**	204	68	272	(455)	(148)	(603)
Unrealized gain (loss) on assets available-for-sale:									
Unrealized gain (loss) arising during the period	**489**	**(124)**	**365**	1,100	(271)	829	(4,292)	1,047	(3,245)
Reclassification adjustment *(b)*	**85**	**(21)**	**64**	68	(16)	52	443	(105)	338
Net unrealized gain (loss) on assets available-for-sale	**574**	**(145)**	**429**	1,168	(287)	881	(3,849)	942	(2,907)
Defined benefit plans:									
Net (loss) arising during the period	**(15)**	**6**	**(9)**	(107)	32	(75)	(400)	94	(306)
Foreign exchange adjustment	**—**	**—**	**—**	(1)	—	(1)	—	—	—
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost *(b)*	**14**	**(2)**	**12**	(18)	8	(10)	68	(12)	56
Total defined benefit plans	**(1)**	**4**	**3**	(126)	40	(86)	(332)	82	(250)
Unrealized gain (loss) on cash flow hedges:									
Unrealized hedge (loss) gain arising during the period	**(1)**	**—**	**(1)**	7	(2)	5	(16)	4	(12)
Reclassification of net (gain) loss to net income:									
Foreign exchange (“FX”) contracts – investment and other revenue	**(2)**	**1**	**(1)**	2	(1)	1	(1)	—	(1)
FX contracts – staff expense	**(5)**	**1**	**(4)**	—	—	—	9	(2)	7
Total reclassifications to net income	**(7)**	**2**	**(5)**	2	(1)	1	8	(2)	6
Net unrealized (loss) gain on cash flow hedges	**(8)**	**2**	**(6)**	9	(3)	6	(8)	2	(6)
Total other comprehensive income (loss)	**$ 536**	**$ (301)**	**$ 235**	$ 1,255	$ (182)	$ 1,073	$ (4,644)	$ 878	$ (3,766)

(a) Includes the impact of hedges of net investments in foreign subsidiaries. See Note 23 for additional information.

(b) The reclassification adjustment related to the unrealized gain (loss) on assets available-for-sale is recorded as net securities gains (losses) in investment and other revenue on the consolidated income statement. The amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost is recorded as other expense on the consolidated income statement.

Changes in accumulated other comprehensive income (loss) attributable to The Bank of New York Mellon Corporation shareholders

(in millions)	Foreign currency translation	Pensions	Other post-retirement benefits	Unrealized gain (loss) on assets available-for-sale *(a)*	Unrealized gain (loss) on cash flow hedges	Total accumulated other comprehensive (loss) income, net of tax
2021 ending balance	$ (1,524)	$ (1,016)	$ (31)	$ 357	$ 1	$ (2,213)
Change in 2022	(590)	(240)	(10)	(2,907)	(6)	(3,753)
2022 ending balance	(2,114)	(1,256)	(41)	(2,550)	(5)	(5,966)
Change in 2023	272	(87)	1	881	6	1,073
2023 ending balance	(1,842)	(1,343)	(40)	(1,669)	1	(4,893)
Change in 2024	**(189)**	**(1)**	**4**	**429**	**(6)**	**237**
2024 ending balance	**$ (2,031)**	**$ (1,344)**	**$ (36)**	**$ (1,240)**	**$ (5)**	**$ (4,656)**

(a) Held-to-maturity securities transferred from available-for-sale securities are initially recorded at fair value as of the date of transfer. Included in accumulated OCI (loss) are net unamortized pre-tax gains (losses) of $(193) million at Dec. 31, 2024, $104 million at Dec. 31, 2023 and $168 million at Dec. 31, 2022, associated with available-for-sale securities that were transferred to held-to-maturity securities, before consideration of hedges. Also included in accumulated OCI (loss) are net pre-tax gains (losses) of $188 million at Dec. 31, 2024, $(49) million at Dec. 31, 2023 and $(67) million at Dec. 31, 2022, associated with hedged item basis adjustments associated with available-for-sale securities that were transferred to held-to-maturity securities. On an after-tax basis, accumulated OCI (loss) includes $(4) million at Dec. 31, 2024, $42 million at Dec. 31, 2023 and $78 million at Dec. 31, 2022, associated with available-for-sale securities that were transferred to held-to-maturity securities inclusive of hedges.

Note 17–Stock-based compensation

Our Long-Term Incentive Plans provide for the issuance of restricted stock, restricted stock units (“RSUs”) and other stock-based awards, including options, to employees and directors of BNY. At Dec. 31, 2024, under the Long-Term Incentive Plan approved in April 2023, we may issue 37,099,283 new stock-based awards, all of which may be issued as restricted stock or RSUs. Stock-based compensation expense related to retirement eligibility vesting totaled $77 million in 2024, $81 million in 2023 and $72 million in 2022.

RSUs and Performance share units

RSUs are granted under our long-term incentive plans at no cost to the recipient. These awards are subject to forfeiture until certain restrictions have lapsed, including continued employment, for a specified period. An RSU entitles the recipient to receive a share of common stock after the applicable restrictions lapse. The recipient generally is entitled to receive cash payments equivalent to any dividends paid on the underlying common stock during the period the RSU is outstanding but does not receive voting rights. The cash dividends are paid at the time of vesting.

The fair value of RSUs is equal to the fair market value of our common stock on the date of grant. The expense is recognized over the vesting period, which is generally zero to four years. The total compensation expense recognized for RSUs was $386 million in 2024, $332 million in 2023 and $293 million in 2022. The total income tax benefit recognized in the consolidated income statement related to compensation costs was $92 million in 2024, $79 million in 2023 and $69 million in 2022.

BNY’s Executive Committee members were granted a target award of 851,939 performance share units (“PSUs”) in 2024, 577,549 in 2023 and 513,101 in 2022. The Executive Committee PSUs will vest based on two separate and distinct measurements, a performance condition and a market condition split 70% based on return on tangible common shareholders’ equity (“ROTCE”) and 30% on Total Shareholder Return (“TSR”). The ROTCE portion was measured based on the fair market value on the date of the grant, while the TSR portion was valued using a Monte Carlo simulation method. Each condition only impacts its applicable portion (70%/30%) of the total PSU award. The performance and market conditions are measured after three years to determine the final percentage of the total PSUs to vest. The final total amount of vested PSUs will be the sum of the two separate and distinct performance and market-based portions of the PSU awards, but will be capped at 150% of the total PSUs awarded. The ultimate payout is subject to the discretion of the Human Resources and Compensation Committee. These awards are classified as equity and the ROTCE portion is marked-to-market to earnings as a result of this discretion. The TSR portion of the award contains a market condition, and as a result the grant date fair value is recognized over the service period unless the requisite service is not rendered.

The following table summarizes our non-vested PSU and RSU activity for 2024.

Non-vested PSU and RSU activity	Number of shares *(a)*	Weighted-average fair value at grant date
Non-vested PSUs and RSUs at Dec. 31, 2023	16,456,716	$ 51.20
Granted	**8,813,757**	**57.01**
Vested	**(6,833,859)**	**49.82**
Forfeited	**(976,336)**	**54.42**
Non-vested PSUs and RSUs at Dec. 31, 2024	**17,460,278**	**$ 54.49**

(a) *Includes dividend shares earned on the Executive Committee PSUs and Board of Director’s stock awards.*

As of Dec. 31, 2024, $434 million of total unrecognized compensation costs related to non-vested PSUs and RSUs is expected to be recognized over a weighted-average period of 2.3 years.

The total fair value of RSUs and PSUs that vested was $347 million in 2024, $305 million in 2023 and $264 million in 2022. The actual excess tax benefit realized for the tax deductions from shares vested totaled $7 million in 2024, $3 million in 2023 and $16 million in 2022. The tax impacts were recognized in the provision for income taxes.

Subsidiary Long-Term Incentive Plans

BNY also has several subsidiary Long-Term Incentive Plans which have issued restricted subsidiary shares to certain employees. These share awards are subject to forfeiture until certain restrictions have lapsed, including continued employment for a specified period of time. The shares are generally non-voting and non-dividend paying. Once the restrictions lapse, which generally occurs in three to five years, the shares can only be sold, at the option of the employee, to BNY at a price based generally on the fair value of the subsidiary at the time of repurchase. In certain instances, BNY has an election to call the shares.

Stock options

Our Long-Term Incentive Plans provide for the issuance of stock options at fair market value at the date of grant to officers and employees of BNY. No stock options were granted in 2024, 2023 or 2022, and no stock options were outstanding at Dec. 31, 2024, Dec. 31, 2023 or Dec. 31, 2022.

The total intrinsic value of options exercised was $15 million in 2022. Cash received from option exercises totaled $9 million in 2022. The actual excess tax benefit realized for the tax deductions from options exercised totaled $3 million in 2022 and was recognized in the provision for income taxes.

Note 18–Employee benefit plans

BNY has defined benefit and/or defined contribution retirement plans and other post-retirement plans providing healthcare benefits.

The defined benefit pension plans cover approximately 6,400 U.S. employees and approximately 18,400 non-U.S. employees.

BNY has one qualified and several non-qualified defined benefit pension plans in the U.S. and several pension plans overseas.

Effective June 30, 2015, the benefit accruals under the U.S. qualified and non-qualified defined benefit plans were frozen. This change resulted in no additional benefits being earned by participants in those plans based on service or pay after June 30, 2015. These plans were previously closed to new participants effective Dec. 31, 2010.

Effective Dec. 31, 2018, the benefit accruals were frozen under our largest foreign plan, which covers certain UK employees. This change resulted in no additional benefits being earned by participants in that plan based on service or pay after Dec. 31, 2018. Most UK employees currently earn benefits only on a defined contribution basis. UK employees impacted by the pension plan freeze began earning benefits on a defined contribution basis on Jan. 1, 2019.

Pension and post-retirement healthcare plans

The following tables report the combined data for our domestic and foreign defined benefit pension and post-retirement healthcare plans.

	Pension Benefits				Healthcare Benefits			
	Domestic		Foreign		Domestic		Foreign	
(dollars in millions)	**2024**	2023	**2024**	2023	**2024**	2023	**2024**	2023
Weighted-average assumptions used to determine benefit obligations								
Discount rate	**5.72%**	5.25%	**5.15%**	4.44%	**5.72%**	5.25%	**5.60%**	4.65%
Rate of compensation increase	**N/A**	N/A	**3.83**	3.71	**3.00**	3.00	**N/A**	N/A
Cash balance interest crediting rate	**4.00**	4.00	**N/A**	N/A	**N/A**	N/A	**N/A**	N/A
Change in benefit obligation *(a)*								
Benefit obligation at beginning of period	**$(3,602)**	$(3,527)	**$ (889)**	$ (768)	**$ (92)**	$ (95)	**$ (2)**	$ (2)
Service cost	**—**	—	**(11)**	(10)	**—**	(1)	**—**	—
Interest cost	**(182)**	(190)	**(39)**	(36)	**(5)**	(5)	**—**	—
Actuarial gain (loss)	**178**	(122)	**111**	(67)	**1**	(2)	**—**	(1)
Curtailments	**—**	—	**—**	1	**—**	—	**—**	—
Benefits paid	**235**	237	**31**	26	**4**	11	**—**	—
Foreign exchange adjustment	**N/A**	N/A	**28**	(35)	**N/A**	N/A	**—**	1
Benefit obligation at end of period	**(3,371)**	(3,602)	**(769)**	(889)	**(92)**	(92)	**(2)**	(2)
Change in fair value of plan assets								
Fair value at beginning of period	**5,089**	4,806	**1,052**	975	**135**	116	**—**	—
Actual return on plan assets	**179**	501	**(29)**	43	**16**	19	**—**	—
Employer contributions	**13**	19	**9**	11	**4**	11	**—**	—
Benefit payments	**(235)**	(237)	**(31)**	(26)	**(4)**	(11)	**—**	—
Foreign exchange adjustment	**N/A**	N/A	**(30)**	49	**N/A**	N/A	**—**	—
Fair value at end of period	**5,046**	5,089	**971**	1,052	**151**	135	**—**	—
Funded status at end of period	**$ 1,675**	$ 1,487	**$ 202**	$ 163	**$ 59**	$ 43	**$ (2)**	$ (2)
Amounts recognized in accumulated other comprehensive loss (income) consist of:								
Net loss (gain)	**$ 1,637**	$ 1,637	**$ 245**	$ 243	**$ 32**	$ 38	**$ (1)**	$ (1)
Prior service (credit)	**—**	—	**(1)**	(1)	**—**	(6)	**—**	—
Total loss (gain) (before tax effects)	**$ 1,637**	$ 1,637	**$ 244**	$ 242	**$ 32**	$ 32	**$ (1)**	$ (1)

(a) The benefit obligation for pension benefits is the projected benefit obligation, and for healthcare benefits, it is the accumulated benefit obligation.
N/A – Not applicable.

A number of key assumptions and measurement date values determine pension expense. The key elements include the long-term rate of return on plan assets, the discount rate, the market-related value of plan assets and the price used to value stock in the Employee Stock Ownership Plan ("ESOP").

The discount rate for U.S. pension plans was determined after reviewing equivalent rates obtained by discounting the pension plans' expected cash flows using various high-quality, long-term corporate bond yield curves. We also reviewed the results of several models that matched bonds to our pension cash flows. After reviewing the various indices and models, we selected a discount rate of 5.72% as of Dec. 31, 2024.

The discount rates for foreign pension plans are based on high-quality corporate bond rates in countries that have an active corporate bond market. In those countries with no active corporate bond market, discount rates are based on local government bond rates plus a credit spread.

Actuarial gains on the benefit obligation for the domestic and foreign pension plans in 2024 are primarily attributable to increases in discount rates. Actuarial losses on the benefit obligation for the domestic pension plans in 2023 are primarily attributable to decreases in discount rates. Actuarial losses on the benefit obligation for the foreign pension plans in 2023 are primarily attributable to decreases in discount rates and increases in assumed inflation rates.

Net periodic benefit (credit) cost	Pension Benefits						Healthcare Benefits					
	Domestic			Foreign			Domestic			Foreign		
(dollars in millions)	**2024**	2023	2022	**2024**	2023	2022	**2024**	2023	2022	**2024**	2023	2022
Weighted-average assumptions as of Jan. 1:												
Market-related value of plan assets	**$5,773**	$ 5,757	$ 5,924	**$1,377**	$ 1,358	$ 1,627	**$ 143**	$ 135	$133	**N/A**	N/A	N/A
Discount rate	**5.25%**	5.61%	3.03%	**4.44%**	4.62%	2.11%	**5.25%**	5.61%	3.03%	**4.65%**	4.75%	2.15%
Expected rate of return on plan assets	**6.75**	6.75	5.375	**5.64**	6.38	2.40	**6.75**	6.75	5.375	**N/A**	N/A	N/A
Rate of compensation increase	**N/A**	N/A	N/A	**3.74**	3.72	3.43	**3.00**	3.00	3.00	**N/A**	N/A	N/A
Cash balance interest crediting rate	**4.00**	4.00	4.00	**N/A**	N/A	N/A	**N/A**	N/A	N/A	**N/A**	N/A	N/A
Components of net periodic benefit (credit) cost:												
Service cost	**$ —**	$ —	$ —	**$ 11**	$ 10	$ 11	**$ —**	$ 1	$ 1	**$—**	$ —	$ —
Interest cost	**182**	190	140	**39**	36	28	**5**	5	4	**—**	—	—
Expected return on assets	**(381)**	(380)	(312)	**(80)**	(89)	(35)	**(10)**	(9)	(7)	**—**	—	—
Amortization of:												
Prior service (credit)	**—**	—	—	**—**	—	—	**(6)**	(7)	(7)	**—**	—	—
Net actuarial loss (gain)	**25**	8	69	**(4)**	(14)	3	**(1)**	(5)	3	**—**	—	—
Settlement loss (gain)	**—**	1	—	**—**	(1)	—	**—**	—	—	**—**	—	—
Curtailment (gain)	**—**	—	—	**—**	(1)	—	**—**	—	—	**—**	—	—
Net periodic benefit (credit) cost	**$ (174)**	$ (181)	$ (103)	**$ (34)**	$ (59)	$ 7	**$ (12)**	$ (15)	$ (6)	**$—**	$ —	$ —

N/A – Not applicable.

Changes in other comprehensive (income) loss in 2024	Pension Benefits		Healthcare Benefits	
(in millions)	Domestic	Foreign	Domestic	Foreign
Net loss (gain) arising during period	$ 24	$ (2)	$ (7)	$ —
Recognition of prior years' net (loss) gain	(25)	4	1	—
Recognition of prior years' service credit	—	—	6	—
Foreign exchange adjustment	N/A	N/A	N/A	N/A
Total recognized in other comprehensive (income) loss (before tax effects)	$ (1)	$ 2	$ —	$ —

N/A – Not applicable.

	Domestic		Foreign	
(in millions)	**2024**	2023	**2024**	2023
Pension benefits:				
Prepaid benefit cost	**$ 1,777**	$ 1,599	**$ 258**	$ 219
Accrued benefit cost	**(102)**	(112)	**(56)**	(56)
Total pension benefits	**$ 1,675**	$ 1,487	**$ 202**	$ 163
Healthcare benefits:				
Accrued benefit cost	**$ 59**	$ 43	**$ (2)**	$ (2)
Total healthcare benefits	**$ 59**	$ 43	**$ (2)**	$ (2)

The accumulated benefit obligation for all defined benefit plans was $4.2 billion at Dec. 31, 2024 and $4.5 billion at Dec. 31, 2023.

Plans with obligations in excess of plan assets	Pension Benefits				Healthcare Benefits			
	Domestic		Foreign		Domestic		Foreign	
(in millions)	**2024**	2023	**2024**	2023	**2024**	2023	**2024**	2023
Projected benefit obligation	**$ 102**	$ 112	**$ 68**	$ 172	**N/A**	N/A	**N/A**	N/A
Fair value of plan assets	**—**	—	**11**	116	**N/A**	N/A	**N/A**	N/A
Accumulated benefit obligation	**102**	112	**47**	55	**$ 65**	$ 62	**$ 2**	$ 2
Fair value of plan assets	**—**	—	**11**	17	**—**	—	**—**	—

N/A – Not applicable.

Assumed healthcare cost trend

The assumed healthcare cost trend rate used in determining domestic benefit expense for 2025 is 8.90%, decreasing to 4.50% in 2035 for pre-Medicare costs and 9.80% decreasing to 4.50% in 2035 for Medicare costs. The initial trend rate assumption represents an estimate of short-term cost increases based on recent health care marketplace experience, and taking into consideration the cost characteristics of plans available to retirees. Annual increases in national health expenditures have exceeded the general growth in GDP for many years. However, there are practical limitations to how long these trends can continue. It is unrealistic to assume that health care expenditures will be allowed to consume the majority of the economy. Therefore, over the long term we expect that health care costs will be constrained by the public's ability and willingness to pay the higher cost of health care coverage. This assumption implies that the ultimate trend rate should be related to the expected long-term growth in the economy. Therefore, we assume the ultimate rate to be comprised of real growth in per capita GDP, long-term growth attributable to technology innovations, and the assumed long-term inflation rate. The initial trend is assumed to decrease to this ultimate rate over time.

The following benefit payments for the pension and healthcare plans, which reflect expected future service as appropriate, are expected to be paid over the next 10 years:

Expected benefit payments *(in millions)*		**Domestic**	**Foreign**
Pension benefits:			
Year	2025	$ 282	$ 29
	2026	268	33
	2027	267	36
	2028	265	40
	2029	264	14
	2030-2034	1,269	70
Total pension benefits		$ 2,615	$ 222
Healthcare benefits:			
Year	2025	$ 9	$ —
	2026	9	—
	2027	9	—
	2028	9	—
	2029	9	—
	2030-2034	41	1
Total healthcare benefits		$ 86	$ 1

Plan contributions

We expect to make cash contributions to fund our defined benefit pension plans in 2025 of $11 million for the domestic plans and $6 million for the foreign plans.

We expect to make cash contributions to fund our post-retirement healthcare plans in 2025 of $9 million for the domestic plans and less than $1 million for the foreign plans.

Investment strategy and asset allocation

We are responsible for the administration of various employee pension and healthcare post-retirement benefits plans, both domestically and internationally. The domestic plans are administered by BNY's Benefits Administration Committee, a named fiduciary. Subject to the following, at all relevant times, BNY's Benefits Investment Committee, another named fiduciary to the domestic plans, is responsible for the investment of plan assets. The Benefits Investment Committee's responsibilities include the investment of all domestic defined benefit plan assets, as well as the determination of investment options offered to participants in all domestic defined contribution plans. The Benefits Investment Committee conducts periodic reviews of investment performance, asset allocation and investment manager suitability. In addition, the Benefits Investment Committee has oversight of the Regional Governance Committees for the foreign defined benefit plans.

Our investment objective for U.S. and foreign plans is to maximize total return while maintaining a broadly diversified portfolio for the primary purpose of satisfying obligations for future benefit payments. Our plans are primarily invested in fixed income and equity securities. In general, for the domestic plan's portfolio, fixed income securities can range from 35% to 100% of plan assets, equity securities and alternative investments can range from 0% to 65% of plan assets and cash equivalents can be held in amounts ranging from 0% to 10% of plan assets. Actual asset allocation within the approved ranges varies from time to time based on economic conditions (both current and forecast), the timing of transitional reallocations and the advice of professional advisors.

Our pension assets were invested as follows:

Asset allocations	Domestic		Foreign	
	2024	2023	**2024**	2023
Fixed income	**59%**	62%	**75%**	74%
Equities	**36**	34	**14**	13
Alternative investments	**4**	3	**9**	11
Cash	**1**	1	**2**	2
Total pension assets	**100%**	100%	**100%**	100%

We held no The Bank of New York Mellon Corporation stock in our pension plans at Dec. 31, 2024 and Dec. 31, 2023. Assets of the U.S. postretirement healthcare plan are invested in an insurance contract.

Fair value measurement of plan assets

We have established a three-level hierarchy for fair value measurements of our pension plan assets based upon the transparency of inputs to the valuation of an asset as of the measurement date.

The following is a description of the valuation methodologies used for assets measured at fair value, as well as the general classification of such assets pursuant to the valuation hierarchy.

Cash and currency

This category consists primarily of foreign currency balances and is included in Level 1 of the valuation hierarchy. Foreign currency is translated monthly based on current foreign exchange rates.

Common and preferred stock and exchange-traded funds

These investments include equities and are valued at the closing price reported in the active market in which the individual securities are traded, if available. Common and preferred stock and exchange-traded funds are included in Level 1 of the valuation hierarchy.

Collective trust funds

Collective trust funds include commingled and U.S. equity funds that have no readily available market quotations. The fair value of the funds is based on the securities in the portfolio, which typically are the amount that the fund might reasonably expect to receive for the securities upon a sale. These funds are valued using observable inputs on either a daily or monthly basis. Collective trust funds are included in Level 2 of the valuation hierarchy.

Fixed-income investments

Fixed-income investments include U.S. Treasury securities, U.S. government agencies, non-U.S. government securities, sovereign government obligations, state and political subdivisions, U.S. corporate bonds and foreign corporate debt funds. U.S. Treasury and certain non-U.S. government securities that are actively traded in highly liquid over-the-counter ("OTC") markets are valued at the closing price reported in the active market in which the individual security is traded and included as Level 1 of the valuation hierarchy. U.S. government agencies, non-U.S. government securities, sovereign government obligations, state and political subdivisions, U.S. corporate bonds and foreign corporate debt funds are valued based on quoted prices for comparable securities with similar yields and credit ratings. When quoted prices are not available for identical or similar bonds, the bonds are valued using discounted cash flows that maximize observable inputs, such as current yields of similar instruments, but includes adjustments for certain risks that may not be observable, such as credit and liquidity risks. U.S. government agencies, non-U.S. government securities, sovereign government obligations, state and political subdivisions, U.S. corporate bonds and foreign corporate debt funds are primarily included in Level 2 of the valuation hierarchy.

Other assets measured at NAV per share, as a practical expedient

Other assets measured at NAV, as a practical expedient, include funds of funds, venture capital and partnership interests and other funds. There are no readily available market quotations for these funds. The fair value of the funds of funds is based on NAVs of the funds in the portfolio, which reflect the value of the underlying investments held by the fund, less its liabilities. The fair value of the underlying investments is typically the amount that the fund might reasonably expect to receive upon selling those hard to value or illiquid investments within the portfolios. These funds are either valued on a daily or monthly basis. The fair value of the venture capital and partnership interests is based on the pension plan's ownership percentage of the fair value of the underlying funds as provided by the fund managers. These funds are typically valued on a quarterly basis.

The following tables present the fair value of each major category of plan assets as of Dec. 31, 2024 and Dec. 31, 2023, by captions and by ASC 820, *Fair Value Measurement*, valuation hierarchy.

Plan assets measured at fair value on a recurring basis— domestic plans at Dec. 31, 2024				
(in millions)	Level 1	Level 2	Level 3	Total fair value
Common and preferred stock:				
U.S. equity	$ 936	$ —	$ —	$ 936
Non-U.S. equity	392	—	—	392
Collective trust funds:				
U.S. equity	—	141	—	141
Commingled	—	535	—	535
Fixed income:				
U.S. corporate bonds	—	2,456	—	2,456
U.S. Treasury securities	184	—	—	184
State and political subdivisions	—	65	—	65
Non-U.S. government	1	20	—	21
U.S. government agencies	—	33	—	33
Other	—	40	—	40
Exchange-traded funds	7	—	—	7
Total domestic plan assets in the fair value hierarchy	$ 1,520	$ 3,290	$ —	$ 4,810
Other assets measured at NAV:				
Funds of funds				232
Venture capital and partnership interests				4
Total domestic plan assets, at fair value				$ 5,046

Plan assets measured at fair value on a recurring basis— foreign plans at Dec. 31, 2024				
(in millions)	Level 1	Level 2	Level 3	Total fair value
Corporate debt funds	$ —	$ 588	$ —	$ 588
Equity funds	—	144	—	144
Sovereign/government obligation funds	—	139	—	139
Cash and currency	17	—	—	17
Total foreign plan assets in the fair value hierarchy	$ 17	$ 871	$ —	$ 888
Other assets measured at NAV				83
Total foreign plan assets, at fair value				$ 971

Plan assets measured at fair value on a recurring basis— domestic plans at Dec. 31, 2023				
(in millions)	Level 1	Level 2	Level 3	Total fair value
Common and preferred stock:				
U.S. equity	$ 920	$ —	$ —	$ 920
Non-U.S. equity	373	—	—	373
Collective trust funds:				
U.S. equity	—	116	—	116
Commingled	—	530	—	530
Fixed income:				
U.S. corporate bonds	—	2,539	—	2,539
U.S. Treasury securities	233	—	—	233
State and political subdivisions	—	110	—	110
Non-U.S. government	3	27	—	30
U.S. government agencies	—	26	—	26
Other	—	35	—	35
Exchange-traded funds	8	—	—	8
Total domestic plan assets in the fair value hierarchy	$ 1,537	$ 3,383	$ —	$ 4,920
Other assets measured at NAV:				
Funds of funds				164
Venture capital and partnership interests				5
Total domestic plan assets, at fair value				$ 5,089

Plan assets measured at fair value on a recurring basis— foreign plans at Dec. 31, 2023				
(in millions)	Level 1	Level 2	Level 3	Total fair value
Corporate debt funds	$ —	$ 659	$ —	$ 659
Equity funds	—	137	—	137
Sovereign/government obligation funds	—	123	—	123
Cash and currency	19	—	—	19
Total foreign plan assets in the fair value hierarchy	$ 19	$ 919	$ —	$ 938
Other assets measured at NAV				114
Total foreign plan assets, at fair value				$ 1,052

Other assets measured at NAV per share, as a practical expedient

Certain pension and post-retirement plan assets are invested in funds of funds, venture capital and partnership interests and other contracts valued using NAV, as a practical expedient. The funds of funds investments are redeemable at NAV under agreements with the funds of funds managers.

Assets valued using NAV at Dec. 31, 2024 *(dollars in millions)*	Fair value	Unfunded commitments	Redemption frequency	Redemption notice period
Funds of funds *(a)*	$ 232	$ —	Monthly	30-45 days
Venture capital and partnership interests *(b)*	67	—	N/A	N/A
Other contracts *(c)*	20	—	N/A	N/A
Total	**$ 319**	**$ —**		

Assets valued using NAV at Dec. 31, 2023 *(dollars in millions)*	Fair value	Unfunded commitments	Redemption frequency	Redemption notice period
Funds of funds *(a)*	$ 164	$ —	Monthly	30-45 days
Venture capital and partnership interests *(b)*	83	—	N/A	N/A
Other contracts *(c)*	36	—	N/A	N/A
Total	$ 283	$ —		

(a) Funds of funds includes multi-strategy hedge funds that utilize investment strategies that invest over both long-term investment and short-term investment horizons.
(b) Venture capital and partnership interests do not have redemption rights. Distributions from such funds will be received as the underlying investments are liquidated.
(c) Other contracts include assets invested in pooled accounts at insurance companies that are privately valued by the asset manager.
N/A – Not applicable.

Defined contribution plans

We sponsor defined contribution plans in the U.S. and in certain non-U.S. locations, all of which are administered in accordance with local laws. The most significant defined contribution plan is The Bank of New York Mellon Corporation 401(k) Savings Plan sponsored by the Company in the U.S. and covers substantially all U.S. employees.

Under The Bank of New York Mellon Corporation 401(k) Savings Plan for 2024, 2023 and 2022, the Company matched 100% of participant contributions up to 7% of an employee's eligible base pay with a monetary limit of $16,000 per participant. In addition, an annual non-elective contribution of $750 was made in 2024, 2023 and 2022 to each participant with eligible base pay of less than $100,000 a year and who are credited with at least one year of service.

At Dec. 31, 2024 and Dec. 31, 2023, The Bank of New York Mellon Corporation 401(k) Savings Plan owned 7.8 million and 8.7 million shares of our common stock, respectively. The fair value of total assets was $10.0 billion at Dec. 31, 2024 and $8.8 billion at Dec. 31, 2023. We recorded expenses of $264 million in 2024, $282 million in 2023 and $276 million in 2022, primarily for contributions to our defined contribution plans.

We also have an ESOP covering certain domestic full-time employees hired on or before July 1, 2008. The ESOP works in conjunction with the defined benefit pension plan. Employees are entitled to the higher of their benefit under the ESOP or such defined benefit pension plan at retirement. Benefits payable under the defined benefit pension plan are offset by the equivalent value of benefits earned under the ESOP.

At Dec. 31, 2024 and Dec. 31, 2023, the ESOP owned 3.1 million and 3.5 million shares of our common stock, respectively. The fair value of total ESOP assets was $244 million at Dec. 31, 2024 and $185 million at Dec. 31, 2023. The Company is not permitted to make contributions to the ESOP.

The Benefits Investment Committee appointed Fiduciary Counselors Inc. to serve as the independent fiduciary to (i) make all fiduciary decisions related to the continued prudence of offering the common stock of BNY or its affiliates as an investment option under the plans, other than plan sponsor decisions, and (ii) select and monitor any actively or passively managed investments that are managed by BNY or its affiliates to be offered to participants as investment options under the plans, excluding self-directed accounts.

Note 19–Company financial information (Parent Corporation)

In connection with our single point of entry resolution strategy, we have established an intermediate holding company ("IHC") to facilitate the provision of capital and liquidity resources to certain key subsidiaries in the event of material financial distress or failure. In 2017, we entered into a binding support agreement with those key subsidiaries and other related entities that requires the IHC to provide that support. The support agreement requires the Parent to transfer cash and other liquid financial assets to the IHC on an ongoing basis, subject to certain amounts retained by the Parent to meet its near-term cash needs. The Parent's and the IHC's obligations under the support agreement are secured. The IHC has provided unsecured subordinated funding notes to the Parent as well as a committed line of credit that allows the Parent to draw funds necessary to service near-term obligations. As a result, during business-as-usual circumstances, the Parent is expected to continue to have access to the funds necessary to pay dividends, repurchase common stock, service its debt and satisfy its other obligations. If our projected financial resources deteriorate so severely that resolution of the Parent becomes imminent, the committed line of credit the IHC provided to the Parent will automatically terminate, with all amounts outstanding becoming due and payable, and the support agreement will require the Parent to transfer most of its remaining assets (other than stock in subsidiaries and a cash reserve to fund bankruptcy expenses) to the IHC. As a result, during a period of severe financial stress, the Parent could become unable to meet its debt and payment obligations (including with respect to its securities), causing the Parent to seek protection under bankruptcy laws earlier than it otherwise would have.

Our bank subsidiaries are subject to dividend limitations under the federal and state banking laws. Under these statutes, prior regulatory consent is required for dividends in any year that would exceed the bank's net profits for such year combined with retained net profits for the prior two years. Additionally, such bank subsidiaries may not declare dividends in excess of net profits on hand, as defined, after deducting the amount by which the principal amount of all loans, on which interest is past due for a period of six months or more, exceeds the allowance for credit losses.

The payment of dividends also is limited by minimum capital requirements and buffers imposed on banks. As of Dec. 31, 2024, our bank subsidiaries exceeded these requirements.

Subsequent to Dec. 31, 2024, our U.S. bank subsidiaries could declare dividends to the Parent of approximately $82 million, without the need for a regulatory waiver. In addition, at Dec. 31, 2024, non-bank subsidiaries of the Parent had liquid assets of approximately $3.8 billion.

The bank subsidiaries declared dividends of $4.3 billion in 2024, $3.5 billion in 2023 and $1.0 billion in 2022. The Federal Reserve and the Office of the Comptroller of the Currency have issued additional guidelines that require BHCs and national banks to continually evaluate the level of cash dividends in relation to their respective operating income, capital needs, asset quality and overall financial condition.

The Federal Reserve policy with respect to the payment of cash dividends by BHCs provides that, as a matter of prudent banking, a BHC should not maintain a rate of cash dividends unless its net income available to common shareholders has been sufficient to fully fund the dividends, and the prospective rate of earnings retention appears to be consistent with the holding company's capital needs, asset quality and overall financial condition. The Federal Reserve can also prohibit a dividend if payment would constitute an unsafe or unsound banking practice.

In January 2023, we announced a share repurchase program approved by our Board of Directors providing for the repurchase of up to $5.0 billion of common shares beginning Jan. 1, 2023. This new share repurchase plan replaced all previously authorized share repurchase plans.

In April 2024, we announced a new authorization providing for the repurchase of $6.0 billion of common shares in addition to any remaining capacity under the existing January 2023 authorization.

The Federal Reserve Act limits, and requires collateral for, extensions of credit by our insured subsidiary banks to the Parent and certain of its non-bank affiliates. Also, there are restrictions on the amounts of investments by such banks in stock and other securities of BNY and such affiliates, and restrictions on the acceptance of their securities as collateral for loans by such banks. Extensions of credit by the banks to each of our affiliates are limited to 10% of such bank's regulatory capital, and in the aggregate for BNY and all such affiliates to 20%, and collateral must be between 100% and 130% of the amount of the credit, depending on the type of collateral.

In the event of impairment of the capital stock of one of the Parent's national banks or The Bank of New York Mellon, the Parent, as the banks' stockholder, could be required to pay such deficiency.

The Parent guarantees the uncommitted lines of credit of Pershing LLC and Pershing Limited subsidiaries. The Parent guarantees described above are full and unconditional and contain the standard provisions relating to parent guarantees of subsidiary debt. Additionally, the Parent guarantees or indemnifies obligations of its consolidated subsidiaries as needed. Generally, there are no stated notional amounts included in these indemnifications and the contingencies triggering the obligation for indemnification are not expected to occur. As a result, we are unable to develop an estimate of the maximum payout under these indemnifications. However, we believe the possibility is remote that we will have to make any material payment under these guarantees and indemnifications.

The Parent's condensed financial statements are as follows:

Condensed Income Statement—The Bank of New York Mellon Corporation (Parent Corporation)

	Year ended Dec. 31,		
(in millions)	**2024**	2023	2022
Dividends from bank subsidiaries	**$ 4,256**	$ 3,472	$ 1,006
Dividends from non-bank subsidiaries	**1,616**	1,070	880
Interest income from bank subsidiaries	**53**	71	25
Interest income from non-bank subsidiaries	**70**	64	37
(Loss) on securities held for sale	**(2)**	(1)	—
Other revenue	**51**	83	57
Total revenue	**6,044**	4,759	2,005
Interest expense (including $20, $23 and $10, to subsidiaries, respectively)	**1,838**	1,716	853
Other expense	**200**	291	433
Total expense	**2,038**	2,007	1,286
Income before income taxes and equity in undistributed net income of subsidiaries	**4,006**	2,752	719
(Benefit) for income taxes	**(438)**	(258)	(190)
Equity in undistributed net income:			
Bank subsidiaries *(a)*	**(131)**	(295)	1,685
non-bank subsidiaries *(a)*	**217**	587	(38)
Net income *(a)*	**4,530**	3,302	2,556
Preferred stock dividends and redemption charge	**(194)**	(235)	(211)
Net income applicable to common shareholders of The Bank of New York Mellon Corporation *(a)*	**$ 4,336**	$ 3,067	$ 2,345

(a) Results for the years ended Dec. 31, 2023 and Dec. 31, 2022 were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 for additional information.

Condensed Balance Sheet—The Bank of New York Mellon Corporation (Parent Corporation)

	Dec. 31,	
(in millions)	**2024**	2023
Assets:		
Cash and due from banks	**$ 117**	$ 229
Investment in and advances to subsidiaries and associated companies:		
Banks *(a)*	**34,315**	34,087
Other *(a)*	**39,712**	38,831
Subtotal	**74,027**	72,918
Corporate-owned life insurance	**809**	796
Other assets	**436**	363
Total assets	**$ 75,389**	$ 74,306
Liabilities:		
Deferred compensation	**$ 369**	$ 367
Affiliate borrowings	**1,850**	1,294
Other liabilities	**2,025**	1,889
Long-term debt	**29,827**	29,986
Total liabilities	**34,071**	33,536
Shareholders' equity *(a)*	**41,318**	40,770
Total liabilities and shareholders' equity	**$ 75,389**	$ 74,306

(a) Prior period balances were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 for additional information.

Condensed Statement of Cash Flows—The Bank of New York Mellon Corporation (Parent Corporation)

	Year ended Dec. 31,		
(in millions)	**2024**	2023	2022
Operating activities:			
Net income *(a)*	**$ 4,530**	$ 3,302	$ 2,556
Adjustments to reconcile net income to net cash provided by (used for) operating activities:			
Equity in undistributed net (income) of subsidiaries *(a)*	**(86)**	(292)	(1,647)
Change in accrued interest receivable	**(30)**	24	(8)
Change in accrued interest payable	**54**	24	78
Change in taxes payable *(b)*	**(3)**	395	(3)
Other, net	**(67)**	86	221
Net cash provided by operating activities	**4,398**	3,539	1,197
Investing activities:			
Acquisitions of, investments in, and advances to subsidiaries *(c)*	**(497)**	592	(1,962)
Other, net	**(4)**	—	—
Net cash (used for) provided by investing activities	**(501)**	592	(1,962)
Financing activities:			
Proceeds from issuance of long-term debt	**5,237**	5,988	9,179
Repayments of long-term debt	**(5,213)**	(6,055)	(4,000)
Change in advances from subsidiaries	**556**	364	(2,917)
Issuance of common stock	**17**	16	23
Treasury stock acquired	**(3,064)**	(2,604)	(124)
Redemption of preferred stock	**—**	(500)	—
Cash dividends paid	**(1,542)**	(1,487)	(1,376)
Net cash (used for) provided by financing activities	**(4,009)**	(4,278)	785
Change in cash and due from banks	**(112)**	(147)	20
Cash and due from banks at beginning of year	**229**	376	356
Cash and due from banks at end of year	**$ 117**	$ 229	$ 376
Supplemental disclosures			
Interest paid	**$ 1,783**	$ 1,693	$ 774
Income taxes refunded	**—**	2	—

(a) Results for the years ended Dec. 31, 2023 and Dec. 31, 2022 were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 of the Notes to Consolidated Financial Statements for additional information.

(b) Includes payments received from subsidiaries for taxes of $1,075 million in 2024, $986 million in 2023 and $70 million in 2022.

(c) Includes $1,456 million of cash outflows, net of $959 million of cash inflows in 2024, $1,963 million of cash outflows, net of $2,555 million of cash inflows in 2023 and $2,778 million of cash outflows, net of $816 million of cash inflows in 2022.

Note 20–Fair value measurement

Fair value is defined as the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date. A three-level hierarchy for fair value measurements is utilized based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. BNY's own creditworthiness is considered when valuing liabilities.

Fair value focuses on exit price in an orderly transaction (that is, not a forced liquidation or distressed sale) between market participants at the measurement date under current market conditions. If there has been a significant decrease in the volume and level of activity for the asset or liability, a change in valuation technique or the use of multiple valuation techniques may be appropriate. In such instances, determining the price at which willing market participants would transact at the measurement date under current market conditions depends on the facts and circumstances and requires the use of significant judgment. The objective is to determine from weighted indicators of fair value a reasonable point within the range that is most representative of fair value under current market conditions.

Determination of fair value

We have established processes for determining fair values. Fair value is based upon quoted market prices in active markets, where available. For financial instruments where quotes from recent exchange transactions are not available, we determine fair value based on discounted cash flow analysis, comparison to similar instruments and the use of financial models. Discounted cash flow analysis is dependent upon estimated future cash flows and the level of interest rates. Model-based pricing uses inputs of observable prices, where available, for interest rates, foreign exchange rates, option volatilities and other factors. Models are benchmarked and validated by an independent internal risk management function. Our valuation process takes into consideration factors such as counterparty credit quality, liquidity, concentration concerns and observability of model parameters. Valuation adjustments may be made to record financial instruments at fair value.

Most derivative contracts are valued using models which are calibrated to observable market data and employ standard market pricing theory for their valuations. Valuation models incorporate counterparty credit risk by discounting each trade's expected exposures to the counterparty using the counterparty's credit spreads, as implied by the credit default swap market. We also adjust expected liabilities to the counterparty using BNY's own credit spreads, as implied by the credit default swap market.

Accordingly, the valuation of our derivative positions is sensitive to the current changes in our own credit spreads, as well as those of our counterparties.

In certain cases, recent prices may not be observable for instruments that trade in inactive or less active markets. Upon evaluating the uncertainty in valuing financial instruments subject to liquidity issues, we make an adjustment to their value. The determination of the liquidity adjustment includes the availability of external quotes, the time since the latest available quote and the price volatility of the instrument.

Certain parameters in some financial models are not directly observable and, therefore, are based on management's estimates and judgments. These financial instruments are normally traded less actively. We apply valuation adjustments to mitigate the possibility of error and revision in the model-based estimate value. Examples include products where parameters such as correlation and recovery rates are unobservable.

The methods described above for instruments that trade in inactive or less active markets may produce a current fair value calculation that may not be indicative of net realizable value or reflective of future fair values. We believe our methods of determining fair value are appropriate and consistent with other market participants. However, the use of different methodologies or different assumptions to value certain financial instruments could result in a different estimate of fair value.

Valuation hierarchy

A three-level valuation hierarchy is used for disclosure of fair value measurements based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. The three levels are described below.

Level 1: Inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets. Level 1 assets and liabilities include certain debt and equity securities, derivative financial instruments actively traded on exchanges and highly liquid government bonds.

Level 2: Observable inputs other than Level 1 prices, for example, quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, and inputs that are observable or can be corroborated, either directly or indirectly, for substantially the full term of the financial instrument. Level 2 assets and liabilities include debt instruments that are traded less frequently than exchange-traded securities and derivative financial instruments whose model inputs are observable in the market or can be corroborated by market-observable data.

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

Valuation methodology

Following is a description of the valuation methodologies used for instruments measured at fair value, as well as the general classification of such instruments pursuant to the valuation hierarchy.

Securities

We determine fair value primarily based on pricing sources with reasonable levels of price transparency. Where quoted prices are available in an active market, we classify the securities within Level 1 of the valuation hierarchy. Securities include both long and short positions. Level 1 securities include U.S. Treasury and certain non-U.S. government debt securities that are actively traded in highly liquid OTC markets, money market funds and exchange-traded equities.

If quoted market prices are not available, fair values are primarily determined using pricing models using observable trade data, market data, quoted prices of securities with similar characteristics or discounted cash flows. Examples of such instruments, which would generally be classified within Level 2 of the valuation hierarchy, include RMBS, MBS, certain non-U.S. government debt, foreign covered bonds and CLOs.

Specifically, the pricing sources obtain recent transactions for similar types of securities (e.g., vintage, position in the securitization structure) and ascertain variables such as discount rate and speed of prepayment for the types of transaction and apply such variables to similar types of bonds. We view these as observable transactions in the current marketplace and classify such securities as Level 2. Pricing sources discontinue pricing any specific security whenever they determine there is insufficient observable data to provide a good-faith opinion on price.

At Dec. 31, 2024, approximately 99% of our securities were valued by pricing sources with reasonable levels of price transparency. The remaining securities were generally valued using observable inputs. Additional disclosures of securities are provided in Note 4.

In certain cases where there is limited activity or less transparency around inputs to the valuation, we classify those securities in Level 3 of the valuation hierarchy. As of Dec. 31, 2024, we have no instruments included in Level 3 of the valuation hierarchy.

Derivative financial instruments

We classify exchange-traded derivative financial instruments valued using quoted prices in Level 1 of the valuation hierarchy. Examples include exchange-traded equity options and interest rate futures and options. Since few other classes of derivative contracts are listed on an exchange, most of our derivative positions are valued using models that use as their basis readily observable market parameters, and we classify them in Level 2 of the valuation hierarchy. Such derivative financial instruments include swaps and options, foreign exchange spot and forward contracts and credit default swaps.

Derivatives valued using models with significant unobservable market parameters in markets that lack two-way flow are classified in Level 3 of the valuation hierarchy. Examples may include long-dated swaps and options, where parameters may be unobservable for longer maturities; and certain highly structured products, where correlation risk is unobservable. As of Dec. 31, 2024, we have no Level 3 derivatives. Additional disclosures of derivative instruments are provided in Note 23.

Seed capital

In our Investment and Wealth Management business segment, we make seed capital investments in certain funds we manage. Seed capital is generally included in other assets on the consolidated balance sheet. When applicable, we value seed capital based on the published NAV of the fund.

For other types of investments in funds, we consider all of the rights and obligations inherent in our ownership interest, including the reported NAV as well as other factors that affect the fair value of our interest in the fund.

Other assets measured at NAV

We hold private equity investments, primarily SBICs, which are compliant with the Volcker Rule. There are no readily available market quotations for these investment partnerships. The fair value of the SBICs is based on our ownership percentage of the fair value of the underlying investments as provided by the partnership managers. These investments are typically valued on a quarterly basis. Our SBIC private equity investments are valued at NAV as a practical expedient for fair value.

The following tables present the financial instruments carried at fair value at Dec. 31, 2024 and Dec. 31, 2023, by caption on the consolidated balance sheet and by the three-level valuation hierarchy. We have included credit ratings information in certain of the tables because the information indicates the degree of credit risk to which we are exposed, and significant changes in ratings classifications could result in increased risk for us.

Assets and liabilities measured at fair value on a recurring basis at Dec. 31, 2024 *(dollars in millions)*	Level 1	Level 2	Level 3	Netting *(a)*	Total carrying value
Assets:					
Available-for-sale securities:					
Non-U.S. government *(b)*	$ 4,780	$ 19,967	$ —	$ —	$ 24,747
Agency RMBS	—	19,900	—	—	19,900
U.S. Treasury	16,403	—	—	—	16,403
Agency commercial MBS	—	7,225	—	—	7,225
Foreign covered bonds	—	7,068	—	—	7,068
CLOs	—	5,819	—	—	5,819
Non-agency commercial MBS	—	2,487	—	—	2,487
U.S. government agencies	—	2,289	—	—	2,289
Non-agency RMBS	—	1,478	—	—	1,478
Other ABS	—	615	—	—	615
Total available-for-sale securities	21,183	66,848	—	—	88,031
Trading assets:					
Debt instruments	2,268	3,007	—	—	5,275
Equity instruments	5,781	—	—	—	5,781
Derivative assets not designated as hedging:					
Interest rate	2	833	—	(835)	—
Foreign exchange	—	10,559	—	(7,698)	2,861
Equity and other contracts	6	137	—	(79)	64
Total derivative assets not designated as hedging	8	11,529	—	(8,612)	2,925
Total trading assets	8,057	14,536	—	(8,612)	13,981
Other assets:					
Derivative assets designated as hedging:					
Interest rate	—	326	—	—	326
Foreign exchange	—	455	—	—	455
Total derivative assets designated as hedging	—	781	—	—	781
Other assets *(c)*	532	686	—	—	1,218
Total other assets	532	1,467	—	—	1,999
Assets measured at NAV *(c)*					152
Total assets	**$ 29,772**	**$ 82,851**	**$ —**	**$ (8,612)**	**$ 104,163**
Percentage of total assets prior to netting	26%	74%	—%		
Liabilities:					
Trading liabilities:					
Debt instruments	$ 1,931	$ 18	$ —	$ —	$ 1,949
Equity instruments	52	—	—	—	52
Derivative liabilities not designated as hedging:					
Interest rate	9	1,201	—	(475)	735
Foreign exchange	—	10,636	—	(8,533)	2,103
Equity and other contracts	—	51	—	(25)	26
Total derivative liabilities not designated as hedging	9	11,888	—	(9,033)	2,864
Total trading liabilities	1,992	11,906	—	(9,033)	4,865
Other liabilities:					
Derivative liabilities designated as hedging:					
Foreign exchange	—	12	—	—	12
Total derivative liabilities designated as hedging	—	12	—	—	12
Other liabilities	400	10	—	—	410
Total other liabilities	**400**	**22**	**—**	**—**	**422**
Total liabilities	**$ 2,392**	**$ 11,928**	**$ —**	**$ (9,033)**	**$ 5,287**
Percentage of total liabilities prior to netting	17%	83%	—%		

(a) ASC 815, Derivatives and Hedging, permits the netting of derivative receivables and derivative payables under legally enforceable master netting agreements and permits the netting of cash collateral. Netting is applicable to derivatives not designated as hedging instruments included in trading assets or trading liabilities and derivatives designated as hedging instruments included in other assets or other liabilities. Netting is allocated to the derivative products based on the net fair value of each product.

(b) Includes supranational securities.

(c) Includes seed capital, private equity investments and other assets.

Assets and liabilities measured at fair value on a recurring basis at Dec. 31, 2023 *(dollars in millions)*	Level 1	Level 2	Level 3	Netting *(a)*	Total carrying value
Assets:					
Available-for-sale securities:					
Non-U.S. government *(b)*	$ 2,439	$ 15,943	$ —	$ —	$ 18,382
U.S. Treasury	16,604	—	—	—	16,604
Agency RMBS	—	13,111	—	—	13,111
Agency commercial MBS	—	7,729	—	—	7,729
Foreign covered bonds	—	6,334	—	—	6,334
CLOs	—	6,137	—	—	6,137
Non-agency commercial MBS	—	2,935	—	—	2,935
U.S. government agencies	—	2,901	—	—	2,901
Non-agency RMBS	—	1,740	—	—	1,740
Other ABS	—	943	—	—	943
Other debt securities	—	1	—	—	1
Total available-for-sale securities	19,043	57,774	—	—	76,817
Trading assets:					
Debt instruments	1,246	2,255	—	—	3,501
Equity instruments	4,518	—	—	—	4,518
Derivative assets not designated as hedging:					
Interest rate	7	1,053	—	(751)	309
Foreign exchange	—	9,227	—	(7,498)	1,729
Equity and other contracts	—	8	—	(7)	1
Total derivative assets not designated as hedging	7	10,288	—	(8,256)	2,039
Total trading assets	5,771	12,543	—	(8,256)	10,058
Other assets:					
Derivative assets designated as hedging:					
Interest rate	—	214	—	—	214
Foreign exchange	—	22	—	—	22
Total derivative assets designated as hedging	—	236	—	—	236
Other assets *(c)*	486	386	—	—	872
Total other assets	486	622	—	—	1,108
Assets measured at NAV *(c)*					153
Total assets	$ 25,300	$ 70,939	$ —	$ (8,256)	$ 88,136
Percentage of total assets prior to netting	26%	74%	—%		
Liabilities:					
Trading liabilities:					
Debt instruments	$ 2,508	$ 12	$ —	$ —	$ 2,520
Equity instruments	23	—	—	—	23
Derivative liabilities not designated as hedging:					
Interest rate	8	1,339	—	(635)	712
Foreign exchange	—	9,282	—	(6,341)	2,941
Equity and other contracts	9	135	—	(114)	30
Total derivative liabilities not designated as hedging	17	10,756	—	(7,090)	3,683
Total trading liabilities	2,548	10,768	—	(7,090)	6,226
Other liabilities:					
Derivative liabilities designated as hedging:					
Foreign exchange	—	173	—	—	173
Total derivative liabilities designated as hedging	—	173	—	—	173
Other liabilities	—	22	—	—	22
Total other liabilities	—	195	—	—	195
Total liabilities	$ 2,548	$ 10,963	$ —	$ (7,090)	$ 6,421
Percentage of total liabilities prior to netting	19%	81%	—%		

(a) *ASC 815, Derivatives and Hedging, permits the netting of derivative receivables and derivative payables under legally enforceable master netting agreements and permits the netting of cash collateral. Netting is applicable to derivatives not designated as hedging instruments included in trading assets or trading liabilities and derivatives designated as hedging instruments included in other assets or other liabilities. Netting is allocated to the derivative products based on the net fair value of each product.*

(b) *Includes supranational securities.*

(c) *Includes seed capital, private equity investments and other assets.*

Details of certain available-for-sale securities measured at fair value on a recurring basis *(dollars in millions)*	**Dec. 31, 2024**						**Dec. 31, 2023**					
	Total carrying value *(b)*	Ratings *(a)* AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Not rated	Total carrying value *(b)*	Ratings *(a)* AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Not rated
Non-agency RMBS, originated in:												
2008-2024	**$ 1,453**	**98%**	**2%**	**—%**	**—%**	**—%**	$ 1,487	100%	—%	—%	—%	—%
2007 and earlier	**25**	**—**	**100**	**—**	**—**	**—**	253	5	13	1	40	41
Total non-agency RMBS	**$ 1,478**	**98%**	**2%**	**—%**	**—%**	**—%**	$ 1,740	86%	2%	—%	6%	6%
Non-agency commercial MBS originated in:												
2009-2023	**$ 2,487**	**100%**	**—%**	**—%**	**—%**	**—%**	$ 2,935	100%	—%	—%	—%	—%
Foreign covered bonds:												
Canada	**$ 2,113**	**100%**	**—%**	**—%**	**—%**	**—%**	$ 2,473	100%	—%	—%	—%	—%
UK	**911**	**100**	**—**	**—**	**—**	**—**	1,035	100	—	—	—	—
Germany	**598**	**100**	**—**	**—**	**—**	**—**	664	100	—	—	—	—
Australia	**574**	**100**	**—**	**—**	**—**	**—**	689	100	—	—	—	—
Other	**2,872**	**100**	**—**	**—**	**—**	**—**	1,473	100	—	—	—	—
Total foreign covered bonds	**$ 7,068**	**100%**	**—%**	**—%**	**—%**	**—%**	$ 6,334	100%	—%	—%	—%	—%
Non-U.S. government:												
UK	**$ 3,383**	**100%**	**—%**	**—%**	**—%**	**—%**	$ 1,316	100%	—%	—%	—%	—%
Germany	**2,308**	**100**	**—**	**—**	**—**	**—**	2,658	100	—	—	—	—
France	**1,732**	**100**	**—**	**—**	**—**	**—**	1,562	100	—	—	—	—
Canada	**1,463**	**100**	**—**	**—**	**—**	**—**	1,336	95	5	—	—	—
Belgium	**728**	**100**	**—**	**—**	**—**	**—**	511	100	—	—	—	—
Netherlands	**705**	**100**	**—**	**—**	**—**	**—**	334	100	—	—	—	—
Spain	**617**	**—**	**2**	**98**	**—**	**—**	293	—	17	83	—	—
Finland	**527**	**100**	**—**	**—**	**—**	**—**	282	100	—	—	—	—
Japan	**377**	**—**	**100**	**—**	**—**	**—**	410	—	100	—	—	—
Other *(c)*	**1,924**	**74**	**15**	**4**	**7**	**—**	2,024	80	2	11	7	—
Supranational	**10,983**	**100**	**—**	**—**	**—**	**—**	7,656	100	—	—	—	—
Total non-U.S. government	**$ 24,747**	**94%**	**3%**	**3%**	**—%**	**—%**	$ 18,382	94%	3%	2%	1%	—%

(a) Represents ratings by S&P or the equivalent.
(b) At Dec. 31, 2024 and Dec. 31, 2023, non-U.S. government securities were included in Level 1 and Level 2 in the valuation hierarchy. All other assets in the table are Level 2 assets in the valuation hierarchy.
(c) Includes non-investment grade non-U.S. government securities related to Brazil of $135 million at Dec. 31, 2024 and $140 million at Dec. 31, 2023.

Assets and liabilities measured at fair value on a nonrecurring basis

Under certain circumstances, we make adjustments to the fair value of our assets, liabilities and unfunded lending-related commitments, although they are not measured at fair value on an ongoing basis. The following table presents the carrying value as of Dec. 31, 2024 and Dec. 31, 2023 of financial instruments for which nonrecurring adjustments to fair value have been recorded during 2024 and/or 2023 and all non-readily marketable equity securities carried at cost with upward or downward adjustments by balance sheet caption and level in the fair value hierarchy.

Assets measured at fair value on a nonrecurring basis *(in millions)*	**Dec. 31, 2024** Level 1	Level 2	Level 3	Total carrying value	Dec. 31, 2023 Level 1	Level 2	Level 3	Total carrying value
Loans *(a)*	**$ —**	**$ 25**	**$ —**	**$ 25**	$ —	$ 28	$ —	$ 28
Other assets *(b)*	**—**	**414**	**—**	**414**	—	481	—	481
Total assets at fair value on a nonrecurring basis	**$ —**	**$ 439**	**$ —**	**$ 439**	$ —	$ 509	$ —	$ 509

(a) The fair value of these loans decreased $1 million in 2024 and $3 million in 2023, based on the fair value of the underlying collateral, as required by guidance in ASC 326, Financial Instruments – Credit Losses, with an offset to the allowance for credit losses.
(b) Includes non-readily marketable equity securities carried at cost with upward or downward adjustments and other assets received in satisfaction of debt.

Estimated fair value of financial instruments

The following tables present the estimated fair value and the carrying amount of financial instruments not carried at fair value on the consolidated balance sheet at Dec. 31, 2024 and Dec. 31, 2023, by caption on the consolidated balance sheet and by the valuation hierarchy.

Summary of financial instruments	**Dec. 31, 2024**				
(in millions)	Level 1	Level 2	Level 3	Total estimated fair value	Carrying amount
Assets:					
Interest-bearing deposits with the Federal Reserve and other central banks	$ —	$ 89,546	$ —	$ 89,546	$ 89,546
Interest-bearing deposits with banks	—	9,617	—	9,617	9,612
Federal funds sold and securities purchased under resale agreements	—	41,146	—	41,146	41,146
Securities held-to-maturity	10,016	34,004	—	44,020	48,596
Loans *(a)*	—	69,738	—	69,738	70,673
Other financial assets	4,178	2,271	—	6,449	6,449
Total	**$ 14,194**	**$ 246,322**	**$ —**	**$ 260,516**	**$ 266,022**
Liabilities:					
Noninterest-bearing deposits	$ —	$ 58,267	$ —	$ 58,267	$ 58,267
Interest-bearing deposits	—	226,799	—	226,799	231,257
Federal funds purchased and securities sold under repurchase agreements	—	14,064	—	14,064	14,064
Payables to customers and broker-dealers	—	20,073	—	20,073	20,073
Commercial paper	—	301	—	301	301
Borrowings	—	941	—	941	941
Long-term debt	—	30,351	—	30,351	30,854
Total	**$ —**	**$ 350,796**	**$ —**	**$ 350,796**	**$ 355,757**

(a) Does not include the leasing portfolio.

Summary of financial instruments	Dec. 31, 2023				
(in millions)	Level 1	Level 2	Level 3	Total estimated fair value	Carrying amount
Assets:					
Interest-bearing deposits with the Federal Reserve and other central banks	$ —	$ 111,550	$ —	$ 111,550	$ 111,550
Interest-bearing deposits with banks	—	12,134	—	12,134	12,139
Federal funds sold and securities purchased under resale agreements	—	28,900	—	28,900	28,900
Securities held-to-maturity	9,545	35,166	—	44,711	49,578
Loans *(a)*	—	65,026	—	65,026	65,977
Other financial assets	4,922	2,149	—	7,071	7,071
Total	$ 14,467	$ 254,925	$ —	$ 269,392	$ 275,215
Liabilities:					
Noninterest-bearing deposits	$ —	$ 58,274	$ —	$ 58,274	$ 58,274
Interest-bearing deposits	—	221,463	—	221,463	225,395
Federal funds purchased and securities sold under repurchase agreements	—	14,507	—	14,507	14,507
Payables to customers and broker-dealers	—	18,395	—	18,395	18,395
Borrowings	—	1,274	—	1,274	1,274
Long-term debt	—	30,596	—	30,596	31,257
Total	$ —	$ 344,509	$ —	$ 344,509	$ 349,102

(a) Does not include the leasing portfolio.

Note 21–Fair value option

We elected fair value as an alternative measurement for selected financial assets and liabilities that are not otherwise required to be measured at fair value, including the assets and liabilities of consolidated investment management funds and subordinated notes associated with certain equity investments.

The following table presents the assets and liabilities of consolidated investment management funds, at fair value.

Assets and liabilities of consolidated investment management funds, at fair value	Dec. 31,	
(in millions)	**2024**	2023
Assets of consolidated investment management funds:		
Trading assets	**$ 846**	$ 510
Other assets	**45**	16
Total assets of consolidated investment management funds	**$ 891**	$ 526
Liabilities of consolidated investment management funds:		
Other liabilities	**$ 5**	$ 1
Total liabilities of consolidated investment management funds	**$ 5**	$ 1

The assets and liabilities of the consolidated investment management funds are included in other assets and other liabilities, respectively, on the consolidated balance sheet. We value the assets and liabilities of consolidated investment management funds using quoted prices for identical assets or liabilities in active markets or observable inputs such as quoted prices for similar assets or liabilities. Quoted prices for either identical or similar assets or liabilities in inactive markets may also be used. Accordingly, fair value best reflects the interests BNY holds in the economic performance of the consolidated investment management funds. Changes in the fair value of the assets and liabilities are recorded as income (loss) from consolidated investment management funds, which is included in investment and other revenue in the consolidated income statement.

We elected the fair value option on subordinated notes associated with certain equity investments. The fair value of these subordinated notes was $26 million at Dec. 31, 2024 and $4 million at Dec. 31, 2023, and are included in other assets on the consolidated balance sheet. The subordinated notes were valued using observable market inputs and included in Level 2 of the valuation hierarchy.

Note 22–Commitments and contingent liabilities

Off-balance sheet arrangements

In the normal course of business, various commitments and contingent liabilities are outstanding that are not reflected in the accompanying consolidated balance sheets.

Our significant trading and off-balance sheet risks are securities, foreign currency and interest rate risk management products, commercial lending commitments, letters of credit and securities lending indemnifications. We assume these risks to reduce interest rate and foreign currency risks, to provide customers with the ability to meet credit and liquidity needs and to hedge foreign currency and interest rate risks. These items involve, to varying degrees, credit, foreign currency and interest rate risks not recognized on the balance sheet. Our off-balance sheet risks are managed and monitored in manners similar to those used for on-balance sheet risks.

The following table presents a summary of our off-balance sheet credit risks.

Off-balance sheet credit risks *(in millions)*	**Dec. 31, 2024**	Dec. 31, 2023
Lending commitments	**$ 52,581**	$ 46,518
Standby letters of credit ("SBLC") *(a)*	**1,641**	1,816
Commercial letters of credit	**24**	41
Securities lending indemnifications *(b)(c)*	**544,601**	492,739

(a) Net of participations totaling $192 million at Dec. 31, 2024 and $163 million at Dec. 31, 2023.
(b) Excludes the indemnification for securities for which BNY acts as an agent on behalf of CIBC Mellon clients, which totaled $60 billion at Dec. 31, 2024 and $59 billion at Dec. 31, 2023.
(c) Includes cash collateral, invested in indemnified repurchase agreements, held by us as securities lending agent of $59 billion at Dec. 31, 2024 and $45 billion at Dec. 31, 2023.

The total potential loss on undrawn lending commitments, standby and commercial letters of credit, and securities lending indemnifications is equal to the total notional amount if drawn upon, which does not consider the value of any collateral.

Since many of the lending commitments are expected to expire without being drawn upon, the total amount does not necessarily represent future cash requirements. A summary of lending commitment maturities is as follows: $32.7 billion in less than one year, $19.4 billion in one to five years and $440 million over five years.

SBLCs principally support obligations of corporate clients and were collateralized with cash and securities of $173 million at Dec. 31, 2024 and $158 million at Dec. 31, 2023. At Dec. 31, 2024, $1.3 billion of the SBLCs will expire within one year and $298 million in one to five years. No SBLCs expire in over five years.

We must recognize, at the inception of an SBLC and foreign and other guarantees, a liability for the fair value of the obligation undertaken in issuing the guarantee. The fair value of the liability, which was recorded with a corresponding asset in other assets, was estimated as the present value of contractual customer fees. The estimated liability for losses related to SBLCs and foreign and other guarantees, if any, is included in the allowance for lending-related commitments.

Payment/performance risk of SBLCs is monitored using both historical performance and internal ratings criteria. BNY's historical experience is that SBLCs typically expire without being funded. SBLCs below investment grade are monitored closely for payment/ performance risk. The table below shows SBLCs by investment grade:

Standby letters of credit	**Dec. 31, 2024**	Dec. 31, 2023
Investment grade	**67%**	74%
Non-investment grade	**33%**	26%

A commercial letter of credit is normally a short-term instrument used to finance a commercial contract for the shipment of goods from a seller to a buyer. Although the commercial letter of credit is contingent upon the satisfaction of specified conditions, it represents a credit exposure if the buyer defaults on the underlying transaction. As a result, the total contractual amounts do not necessarily represent future cash requirements. Commercial letters of credit totaled $24 million at Dec. 31, 2024 and $41 million at Dec. 31, 2023.

We expect many of the lending commitments and letters of credit to expire without the need to advance any cash. The revenue associated with guarantees frequently depends on the credit rating of the obligor and the structure of the transaction, including collateral, if any. The allowance for lending-related commitments was $72 million at Dec. 31, 2024 and $87 million at Dec. 31, 2023.

A securities lending transaction is a fully collateralized transaction in which the owner of a security agrees to lend the security (typically through an agent, in our case, The Bank of New York Mellon) to a borrower, usually a broker-dealer or bank, on an open, overnight or term basis, under the terms of a prearranged contract.

We typically lend securities with indemnification against borrower default. We generally require the borrower to provide collateral with a minimum value of 102% of the fair value of the securities borrowed, which is monitored on a daily basis, thus reducing credit risk. Market risk can also arise in securities lending transactions. These risks are controlled through policies limiting the level of risk that can be undertaken. Securities lending transactions are generally entered into only with highly rated counterparties. Securities lending indemnifications were secured by collateral of $574 billion at Dec. 31, 2024 and $518 billion at Dec. 31, 2023.

CIBC Mellon, a joint venture between BNY and the Canadian Imperial Bank of Commerce ("CIBC"), engages in securities lending activities. CIBC Mellon, BNY and CIBC jointly and severally indemnify securities lenders against specific types of borrower default. At Dec. 31, 2024 and Dec. 31, 2023, $60 billion and $59 billion, respectively, of borrowings at CIBC Mellon, for which BNY acts as agent on behalf of CIBC Mellon clients, were secured by collateral of $64 billion and $62 billion, respectively. If, upon a default, a borrower's collateral was not sufficient to cover its related obligations, certain losses related to the indemnification could be covered by the indemnitors.

Unsettled repurchase and reverse repurchase agreements

In the normal course of business, we enter into repurchase agreements and reverse repurchase agreements that settle at a future date. In repurchase agreements, BNY receives cash from and provides securities as collateral to a counterparty at settlement. In reverse repurchase agreements, BNY advances cash to and receives securities as collateral from the counterparty at settlement. These transactions are recorded on the consolidated balance sheet on the settlement date. At Dec. 31, 2024, we had no unsettled repurchase agreements and $96.1 billion of unsettled reverse repurchase agreements. At Dec. 31, 2023, we had no unsettled repurchase agreements and $77.9 billion of unsettled reverse repurchase agreements.

Industry concentrations

We have significant industry concentrations related to credit exposure at Dec. 31, 2024. The tables below present our credit exposure in the financial institutions and commercial portfolios.

Financial institutions portfolio exposure *(in billions)*	Dec. 31, 2024		
	Loans	**Unfunded commitments**	**Total exposure**
Securities industry	**$ 2.3**	**$ 20.3**	**$ 22.6**
Banks	**8.9**	**1.4**	**10.3**
Asset managers	**1.8**	**8.4**	**10.2**
Insurance	**—**	**4.2**	**4.2**
Government	**—**	**0.4**	**0.4**
Other	**0.2**	**0.5**	**0.7**
Total	**$ 13.2**	**$ 35.2**	**$ 48.4**

Commercial portfolio exposure *(in billions)*	Dec. 31, 2024		
	Loans	**Unfunded commitments**	**Total exposure**
Energy and utilities	**$ 0.2**	**$ 4.1**	**$ 4.3**
Services and other	**0.7**	**3.5**	**4.2**
Manufacturing	**0.5**	**3.5**	**4.0**
Media and telecom	**—**	**0.8**	**0.8**
Total	**$ 1.4**	**$ 11.9**	**$ 13.3**

Major concentrations in securities lending are primarily to broker-dealers and are generally collateralized with cash and/or securities.

Sponsored member repo program

BNY is a sponsoring member in the Fixed Income Clearing Corporation ("FICC") sponsored member program, where we submit eligible repurchase and reverse repurchase transactions in U.S. Treasury and agency securities ("Sponsored Member Transactions") between BNY and our sponsored member clients for novation and clearing through FICC pursuant to the FICC Government Securities Division rulebook (the "FICC Rules"). We also guarantee to FICC the prompt and full payment and performance of our sponsored member clients' respective obligations under the FICC Rules in connection with such clients' Sponsored Member Transactions. We minimize our credit exposure under this guaranty by obtaining a security interest in our sponsored member clients' collateral and rights under Sponsored Member Transactions. See "Offsetting assets and liabilities" in Note 23 for additional information on our repurchase and reverse repurchase agreements.

Indemnification arrangements

We have provided standard representations for underwriting agreements, acquisition and divestiture agreements, sales of loans and commitments, and other similar types of arrangements and customary indemnification for claims and legal proceedings related to providing financial services that are not otherwise included above. Insurance has been purchased to mitigate certain of these risks. Generally, there are no stated or notional amounts included in these indemnifications and the contingencies triggering the obligation for indemnification are not expected to occur. Furthermore, often counterparties to these transactions provide us with comparable indemnifications. We are unable to develop an estimate of the maximum payout under these indemnifications for several reasons. In addition to the lack of a stated or notional amount in a majority of such indemnifications, we are unable to predict the nature of events that would trigger indemnification or the level of indemnification for a certain event. We believe, however, that the possibility that we will have to make any material payments for these indemnifications is remote. At Dec. 31, 2024 and Dec. 31, 2023, we have not recorded any material liabilities under these arrangements.

Clearing and settlement exchanges

We are a noncontrolling equity investor in, and/or member of, several industry clearing or settlement exchanges through which foreign exchange, securities, derivatives or other transactions settle. Certain of these industry clearing and settlement exchanges require their members to guarantee their obligations and liabilities and/or to provide liquidity support in the event other members do not honor their obligations. We believe the likelihood that a clearing or settlement exchange (of which we are a member) would become insolvent is remote. Additionally, certain settlement exchanges have implemented loss allocation policies that enable the exchange to allocate settlement losses to the members of the exchange. It is not possible to quantify such mark-to-market loss until the loss occurs. Any ancillary costs that occur as a result of any mark-to-market loss cannot be quantified. In addition, we also sponsor clients as members on clearing and settlement exchanges and guarantee their obligations. At Dec. 31, 2024 and Dec. 31, 2023, we did not record any material liabilities under these arrangements.

Legal proceedings

In the ordinary course of business, The Bank of New York Mellon Corporation and its subsidiaries are routinely named as defendants in or made parties to pending and potential legal actions. We also are subject to governmental and regulatory examinations, information-gathering requests, investigations and proceedings (both formal and informal). Claims for significant monetary damages are often asserted in many of these legal actions, while claims for disgorgement, restitution, penalties and/or other remedial actions or sanctions may be sought in governmental and regulatory matters. It is inherently difficult to predict the eventual outcomes of such matters given their complexity and the particular facts and circumstances at issue in each of these matters. However, on the basis of our current knowledge and understanding, we do not believe that judgments, settlements or orders, if any, arising from these matters (either individually or in the aggregate, after giving effect to applicable reserves and insurance coverage) will have a material adverse effect on the consolidated financial position or liquidity of BNY, although they could have a material effect on our results of operations in a given period.

In view of the inherent unpredictability of outcomes in litigation and regulatory matters, particularly where (i) the damages sought are substantial or indeterminate, (ii) the proceedings are in the early stages, or (iii) the matters involve novel legal theories or a large number of parties, as a matter of course there is considerable uncertainty surrounding the timing or ultimate resolution of litigation and regulatory matters, including a possible eventual loss, fine, penalty or business impact, if any, associated with each such matter. In accordance with applicable accounting guidance, we establish accruals for litigation and regulatory matters when those matters proceed to a stage where they present loss contingencies that are both probable and reasonably estimable. In such cases, there may be a possible exposure to loss in excess of any amounts accrued. We regularly monitor such matters for developments that could affect the amount of the accrual, and will adjust the accrual amount as appropriate. If the loss contingency in question is not both probable and reasonably estimable, we do not establish an accrual and the matter continues to be monitored for any developments that would make the loss contingency both probable and reasonably estimable. We believe that our accruals for legal proceedings are appropriate and, in the aggregate, are not material to the consolidated financial position of BNY, although future accruals could have a material effect on the results of operations in a given period. In addition, if we have the potential to recover a portion of an estimated loss from a third party, we record a receivable up to the amount of the accrual that is probable of recovery.

For certain of those matters described here for which a loss contingency may, in the future, be reasonably possible (whether in excess of a related accrued liability or where there is no accrued liability), BNY is currently unable to estimate a range of reasonably possible loss. For those matters described here where BNY is able to estimate a reasonably possible loss, the aggregate range of such reasonably possible loss is up to $690 million in excess of the accrued liability (if any) related to those matters. For matters where a reasonably possible loss is denominated in a foreign currency, our estimate is adjusted quarterly based on prevailing exchange rates. We do not consider potential recoveries when estimating reasonably possible losses.

The following describes certain judicial, regulatory and arbitration proceedings involving BNY:

<u>Mortgage-Securitization Trusts Proceedings</u>
BNY has been named as a defendant in a number of legal actions brought by MBS investors alleging that the trustee has expansive duties under the governing agreements, including the duty to investigate and pursue breach of representation and warranty claims against other parties to the MBS transactions. Two actions commenced in December 2015 and February 2017 are pending in New York federal court. In New York state court, five actions are pending: two related cases commenced in September 2021 and October 2022; and three related cases commenced in October 2021, December 2021 and February 2022.

Matters Related to R. Allen Stanford

In late December 2005, Pershing LLC became a clearing firm for Stanford Group Co. ("SGC"), a registered broker-dealer that was part of a group of entities ultimately controlled by R. Allen Stanford ("Stanford"). Stanford International Bank, also controlled by Stanford, issued certificates of deposit ("CDs"). Some investors allegedly wired funds from their SGC accounts to purchase CDs. In 2009, the Securities and Exchange Commission charged Stanford with operating a Ponzi scheme in connection with the sale of CDs, and SGC was placed into receivership. Alleged purchasers of CDs have filed two putative class action proceedings against Pershing LLC: one in November 2009 in Texas federal court, and one in May 2016 in New Jersey federal court. On Nov. 5, 2021, the court dismissed the class action filed in New Jersey. Both matters have concluded. Three lawsuits remain against Pershing LLC in Louisiana and New Jersey federal courts, which were filed in January 2010, October 2015 and May 2016. The purchasers allege that Pershing LLC, as SGC's clearing firm, assisted Stanford in a fraudulent scheme and assert contractual, statutory and common law claims. In March 2019, a group of investors filed a putative class action against The Bank of New York Mellon in New Jersey federal court, making the same allegations as in the prior actions brought against Pershing LLC. On Nov. 12, 2021, the court dismissed the class action against The Bank of New York Mellon; on Dec. 15, 2022, an appeals court reversed the dismissal and returned the case to the trial court for further proceedings. On June 28, 2024, an unincorporated association that claims to represent the interests of Stanford investors filed a lawsuit in New Jersey federal court against The Bank of New York Mellon, making the same allegations as prior cases. All of the cases that have been brought in federal court have been consolidated in Texas federal court for discovery purposes. Various alleged Stanford CD purchasers asserted similar claims in Financial Industry Regulatory Authority, Inc. ("FINRA") arbitration proceedings.

Brazilian Postalis Litigation

BNY Servicos Financeiros DTVM S.A. ("DTVM"), a subsidiary that provides asset services in Brazil, acts as administrator for certain investment funds in which a public pension fund for postal workers called Postalis-Instituto de Seguridade Social dos Correios e Telégrafos ("Postalis") invested. On Aug. 22, 2014, Postalis sued DTVM in Rio de Janeiro, Brazil for losses related to a Postalis fund for which DTVM is administrator. Postalis alleges that DTVM failed to properly perform duties, including to conduct due diligence of and exert control over the manager. On March 12, 2015, Postalis filed a lawsuit in Rio de Janeiro against DTVM and BNY Administração de Ativos Ltda. ("Ativos") alleging failure to properly perform duties relating to another fund of which DTVM is administrator and Ativos is manager. On Dec. 14, 2015, Associacão dos Profissionais dos Correios ("ADCAP"), a Brazilian postal workers association, filed a lawsuit in São Paulo against DTVM and other defendants alleging that DTVM improperly contributed to Postalis investment losses. On March 20, 2017, the lawsuit was dismissed without prejudice, and ADCAP appealed. On Aug. 4, 2021, the appellate court overturned the dismissal and sent the lawsuit to a state lower court. On March 2, 2023, DTVM appealed the August 4 decision to Brazil's Superior Court of Justice. On Dec. 17, 2015, Postalis filed three lawsuits in Rio de Janeiro against DTVM and Ativos alleging failure to properly perform duties with respect to investments in several other funds. On May 20, 2021, the court in one of those lawsuits entered a judgment of approximately \$3 million against DTVM and Ativos. DTVM appealed and, on June 7, 2022, the appellate court partially granted and partially denied the appeal, reducing the judgment to approximately \$2 million. On July 13, 2023, DTVM and Ativos filed a further appeal to Brazil's Superior Court of Justice, which was denied on Sept. 20, 2024. DTVM and Ativos further appealed, but their appeal was denied on Dec. 3, 2024. On Aug. 24, 2022, the court dismissed one of the other lawsuits. Postalis appealed that decision, but Postalis's appeal was denied on Oct. 24, 2023. Postalis further appealed; that further appeal was denied on Oct. 22, 2024. On Feb. 4, 2016, Postalis filed a lawsuit in Brasilia against DTVM, Ativos and BNY Alocação de Patrimônio Ltda. ("Alocação de Patrimônio"), an investment management subsidiary, alleging failure to properly perform duties and liability for losses with respect to investments in various funds of which the defendants were administrator and/or manager. On Jan. 16, 2018, the Brazilian Federal Prosecution Service filed a civil lawsuit in São Paulo against DTVM alleging liability for Postalis losses based on alleged failures to properly perform certain duties as administrator to certain funds in which Postalis invested or as controller of Postalis's own investment portfolio. On April 18, 2018, the court dismissed the lawsuit without prejudice. On Aug. 4, 2021, the appellate court overturned the dismissal and returned the lawsuit to the lower court. DTVM appealed, but that appeal was denied on Aug. 21, 2023. In addition, the Tribunal de Contas da União ("TCU"), an administrative tribunal, has initiated proceedings with the purpose of determining liability for losses to four investment funds administered by DTVM in which Postalis was an investor. On Sept. 9, 2020, TCU rendered a decision in one of the proceedings, finding DTVM and two former Postalis directors jointly and severally liable for approximately $50 million. TCU also imposed on DTVM a fine of approximately $2 million. DTVM's administrative appeal of the decision was denied. On Feb. 25, 2022, DTVM filed a lawsuit in Brazil federal court in Brasilia seeking annulment of TCU's decision and an injunction preventing TCU from enforcing the judgment. On Aug. 24, 2022, the Brazilian Federal Attorneys filed an action in Rio de Janeiro court seeking to enforce the fine portion of the judgment. On Nov. 8, 2022, the Brasilia federal court in the annulment action granted DTVM's request for an injunction, suspending the Sept. 9, 2020, TCU decision until the annulment action is decided. On Oct. 4, 2019, Postalis and another pension fund filed a request for arbitration in São Paulo against DTVM and Ativos alleging liability for losses to an investment fund for which DTVM was administrator and Ativos was manager. On March 26, 2021, DTVM and Ativos filed a lawsuit in São Paulo challenging the Arbitration Court's jurisdiction over the case. On Feb. 24, 2023, the São Paulo court annulled the Arbitration Court's decision that it had jurisdiction, and Postalis and the other pension fund appealed. On April 8, 2024, the appellate court reversed the São Paulo court's decision and found that the Arbitration Court did have jurisdiction. DTVM and Ativos appealed; that appeal was denied on April 8, 2024. DTVM and Ativos have further appealed. The arbitration continues during the further appeal. On Oct. 25, 2019, Postalis filed a lawsuit in Rio de Janeiro against DTVM and Alocação de Patrimônio, alleging liability for losses in another fund for which DTVM was administrator and Alocação de Patrimônio and Ativos were managers. On May 9, 2022, the court found DTVM and Alocação de Patrimônio jointly and severally liable for approximately $20 million. On Aug. 12, 2022, DTVM and Alocação de Patrimônio appealed the decision. On April 30, 2024, the appeals court reversed the finding against DTVM and Alocação de Patrimônio. Postalis appealed that reversal and, on Oct. 3, 2024, its appeal was denied. Postalis has filed a further appeal. On June 19, 2020, a lawsuit was filed in federal court in Rio de Janeiro against DTVM, Postalis, and various other defendants alleging liability against DTVM for certain Postalis losses in an investment fund of which DTVM was administrator. On Feb. 10, 2021, Postalis and another pension fund served DTVM in a lawsuit filed in Rio de Janeiro, alleging liability for losses in another investment fund for which DTVM was administrator and the other defendant was manager.

<u>Brazilian Silverado Litigation</u>
DTVM acts as administrator for the Fundo de Investimento em Direitos Creditórios Multisetorial Silverado Maximum ("Silverado Maximum Fund"), which invests in commercial credit receivables. On June 2, 2016, the Silverado Maximum Fund sued DTVM in its capacity as administrator, along with Deutsche Bank S.A. - Banco Alemão in its capacity as custodian and Silverado Gestão e Investimentos Ltda. in its capacity as investment manager. The Fund alleges that each of the defendants failed to fulfill its respective duty, and caused losses to the Fund for which the defendants are jointly and severally liable. On March 21, 2024, the São Paulo court issued a decision finding DTVM, Deutsche Bank and Silverado Gestão e Investimentos jointly liable for losses to the Fund in an amount to be determined during a later calculation phase. On Sept. 12, 2024, DTVM filed an appeal.

<u>German Tax Matters</u>
German authorities are investigating past "cum/ex" trading, which involved the purchase of equity securities on or shortly before the dividend date, but settled after that date, potentially resulting in an unwarranted refund of withholding tax. German authorities have taken the view that past cum/ex trading may have resulted in tax avoidance or evasion. European subsidiaries of BNY have been informed by German authorities about investigations into potential cum/ex trading by certain third-party investment funds, where one of the subsidiaries had acquired entities that served as depositary and/or fund manager for those third-party investment funds. We have received information requests from the authorities relating to pre-acquisition activity and are cooperating fully with those requests. In August 2019, the District Court of Bonn ordered that one of these subsidiaries be joined as a secondary party in connection with the prosecution of unrelated individual defendants. Trial commenced in September 2019. In March 2020, the court stated that

it would refrain from taking action against the subsidiary in order to expedite the conclusion of the trial. The court convicted the unrelated individual defendants, and determined that the cum/ex trading activities of the relevant third-party investment funds were unlawful. In November and December 2020 and February 2023, we received secondary liability notices from the German tax authorities totaling approximately $150 million (at then-prevailing exchange rates) related to pre-acquisition activity in various funds for which the entities we acquired were depositary and/or fund manager. We have appealed the notices. In connection with the acquisition of the subject entities, we obtained an indemnity for liabilities from the sellers that we intend to pursue as necessary.

Off-Channel Business-Related Communications
The Company has been responding to requests for information from the SEC and the Commodity Futures Trading Commission concerning compliance with recordkeeping obligations relating to business communications transmitted on unapproved electronic communication platforms. SEC and CFTC have been conducting similar inquiries into recordkeeping practices at other financial institutions. On Aug. 14, 2024, the SEC issued an order under which the Company agreed to pay a $40 million penalty and to certain undertakings to resolve the SEC matter. The fine has been paid, and the Company is complying with the other settlement terms. The Company continues to cooperate with the CFTC’s inquiry.

Pershing LLC Rule 15c3-3 Matter
The Company has been responding to investigative requests for information and records from the SEC concerning Pershing LLC’s compliance with its obligations under SEC Rule 15c3-3, among other regulatory rules and statutes. The Company continues to cooperate with the inquiry.

Note 23–Derivative instruments

We use derivatives to manage exposure to market risk, including interest rate risk, equity price risk and foreign currency risk, as well as credit risk. Our trading activities are focused on acting as a market-maker for our customers and facilitating customer trades in compliance with the Volcker Rule.

The notional amounts for derivative financial instruments express the dollar volume of the transactions; however, credit risk is much smaller. We perform credit reviews and enter into netting agreements and collateral arrangements to minimize the credit risk of derivative financial instruments. We enter into offsetting positions to reduce exposure to foreign currency, interest rate and equity price risk.

Use of derivative financial instruments involves reliance on counterparties. Failure of a counterparty to honor its obligation under a derivative contract is a risk we assume whenever we engage in a derivative contract. There were no counterparty default losses recorded in 2024.

Hedging derivatives

We utilize interest rate swap agreements, including forward starting swaps, to manage our exposure to interest rate fluctuations. We enter into fair value hedges as an interest rate risk management strategy to reduce fair value variability by converting certain fixed rate interest payments associated with available-for-sale securities, loans and long-term debt to floating interest rates. We also utilize interest rate swaps and forward exchange contracts as cash flow hedges to manage our exposure to interest rate and foreign exchange rate changes. In designating interest rate swaps as hedges, we utilize both partial-term and full-term hedge strategies.

The available-for-sale securities hedged consist of U.S. Treasury, agency and non-agency commercial MBS, agency and non-agency RMBS, non-U.S. government and foreign covered bonds. At Dec. 31, 2024, $36.9 billion par value of available-for-sale securities were hedged with interest rate swaps designated as fair value hedges that had notional values of $36.9 billion.

At Dec. 31, 2024, $1.4 billion of interest rate swaps was designated as portfolio layer method fair value hedges of loans against a closed portfolio of fixed rate loans of $3.2 billion, essentially converting $1.4 billion of such fixed rate loans to a floating rate.

The fixed rate long-term debt instruments hedged generally have original maturities of five to 30 years. In fair value hedging relationships, fixed rate debt is hedged with “receive fixed rate, pay variable rate” swaps. At Dec. 31, 2024, $28.5 billion par value of debt was hedged with interest rate swaps designated as fair value hedges that had notional values of $28.5 billion.

In addition, we utilize forward foreign exchange contracts as hedges to mitigate foreign exchange exposures. We use forward foreign exchange contracts as cash flow hedges to convert certain forecasted non-U.S. dollar revenue and expenses into U.S. dollars. We use forward foreign exchange contracts with maturities of 15 months or less as cash flow hedges to hedge our foreign exchange exposure to currencies such as the Indian rupee, Polish zloty, Hong Kong dollar, Singapore dollar, British pound and euro used in revenue and expense transactions for entities that have the U.S. dollar as their functional currency. As of Dec. 31, 2024, the hedged forecasted foreign currency transactions and designated forward foreign exchange contract hedges were $765 million (notional), with a pre-tax loss of $4 million recorded in accumulated OCI. Over the next 12 months, a loss of $6 million will be reclassified into earnings.

From time-to-time, we have utilized forward foreign exchange contracts as fair value hedges of the foreign exchange risk associated with available-for-sale securities. Forward points are designated as an excluded component and amortized into earnings over the hedge period. At Dec. 31, 2024, there were no remaining foreign exchange contracts.

Forward foreign exchange contracts are also used to hedge the value of our net investments in foreign subsidiaries. These forward foreign exchange contracts have maturities of less than one year. The derivatives employed are designated as hedges of changes in value of our foreign investments due to exchange rates. The change in fair market value of these forward foreign exchange contracts is reported within foreign currency translation adjustments in shareholders' equity, net of tax. At Dec. 31, 2024, forward foreign exchange contracts with notional amounts totaling $11.3 billion were designated as net investment hedges.

From time-to-time, we also designate non-derivative financial instruments as hedges of our net investments in foreign subsidiaries. At Dec. 31, 2024, there were no non-derivative financial instruments hedging our net investments in foreign subsidiaries.

The following table presents the pre-tax gains (losses) related to our fair value and cash flow hedging activities recognized in the consolidated income statement.

Income statement impact of fair value and cash flow hedges *(in millions)*	Location of gains (losses)	**2024**	2023	2022
Interest rate fair value hedges of available-for-sale securities				
Derivative	Interest income	**$ 311**	$ (631)	$ 3,530
Hedged item	Interest income	**(311)**	629	(3,517)
Interest rate fair value hedges of long-term debt				
Derivative	Interest expense	**(218)**	366	(1,441)
Hedged item	Interest expense	**218**	(365)	1,438
Foreign exchange fair value hedges of available-for-sale securities				
Derivative *(a)*	Foreign exchange revenue	**—**	—	(2)
Hedged item	Foreign exchange revenue	**—**	—	4
Interest rate fair value hedges of loans				
Derivative	Interest income	**7**	—	—
Hedged item	Interest income	**(7)**	—	—
Cash flow hedges of forecasted FX exposures				
Gain (loss) reclassified from OCI into income	Staff expense	**5**	—	(9)
Gain (loss) reclassified from OCI into income	Investment and other revenue	**2**	(2)	1
Gain (loss) recognized in the consolidated income statement due to fair value and cash flow hedging relationships		**$ 7**	$ (3)	$ 4

(a) *There was no amortization associated with the excluded component in 2024 or 2023. Includes gains of $1 million in 2022 associated with the amortization of the excluded component.*

The following table presents the impact of hedging derivatives used in net investment hedging relationships.

Impact of derivative instruments used in net investment hedging relationships *(in millions)* Derivatives in net investment hedging relationships	Gain or (loss) recognized in accumulated OCI on derivatives Year ended Dec. 31, **2024**	2023	2022	Location of gain or (loss) reclassified from accumulated OCI into income	Gain or (loss) reclassified from accumulated OCI into income Year ended Dec. 31, **2024**	2023	2022
FX contracts	**$ 684**	$ (285)	$ 631	Net interest income	**$ —**	$ —	$ —

The following table presents information on the hedged items in fair value hedging relationships.

Hedged items in fair value hedging relationships	Carrying amount of hedged asset or liability		Hedge accounting basis adjustment increase (decrease) *(a)*	
(in millions)	**Dec. 31, 2024**	Dec. 31, 2023	**Dec. 31, 2024**	Dec. 31, 2023
Available-for-sale securities *(b)*	**$ 40,751**	$ 29,941	**$ (1,650)**	$ (1,767)
Loans *(c)*	**$ 3,162**	$ —	**$ (7)**	$ —
Long-term debt	**$ 27,458**	$ 21,854	**$ (1,042)**	$ (846)

(a) Includes $474 million and $434 million of basis adjustment decreases on discontinued hedges associated with available-for-sale securities at Dec. 31, 2024 and Dec. 31, 2023, respectively, and $5 million and $26 million of basis adjustment decreases on discontinued hedges associated with long-term debt at Dec. 31, 2024 and Dec. 31, 2023, respectively.

(b) At Dec. 31, 2024 and Dec. 31, 2023, the amortized cost of the available-for-sale securities included in closed portfolios subject to portfolio layer method hedging was $12.1 billion and $2.0 billion, respectively, of which the notional amount hedged was $6.2 billion and $1.0 billion, respectively. The cumulative basis adjustments for active hedging relationships associated with such hedges as of Dec. 31, 2024 and Dec. 31, 2023 were a decrease of $92 million and an increase of $24 million, respectively.

(c) At Dec. 31, 2024, loans included in closed portfolios subject to portfolio layer method hedging were $3.2 billion, of which $1.4 billion was designated as hedged. The cumulative basis adjustment for active hedging relationships associated with such hedges as of Dec. 31, 2024 was a decrease of $7 million.

The following table summarizes the notional amount and carrying values of our total derivatives portfolio.

Impact of derivative instruments on the balance sheet	Notional value		Asset derivatives fair value		Liability derivatives fair value	
(in millions)	**Dec. 31, 2024**	Dec. 31, 2023	**Dec. 31, 2024**	Dec. 31, 2023	**Dec. 31, 2024**	Dec. 31, 2023
Derivatives designated as hedging instruments: *(a)(b)*						
Interest rate contracts	**$ 66,805**	$ 52,808	**$ 326**	$ 214	**$ —**	$ —
Foreign exchange contracts	**12,048**	11,099	**455**	22	**12**	173
Total derivatives designated as hedging instruments			**$ 781**	$ 236	**$ 12**	$ 173
Derivatives not designated as hedging instruments: *(b)(c)*						
Interest rate contracts	**$ 169,523**	$ 155,535	**$ 835**	$ 1,060	**$ 1,210**	$ 1,347
Foreign exchange contracts	**919,690**	944,241	**10,559**	9,227	**10,636**	9,282
Equity contracts	**5,321**	3,886	**143**	8	**34**	138
Credit contracts	**324**	220	**—**	—	**17**	6
Total derivatives not designated as hedging instruments			**$ 11,537**	$ 10,295	**$ 11,897**	$ 10,773
Total derivatives fair value *(d)*			**$ 12,318**	$ 10,531	**$ 11,909**	$ 10,946
Effect of master netting agreements *(e)*			**(8,612)**	(8,256)	**(9,033)**	(7,090)
Fair value after effect of master netting agreements			**$ 3,706**	$ 2,275	**$ 2,876**	$ 3,856

(a) The fair value of asset derivatives and liability derivatives designated as hedging instruments is recorded as other assets and other liabilities, respectively, on the consolidated balance sheet.

(b) For derivative transactions settled at clearing organizations, cash collateral exchanged is deemed a settlement of the derivative each day. The settlement reduces the gross fair value of derivative assets and liabilities and results in a corresponding decrease in the effect of master netting agreements, with no impact to the consolidated balance sheet.

(c) The fair value of asset derivatives and liability derivatives not designated as hedging instruments is recorded as trading assets and trading liabilities, respectively, on the consolidated balance sheet.

(d) Fair values are on a gross basis, before consideration of master netting agreements, as required by ASC 815, Derivatives and Hedging.

(e) Effect of master netting agreements includes cash collateral received and paid of $1,953 million and $2,374 million, respectively, at Dec. 31, 2024, and $2,353 million and $1,187 million, respectively, at Dec. 31, 2023.

Trading activities (including trading derivatives)

Our trading activities are focused on acting as a market-maker for our customers, facilitating customer trades and risk-mitigating economic hedging in compliance with the Volcker Rule. The change in the fair value of the derivatives utilized in our trading activities is recorded in foreign exchange revenue and investment and other revenue on the consolidated income statement.

The following table presents our foreign exchange revenue and other trading revenue.

Foreign exchange revenue and other trading revenue *(in millions)*	Year ended Dec. 31, **2024**	2023	2022
Foreign exchange revenue	**$ 688**	$ 631	$ 822
Other trading revenue	**314**	231	149

Foreign exchange revenue includes income from purchasing and selling foreign currencies, currency forwards, futures and options, as well as foreign currency remeasurement. Other trading revenue reflects results from trading in cash instruments, including fixed income and equity securities, and trading and economic hedging activity with non-foreign exchange derivatives.

We also use derivative financial instruments as risk-mitigating economic hedges, which are not formally designated as accounting hedges. This includes hedging the foreign currency, interest rate or market risks inherent in some of our balance sheet exposures, such as seed capital investments and deposits, as well as certain investment management fee revenue streams. We also use total return swaps to economically hedge obligations arising from the Company's deferred compensation plan whereby the participants defer compensation and earn a return linked to the performance of investments they select. The gains or losses on these total return swaps are recorded in staff expense on the consolidated income statement and were gains of $18 million in 2024 and $22 million in 2023 and a loss of $43 million in 2022.

We manage trading risk through a system of position limits, a value-at-risk ("VaR") methodology based on historical simulation and other market sensitivity measures. Risk is monitored and reported to senior management by a separate unit, independent from trading, on a daily basis. Based on certain assumptions, the VaR methodology is designed to capture the potential overnight pre-tax dollar loss from adverse changes in fair values of all trading positions. The calculation assumes a one-day holding period, utilizes a 99% confidence level and incorporates non-linear product characteristics. The VaR model is one of several statistical models used to develop economic capital results, which are allocated to lines of business for computing risk-adjusted performance.

VaR methodology does not evaluate risk attributable to extraordinary financial, economic or other occurrences. As a result, the risk assessment process includes a number of stress scenarios based upon the risk factors in the portfolio and management's assessment of market conditions. Additional stress scenarios based upon historical market events are also performed. Stress tests may incorporate the impact of reduced market liquidity and the breakdown of historically observed correlations and extreme scenarios. VaR and other statistical measures, stress testing and sensitivity analysis are incorporated into other risk management materials.

Counterparty credit risk and collateral

We assess the credit risk of our counterparties through regular examination of their financial statements, confidential communication with the management of those counterparties and regular monitoring of publicly available credit rating information. This and other information is used to develop proprietary credit rating metrics used to assess credit quality.

Collateral requirements are determined after a comprehensive review of the credit quality of each counterparty. Collateral is generally held or pledged in the form of cash and/or highly liquid government securities. Collateral requirements are monitored and adjusted daily.

Additional disclosures concerning derivative financial instruments are provided in Note 20.

Disclosure of contingent features in OTC derivative instruments

Certain OTC derivative contracts and/or collateral agreements contain credit risk-contingent features triggered upon a rating downgrade in which the counterparty has the right to request additional collateral or the right to terminate the contracts in a net liability position.

The following table shows the aggregate fair value of OTC derivative contracts in net liability positions that contained credit risk-contingent features and the value of collateral that has been posted.

(in millions)	**Dec. 31, 2024**	Dec. 31, 2023
Aggregate fair value of OTC derivatives in net liability positions *(a)*	**$ 2,163**	$ 1,003
Collateral posted	**$ 1,940**	$ 1,001

(a) Before consideration of cash collateral.

The aggregate fair value of OTC derivative contracts containing credit risk-contingent features can fluctuate from quarter to quarter due to changes in market conditions, composition of counterparty trades, new business or changes to the contingent features.

The Bank of New York Mellon, our largest banking subsidiary, enters into the substantial majority of our OTC derivative contracts and/or collateral agreements. As such, the contingent features may be triggered if The Bank of New York Mellon's long-term issuer rating were downgraded.

The following table shows the fair value of contracts falling under early termination provisions that were in net liability positions for three key ratings triggers.

Potential close-out exposures (fair value) *(a)*		
(in millions)	**Dec. 31, 2024**	Dec. 31, 2023
If The Bank of New York Mellon's rating changed to: *(b)*		
A3/A-	**$ 40**	$ 115
Baa2/BBB	**$ 646**	$ 792
Ba1/BB+	**$ 2,710**	$ 1,920

(a) The amounts represent potential total close-out values if The Bank of New York Mellon's long-term issuer rating were to immediately drop to the indicated levels, and do not reflect collateral posted.

(b) Represents ratings by Moody's/S&P.

If The Bank of New York Mellon's debt rating had fallen below investment grade on Dec. 31, 2024 and Dec. 31, 2023, existing collateral arrangements would have required us to post additional collateral of $351 million and $235 million, respectively.

Offsetting assets and liabilities

The following tables present derivative and financial instruments and their related offsets. There were no derivative instruments or financial instruments subject to a legally enforceable netting agreement for which we are not currently netting.

Offsetting of derivative assets and financial assets at Dec. 31, 2024				Gross amounts not offset in the balance sheet		
(in millions)	Gross assets recognized	Gross amounts offset in the balance sheet *(a)*	Net assets recognized in the balance sheet	Financial instruments	Cash collateral received	Net amount
Derivatives subject to netting arrangements:						
Interest rate contracts	**$ 1,032**	**$ 835**	**$ 197**	**$ 46**	**$ —**	**$ 151**
Foreign exchange contracts	**10,210**	**7,698**	**2,512**	**132**	**—**	**2,380**
Equity and other contracts	**131**	**79**	**52**	**—**	**—**	**52**
Total derivatives subject to netting arrangements	**11,373**	**8,612**	**2,761**	**178**	**—**	**2,583**
Total derivatives not subject to netting arrangements	**945**	**—**	**945**	**—**	**—**	**945**
Total derivatives	**12,318**	**8,612**	**3,706**	**178**	**—**	**3,528**
Reverse repurchase agreements	**252,941**	**228,386** *(b)*	**24,555**	**24,523**	**1**	**31**
Securities borrowing	**18,144**	**1,553**	**16,591**	**15,777**	**—**	**814**
Total	**$ 283,403**	**$ 238,551**	**$ 44,852**	**$ 40,478**	**$ 1**	**$ 4,373**

(a) Includes the effect of netting agreements and net cash collateral received. The offset related to the OTC derivatives was allocated to the various types of derivatives based on the net positions.

(b) Offsetting of reverse repurchase agreements relates to our involvement in the FICC, where we settle government securities transactions on a net basis for payment and delivery through the Fedwire system.

Offsetting of derivative assets and financial assets at Dec. 31, 2023

(in millions)	Gross assets recognized	Gross amounts offset in the balance sheet	(a)	Net assets recognized in the balance sheet	Gross amounts not offset in the balance sheet: Financial instruments	Gross amounts not offset in the balance sheet: Cash collateral received	Net amount
Derivatives subject to netting arrangements:							
Interest rate contracts	$ 979	$ 751		$ 228	$ 60	$ —	$ 168
Foreign exchange contracts	8,552	7,498		1,054	320	—	734
Equity and other contracts	7	7		—	—	—	—
Total derivatives subject to netting arrangements	9,538	8,256		1,282	380	—	902
Total derivatives not subject to netting arrangements	993	—		993	—	—	993
Total derivatives	10,531	8,256		2,275	380	—	1,895
Reverse repurchase agreements	169,092	150,667	(b)	18,425	18,422	—	3
Securities borrowing	10,475	—		10,475	10,011	—	464
Total	$ 190,098	$ 158,923		$ 31,175	$ 28,813	$ —	$ 2,362

(a) *Includes the effect of netting agreements and net cash collateral received. The offset related to the OTC derivatives was allocated to the various types of derivatives based on the net positions.*

(b) *Offsetting of reverse repurchase agreements relates to our involvement in the FICC, where we settle government securities transactions on a net basis for payment and delivery through the Fedwire system.*

Offsetting of derivative liabilities and financial liabilities at Dec. 31, 2024

(in millions)	Gross liabilities recognized	Gross amounts offset in the balance sheet	(a)	Net liabilities recognized in the balance sheet	Gross amounts not offset in the balance sheet: Financial instruments	Gross amounts not offset in the balance sheet: Cash collateral pledged	Net amount
Derivatives subject to netting arrangements:							
Interest rate contracts	**$ 875**	**$ 475**		**$ 400**	**$ 42**	**$ —**	**$ 358**
Foreign exchange contracts	**9,938**	**8,533**		**1,405**	**208**	**—**	**1,197**
Equity and other contracts	**34**	**25**		**9**	**—**	**—**	**9**
Total derivatives subject to netting arrangements	**10,847**	**9,033**		**1,814**	**250**	**—**	**1,564**
Total derivatives not subject to netting arrangements	**1,062**	**—**		**1,062**	**—**	**—**	**1,062**
Total derivatives	**11,909**	**9,033**		**2,876**	**250**	**—**	**2,626**
Repurchase agreements	**239,957**	**228,386**	(b)	**11,571**	**11,556**	**2**	**13**
Securities lending	**4,046**	**1,553**		**2,493**	**2,277**	**—**	**216**
Total	**$ 255,912**	**$ 238,972**		**$ 16,940**	**$ 14,083**	**$ 2**	**$ 2,855**

(a) *Includes the effect of netting agreements and net cash collateral paid. The offset related to the OTC derivatives was allocated to the various types of derivatives based on the net positions.*

(b) *Offsetting of repurchase agreements relates to our involvement in the FICC, where we settle government securities transactions on a net basis for payment and delivery through the Fedwire system.*

Offsetting of derivative liabilities and financial liabilities at Dec. 31, 2023

(in millions)	Gross liabilities recognized	Gross amounts offset in the balance sheet	(a)	Net liabilities recognized in the balance sheet	Gross amounts not offset in the balance sheet: Financial instruments	Gross amounts not offset in the balance sheet: Cash collateral pledged	Net amount
Derivatives subject to netting arrangements:							
Interest rate contracts	$ 1,118	$ 635		$ 483	$ 78	$ —	$ 405
Foreign exchange contracts	8,454	6,341		2,113	93	—	2,020
Equity and other contracts	128	114		14	—	—	14
Total derivatives subject to netting arrangements	9,700	7,090		2,610	171	—	2,439
Total derivatives not subject to netting arrangements	1,246	—		1,246	—	—	1,246
Total derivatives	10,946	7,090		3,856	171	—	3,685
Repurchase agreements	162,661	150,667	(b)	11,994	11,966	28	—
Securities lending	2,513	—		2,513	2,404	—	109
Total	$ 176,120	$ 157,757		$ 18,363	$ 14,541	$ 28	$ 3,794

(a) *Includes the effect of netting agreements and net cash collateral paid. The offset related to the OTC derivatives was allocated to the various types of derivatives based on the net positions.*

(b) *Offsetting of repurchase agreements relates to our involvement in the FICC, where we settle government securities transactions on a net basis for payment and delivery through the Fedwire system.*

Secured borrowings

The following table presents the contract value of repurchase agreements and securities lending transactions accounted for as secured borrowings by the type of collateral provided to counterparties.

Repurchase agreements and securities lending transactions accounted for as secured borrowings

	Dec. 31, 2024					Dec. 31, 2023				
	Remaining contractual maturity					Remaining contractual maturity				
(in millions)	Overnight and continuous	Up to 30 days	30-90 days	Over 90 days	Total	Overnight and continuous	Up to 30 days	30-90 days	Over 90 days	Total
Repurchase agreements:										
U.S. Treasury	**$ 187,227**	**$ 196**	**$ 739**	**$ 742**	**$188,904**	$ 128,304	$ 15	$ 1,409	$ 510	$130,238
Agency RMBS	**44,774**	**71**	**288**	**295**	**45,428**	25,815	—	896	120	26,831
Corporate bonds	**84**	**81**	**1,341**	**741**	**2,247**	103	72	1,315	590	2,080
Sovereign debt/sovereign guaranteed	**123**	**655**	**17**	**—**	**795**	1,049	—	—	—	1,049
State and political subdivisions	**37**	**14**	**414**	**302**	**767**	37	38	449	257	781
Other debt securities	**19**	**278**	**287**	**12**	**596**	4	180	73	24	281
U.S. government agencies	**131**	**—**	**64**	**115**	**310**	44	—	61	32	137
Equity securities	**—**	**4**	**592**	**314**	**910**	—	10	1,172	82	1,264
Total	**$ 232,395**	**$ 1,299**	**$ 3,742**	**$ 2,521**	**$239,957**	$ 155,356	$ 315	$ 5,375	$ 1,615	$162,661
Securities lending:										
Agency RMBS	**$ 98**	**$ —**	**$ —**	**$ —**	**$ 98**	$ 111	$ —	$ —	$ —	$ 111
Other debt securities	**253**	**—**	**—**	**—**	**253**	25	—	—	—	25
Equity securities	**3,695**	**—**	**—**	**—**	**3,695**	2,377	—	—	—	2,377
Total	**$ 4,046**	**$ —**	**$ —**	**$ —**	**$ 4,046**	$ 2,513	$ —	$ —	$ —	$ 2,513
Total secured borrowings	**$ 236,441**	**$ 1,299**	**$ 3,742**	**$ 2,521**	**$244,003**	$ 157,869	$ 315	$ 5,375	$ 1,615	$165,174

BNY’s repurchase agreements and securities lending transactions primarily encounter risk associated with liquidity. We are required to pledge collateral based on predetermined terms within the agreements. If we were to experience a decline in the fair value of the collateral pledged for these transactions, we could be required to provide additional collateral to the counterparty, therefore decreasing the amount of assets available for other liquidity needs that may arise. BNY also offers tri-party collateral agency services in the tri-party repo market where we are exposed to credit risk. In order to mitigate this risk, we require dealers to fully secure intraday credit.

Note 24–Business segments

We have an internal information system that produces performance data along product and service lines for our three principal business segments and the Other segment.

The primary products and services and types of revenue in each line of business and a description of the Other segment are presented below.

Securities Services business segment

Line of business	*Primary products and services*	*Primary types of revenue*
Asset Servicing	Custody, Trust & Depositary, accounting, ETF services, middle-office solutions, transfer agency, services for private equity and real estate funds, foreign exchange, securities lending, liquidity/ lending services and data analytics	– Investment services fees (includes securities lending revenue) – Net interest income – Foreign exchange revenue – Financing-related fees
Issuer Services	Corporate Trust (trustee, paying agency, fiduciary, escrow and other financial services) and Depositary Receipts (issuer services and support for brokers and investors)	– Investment services fees – Net interest income – Foreign exchange revenue

Market and Wealth Services business segment

Line of business	*Primary products and services*	*Primary types of revenue*
Pershing	Clearing and custody, investment, wealth and retirement solutions, technology and enterprise data management, trading services and prime brokerage	– Investment services fees – Net interest income
Treasury Services	Integrated cash management solutions including payments, foreign exchange, liquidity management, receivables processing, payables management and trade finance	– Investment services fees – Net interest income – Foreign exchange revenue
Clearance and Collateral Management	Clearance (including U.S. government and global clearing services) and Global Collateral Management (including tri-party services)	– Investment services fees – Net interest income

Investment and Wealth Management business segment

Line of business	*Primary products and services*	*Primary types of revenue*
Investment Management	Diversified investment management strategies and distribution of investment products	– Investment management fees – Performance fees – Distribution and servicing fees
Wealth Management	Investment management, custody, wealth and estate planning, private banking services, investment services and information management	– Investment management fees – Net interest income

Other segment	*Description*	*Primary types of revenue*

	Includes leasing portfolio, corporate treasury activities including our securities portfolio, derivatives and other trading activity, corporate and bank-owned life insurance, tax credit investments and other corporate investments and certain business exits	– Foreign exchange revenue
		– Investment and other revenue
		  – Other trading revenue
		  – Net gain (loss) on securities
		– Net interest income (expense)

Business accounting principles

Our business segment data has been determined on an internal management basis of accounting, rather than GAAP, which is used for consolidated financial reporting. These measurement principles are designed so that reported results of the businesses will track their economic performance.

Our business segments are consistent with the structure used by the President and Chief Executive Officer, our Chief Operating Decision Maker ("CODM"), to make key operating decisions and assess performance. Our CODM evaluates the business segments' operating performance primarily based on fee and other revenue, total revenue, income before income taxes, and pre-tax operating margin. The significant expense information regularly provided to and reviewed by the CODM is total noninterest expense. The CODM considers this information when evaluating the performance of each business segment and making decisions about allocating capital and other resources to each business segment.

Business segment results are subject to reclassification when organizational changes are made, or for refinements in revenue and expense allocation methodologies. Refinements are typically reflected on a prospective basis. In 2024, we made certain realignments of similar products and services within our lines of business. The largest change was the movement of Institutional Solutions from Pershing to Clearance and Collateral Management, both in the Market and Wealth Services business segment. We made other smaller changes that moved activity from Asset Servicing in the Securities Services business segment to Treasury Services in the Market and Wealth Services business segment, and from Wealth Management in the Investment and Wealth Management business segment and Pershing in the Market and Wealth Services business segment to Investment Management in the Investment and Wealth Management business segment. The Other segment was not impacted by the changes. Business segment results for the fiscal years 2023 and 2022 have been revised to reflect these changes.

The accounting policies of the businesses are the same as those described in Note 1.

The results of our business segments are presented and analyzed on an internal management reporting basis.

- Revenue amounts reflect fee and other revenue generated by each business and include revenue for services provided between the segments that are also provided to third parties. Fee and other revenue transferred between businesses under revenue transfer agreements is included within other fees in each segment.
- Revenues and expenses associated with specific client bases are included in those businesses. For example, foreign exchange activity associated with clients using custody products is included in the Securities Services segment.
- Net interest income is allocated to businesses based on the yields on the assets and liabilities generated by each business. We employ a funds transfer pricing system that matches funds with the specific assets and liabilities of each business based on their interest sensitivity and maturity characteristics.
- The provision for credit losses associated with the respective credit portfolios is reflected in each segment.
- Incentives expense related to restricted stock and RSUs is allocated to the segments.
- Support and other indirect expenses, including services provided between segments that are not provided to third parties or not subject to a revenue transfer agreement, are allocated to businesses based on internally developed methodologies and reflected in noninterest expense.
- Recurring FDIC expense is allocated to the businesses based on average deposits generated within each business.
- Severance expense is recorded in the segments based on the business or function the impacted employees reside, with severance expense related to corporate staff, technology and operations reflected in the Other segment.
- Litigation expense is generally recorded in the business in which the charge occurs.
- Management of the securities portfolio is a shared service contained in the Other segment. As a result, gains and losses associated with the

valuation of the securities portfolio are generally included in the Other segment.

- Client deposits serve as the primary funding source for our securities portfolio. We typically allocate all interest income to the businesses generating the deposits.
- Balance sheet assets and liabilities and their related income or expense are specifically assigned to each business. Segments with a net liability position have been allocated assets.
- Goodwill and intangible assets are reflected within individual businesses.

The following consolidating schedules present the contribution of our segments to our overall profitability.

For the year ended Dec. 31, 2024 *(dollars in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management		Other	Consolidated	
Total fee and other revenue	**$ 6,448**	**$ 4,535**	**$ 3,213**	*(a)*	**$ 98**	**$ 14,294**	*(a)*
Net interest income (expense)	**2,468**	**1,729**	**176**		**(61)**	**4,312**	
Total revenue	**8,916**	**6,264**	**3,389**	*(a)*	**37**	**18,606**	*(a)*
Provision for credit losses	**38**	**19**	**4**		**9**	**70**	
Noninterest expense	**6,314**	**3,353**	**2,780**		**254**	**12,701**	
Income (loss) before income taxes	**$ 2,564**	**$ 2,892**	**$ 605**	*(a)*	**$ (226)**	**$ 5,835**	*(a)*
Pre-tax operating margin *(b)*	**29%**	**46%**	**18%**		**N/M**	**31%**	
Average assets	**$ 196,740**	**$ 124,448**	**$ 26,385**		**$ 65,761**	**$ 413,334**	

(a) Total fee and other revenue, total revenue and income before taxes are net of income attributable to noncontrolling interests related to consolidated investment management funds of $13 million.

(b) Income before income taxes divided by total revenue.

N/M – Not meaningful.

For the year ended Dec. 31, 2023 *(dollars in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management		Other *(a)*	Consolidated *(a)*	
Total fee and other revenue	$ 6,029	$ 4,160	$ 2,987	*(b)*	$ 174	$ 13,350	*(b)*
Net interest income (expense)	2,569	1,710	168		(102)	4,345	
Total revenue	8,598	5,870	3,155	*(b)*	72	17,695	*(b)*
Provision for credit losses	99	41	(4)		(17)	119	
Noninterest expense	6,358	3,205	2,776		956	13,295	
Income (loss) before income taxes	$ 2,141	$ 2,624	$ 383	*(b)*	$ (867)	$ 4,281	*(b)*
Pre-tax operating margin *(c)*	25%	45%	12%		N/M	24%	
Average assets	$ 197,434	$ 131,383	$ 26,714		$ 51,211	$ 406,742	

(a) The prior period was restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 for additional information.

(b) Total fee and other revenue, total revenue and income before taxes are net of income attributable to noncontrolling interests related to consolidated investment management funds of $2 million.

(c) Income before income taxes divided by total revenue.

N/M – Not meaningful.

For the year ended Dec. 31, 2022 (dollars in millions)	Securities Services	Market and Wealth Services	Investment and Wealth Management		Other (a)	Consolidated (a)	
Total fee and other revenue	$ 5,974	$ 3,889	$ 3,335	(b)	$ (160)	$ 13,038	(b)
Net interest income (expense)	2,028	1,410	228		(162)	3,504	
Total revenue (loss)	8,002	5,299	3,563	(b)	(322)	16,542	(b)
Provision for credit losses	8	7	1		23	39	
Noninterest expense	6,281	2,936	3,515		278	13,010	
Income (loss) before income taxes	$ 1,713	$ 2,356	$ 47	(b)	$ (623)	$ 3,493	(b)
Pre-tax operating margin *(c)*	21%	44%	1%		N/M	21%	
Average assets	$ 212,575	$ 138,249	$ 32,057		$ 43,806	$ 426,687	

(a) The prior period was restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 for additional information.
(b) Total fee and other revenue, total revenue and income before taxes are net of (loss) attributable to noncontrolling interests related to consolidated investment management funds of $(13) million.
(c) Income before taxes divided by total revenue.
N/M – Not meaningful.

Note 25–International operations

International activity includes investment services fee revenue and investment management and performance fee revenue generating businesses, foreign exchange trading activity, loans and other revenue producing assets and transactions in which the customer is domiciled outside of the U.S. and/or the international activity is resident at an international entity. Due to the nature of our international and domestic activities, it is not possible to precisely distinguish our international operations between internationally and domestically domiciled customers. As a result, it is necessary to make certain subjective assumptions such as:

- Income from international operations is determined after internal allocations for interest income, taxes, expenses and provision for credit losses.
- Expense charges to international operations include those directly incurred in connection with such activities, as well as an allocable share of general support and overhead charges.

Total assets, total revenue, income before income taxes and net income of our international operations are shown in the table below.

International operations *(in millions)*	International: Europe, the Middle East and Africa		International: Asia-Pacific region	International: Other	Total International	Total Domestic		Total	
2024									
Total assets at period end *(a)*	**$ 73,111**	*(b)*	**$ 8,665**	**$ 1,732**	**$ 83,508**	**$ 332,556**		**$ 416,064**	
Total revenue	**4,272**	*(b)*	**1,272**	**1,006**	**6,550**	**12,069**		**18,619**	
Income before income taxes	**1,664**		**710**	**645**	**3,019**	**2,829**		**5,848**	
Net income	**1,270**		**542**	**492**	**2,304**	**2,239**		**4,543**	
2023									
Total assets at period end *(a)*	$ 76,297	*(b)*	$ 9,617	$ 1,687	$ 87,601	$ 322,276	*(c)*	$ 409,877	*(c)*
Total revenue	4,112	*(b)*	1,281	893	6,286	11,411	*(c)*	17,697	*(c)*
Income before income taxes	1,367		707	569	2,643	1,640	*(c)*	4,283	*(c)*
Net income	1,057		547	440	2,044	1,260	*(c)*	3,304	*(c)*
2022									
Total assets at period end *(a)*	$ 78,074	*(b)*	$ 11,623	$ 1,622	$ 91,319	$ 314,241	*(c)*	$ 405,560	*(c)*
Total revenue	3,954	*(b)*	1,127	805	5,886	10,643	*(c)*	16,529	*(c)*
Income before income taxes	1,164		572	481	2,217	1,263	*(c)*	3,480	*(c)*
Net income	880		432	364	1,676	867	*(c)*	2,543	*(c)*

(a) Total assets include long-lived assets, which are not considered by management to be significant in relation to total assets. Long-lived assets are primarily located in the U.S.

(b) Includes assets of approximately $30.3 billion, $29.1 billion and $31.7 billion and revenue of approximately $2.7 billion, $2.4 billion and $2.2 billion in 2024, 2023 and 2022, respectively, of international operations domiciled in the UK, which is 7%, 7% and 8% of total assets and 14%, 14% and 13% of total revenue, respectively.

(c) Results for the years ended Dec. 31, 2023 and Dec. 31, 2022 were restated to reflect the retrospective application of adopting new accounting guidance in 2024 related to our investments in renewable energy projects using the proportional amortization method (ASU 2023-02). See Note 2 for additional information.

Note 26–Supplemental information to the Consolidated Statement of Cash Flows

Non-cash investing and financing transactions that, appropriately, are not reflected in the consolidated statement of cash flows are listed below.

Non-cash investing and financing transactions *(in millions)*	Year ended Dec. 31, **2024**	2023	2022
Transfers from loans to other assets for other real estate owned	**$ 2**	$ 2	$ 1
Change in assets of consolidated investment management funds	**365**	317	253
Change in liabilities of consolidated investment management funds	**4**	—	2
Change in nonredeemable noncontrolling interests of consolidated investment management funds	**309**	43	189
Securities purchased not settled	**170**	174	22
Securities matured not settled	**—**	1,840	385
Available-for-sale securities transferred to held-to-maturity	**3,691**	—	6,067
Premises and equipment/operating lease obligations	**203**	251	307
Contingent consideration and residual interests from divestiture	**—**	—	222
Excise tax on share repurchases	**26**	28	—

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
The Bank of New York Mellon Corporation:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of The Bank of New York Mellon Corporation and subsidiaries (BNY) as of December 31, 2024 and 2023, the related consolidated statements of income, comprehensive income, cash flows, and changes in equity for each of the years in the three-year period ended December 31, 2024, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of BNY as of December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2024, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), BNY's internal control over financial reporting as of December 31, 2024, 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 27, 2025, expressed an unqualified opinion on the effectiveness of BNY's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of BNY's management. Our responsibility is to express an opinion on these consolidated 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 BNY 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 consolidated 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 consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated 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 consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Quantitative component of BNY's pooled allowance for credit losses for loans and lending-related commitments related to higher risk-rated and pass-rated commercial and institutional credits and loans secured by commercial real estate

As discussed in Notes 1 and 5 to the consolidated financial statements, BNY's allowance for credit losses for loans and lending-related commitments (ACL), is presented as a valuation allowance to loans and is recorded in other liabilities for lending-related commitments. At December 31, 2024, BNY had an allowance for loan losses of $294 million and an allowance for lending-related commitments of $72 million. BNY utilizes a quantitative methodology and qualitative framework for determining the ACL for loans and lending-related commitments that share similar risk characteristics (pooled allowance). In estimating the quantitative component, BNY uses models and methodologies that categorize financial assets based on product type, collateral type, and other credit trends and risk characteristics, including relevant information about past events, current conditions and reasonable and supportable forecasts of future economic conditions that affect the collectability of the recorded amounts. The quantitative component of the ACL for loans and lending-related commitments consists of the following three elements: (1) a pooled allowance for higher risk-rated and pass-rated commercial and institutional credits and loans secured by commercial real estate; (2) a pooled allowance for residential mortgage loans; and (3) an asset-specific allowance involving individually evaluated credits of $1 million or greater. In estimating the quantitative component of the pooled allowance for higher risk-rated and pass-rated commercial and institutional credits and loans secured by commercial real estate, BNY uses a methodology that applies the probability of default (PD) and loss given default (LGD) to the estimated facility amount at default. In order to capture the unique risks of the portfolios within the PD and LGD models, and the model used to estimate the facility amount at default, BNY segments the portfolio into major components based on risk characteristics of the loans and how risk is monitored. For each commercial and institutional credit, the expected loss considers the credit's risk rating. For each loan secured by commercial real estate, the expected loss considers collateral specific data and loan maturity, as well as commercial real estate market factors by geographical region and property type. The methodology incorporates a multi-scenario macroeconomic forecast of economic input variables over a reasonable and supportable forecast period spanning the life of the asset. The reasonable and supportable forecast period includes both an initial estimated economic outlook component as well as a reversion component for each economic input variable. A portion of the ACL is comprised of qualitative adjustments, based on various internal and external factors, intended to capture expected losses not reflected in the quantitative models but are likely to impact the measurement of estimated credit losses.

We identified the assessment of the quantitative component of the pooled allowance for higher risk-rated and pass-rated commercial and institutional credits and loans secured by commercial real estate as a critical audit matter. A high degree of audit effort, including specialized skills and knowledge, and subjective and complex auditor judgment was involved in the assessment of the pooled allowance for higher risk-rated and pass-rated commercial and institutional credits and loans secured by commercial real estate due to significant measurement uncertainty. Specifically, the assessment encompassed the evaluation of the methodology, including the methods and models used to estimate the PD and LGD, the macroeconomic forecast scenarios and weighting of each scenario used in the reasonable and supportable forecast, and credit risk ratings for commercial and institutional credits. The assessment also included an evaluation of the conceptual soundness and performance of the PD and LGD models as well as the macroeconomic forecast assumptions. In addition, auditor judgment was required to evaluate the sufficiency of audit evidence obtained.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to BNY's measurement of the quantitative component of the pooled allowance for higher risk-rated and pass-rated commercial and institutional credits and loans secured by commercial real estate, including controls related to the:

- development and approval of the ACL methodology
- development of certain PD and LGD models
- continued use and appropriateness of certain PD and LGD models and macroeconomic forecasts
- performance monitoring of the PD and LGD models and macroeconomic forecast methodology
- determination and measurement of the significant factors and assumptions used in the PD and LGD models and macroeconomic forecasts
- determination of the multi-scenario macroeconomic forecasts and their respective weights
- assessment of credit risk ratings
- computation, analysis, and approval of the ACL results, trends, and ratios.

We evaluated BNY's process to develop the quantitative component of the pooled allowance for higher risk-rated and pass-rated commercial and institutional credits and loans secured by commercial real estate by testing certain sources of data, factors, and assumptions that BNY used, and considered the relevance and reliability of such data, factors, and assumptions. In addition, we involved credit risk professionals with specialized skills and knowledge, who assisted in:

- evaluating the quantitative component of BNY's pooled allowance for higher risk-rated and pass-rated commercial and institutional credits and loans secured by commercial real estate for compliance with U.S. generally accepted accounting principles
- evaluating judgments made by BNY relative to the development and performance monitoring of the PD and LGD models and macroeconomic forecasts by comparing them to relevant company-specific metrics and trends and the applicable industry and regulatory practices
- assessing the conceptual soundness and performance testing of the PD and LGD models and macroeconomic forecast methodology by inspecting the model documentation to determine whether they are suitable for their intended use
- testing the reasonable and supportable forecast period to evaluate the length of the period by comparing to specific portfolio risk characteristics and trends
- testing individual loan risk ratings for a selection of higher risk-rated and pass-rated commercial and institutional credits by evaluating the financial performance of the borrower, sources of repayment, and any relevant guarantees or underlying collateral.

We also assessed the sufficiency of the audit evidence obtained related to the quantitative component of the pooled allowance for higher risk-rated and pass-rated commercial and institutional credits and loans secured by commercial real estate by evaluating the:

- Cumulative results of the audit procedures
- Qualitative aspects of BNY's accounting practices
- Potential bias in the accounting estimate.

Identification and measurement of accruals for litigation and regulatory contingencies

As discussed in Note 22 to the consolidated financial statements, BNY establishes accruals for litigation and regulatory matters when those matters present loss contingencies that are both probable and reasonably estimable. BNY has disclosed that for those matters described where BNY is able to estimate reasonably possible losses, the aggregate range of such reasonably possible losses at December 31, 2024, is up to $690 million in excess of the accrued liability (if any) related to those matters.

We identified the assessment of the identification and measurement of BNY's accruals for litigation and regulatory contingencies as a critical audit matter. Due to the measurement uncertainty, subjective and complex auditor judgment was required to evaluate the sufficiency of audit evidence obtained. Specifically, this assessment included the evaluation of the subjective estimates used to determine the range of possible exposure and the probability of the predicted outcome based on the particular facts and circumstances at issue in each of the matters.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to BNY's process to identify, evaluate and measure accruals for litigation and regulatory contingencies and the reasonably possible losses. We performed inquiries of BNY to gain an understanding of any asserted or unasserted litigation, claims and assessments, and significant changes in individual accruals for litigation and regulatory contingencies. We performed inquiries of BNY's regulators and examined regulatory reports to gain an understanding of developments of regulatory activity and related matters that may result in the assessment of regulatory fines or penalties. We obtained and read letters received directly from BNY's internal legal counsel and a selection of external legal counsel that identified and described BNY's potential exposure to certain legal or regulatory proceedings. For cases that have settled, we performed back-testing analyses of BNY's litigation and regulatory contingency accruals recorded compared to amounts paid. We assessed the accrual for litigation and regulatory contingencies and evaluated the cumulative results of the procedures performed to assess the sufficiency of audit evidence obtained. We also evaluated the information included within the disclosures.

Valuation of goodwill for the Investment Management reporting unit

As discussed in Notes 1 and 7 to the consolidated financial statements, the goodwill balance as of December 31, 2024, was $16.6 billion, of which $6.0 billion is allocated to the Investment Management reporting unit. BNY performs goodwill impairment testing on an annual basis and an interim test is performed when events or circumstances occur that may indicate that it is more likely than not that the fair value of any reporting unit may be less than its carrying value. This involves estimating the fair value of the reporting units using an income approach which discounts estimated future cash flows that incorporate various assumptions including a long-term growth rate.

We identified the assessment of the valuation of goodwill for the Investment Management reporting unit as a critical audit matter. A high degree of audit effort, including specialized skills and knowledge, and subjective and complex auditor judgment was involved in the evaluation of goodwill and determination of fair value for the Investment Management reporting unit due to significant measurement uncertainty relating to specific assumptions used in the valuation. Specifically, these assumptions included the discount rate and the long-term growth rate.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to BNY's determination of the discount rate and long-term growth rate assumptions for the Investment Management reporting unit.

We evaluated the reasonableness of BNY's long-term growth rate for the Investment Management reporting unit, by comparing BNY's growth rates within historical revenue forecasts to actual results to assess BNY's ability to accurately forecast. In addition, we involved valuation professionals with specialized skills and knowledge, who assisted in:

- Assessing the reasonableness of the valuation approach including the discount rate and long-term growth rate assumptions used by BNY to calculate the fair value of the Investment Management reporting unit for compliance with U.S. generally accepted accounting principles
- Evaluating the discount rate by developing an independent range for the discount rate used in the valuation and comparing the inputs to the discount rate to publicly available data and assessing the resulting discount rate
- Testing the long-term growth rate by developing an independent assumption of the long-term growth rate and comparing the long-term growth rate to publicly available data.

/s/ KPMG LLP

We have served as BNY's auditor since 2007.

New York, New York
February 27, 2025

Effective February 27, 2025

Directors

Linda Z. Cook
Chief Executive Officer and Board member, Harbour Energy plc, a global independent oil and gas company

Joseph J. Echevarria
Chair, The Bank of New York Mellon Corporation
Retired Chief Executive Officer, Deloitte LLP, a global provider of professional services

M. Amy Gilliland
President, General Dynamics Information Technology, a global technology and professional services company that is a business unit of General Dynamics Corporation

Jeffrey A. Goldstein
Senior Advisor and member of the Investment Committee, Canapi Ventures, a venture capital fund; and Advisor Emeritus, Hellman & Friedman LLC, a private equity firm

K. Guru Gowrappan
Former President, Viasat, Inc., a global satellite communications company

Ralph Izzo
Retired Chairman, President and Chief Executive Officer, Public Service Enterprise Group Incorporated, a diversified energy holding company

Sandra E. (Sandie) O'Connor
Retired Chief Regulatory Affairs Officer, JPMorgan Chase, a financial holding company

Elizabeth E. Robinson
Retired Global Treasurer, The Goldman Sachs Group, Inc., a global financial services company

Rakefet Russak-Aminoach
Managing Partner, Team8, a venture group

Robin Vince
President and Chief Executive Officer, The Bank of New York Mellon Corporation

Alfred W. (Al) Zollar
Retired Executive Partner, Siris Capital Group, LLC, a private equity firm

Executive Committee and Other Executive Officers

Jennifer Barker
Global Head of Treasury Services and Depositary Receipts

James T. Crowley
Global Head of BNY Pershing

Rajashree Datta
Deputy Chief Risk Officer

Shannon Hobbs *
Chief People Officer

Hani Kablawi
Head of International

Catherine M. Keating *
Global Head of BNY Wealth

Jayee Koffey *
Global Head of Enterprise Execution and Chief Corporate Affairs Officer

Senthil Kumar *
Chief Risk Officer

Kurtis R. Kurimsky *
Corporate Controller

J. Kevin McCarthy *
General Counsel

Dermot McDonogh *
Chief Financial Officer

Jose Minaya *
Global Head of BNY Investments and Wealth

Alejandro Perez
Chief Administrative Officer

Joseph Pizzuto
Chief Auditor

Emily Portney
Global Head of Asset Servicing

Brian Ruane
Global Head of Clearance and Collateral Management, Credit Services and Corporate Trust

Leigh-Ann Russell
Chief Information Officer and Global Head of Engineering

Akash Shah
Chief Growth Officer and Global Head of Growth Ventures

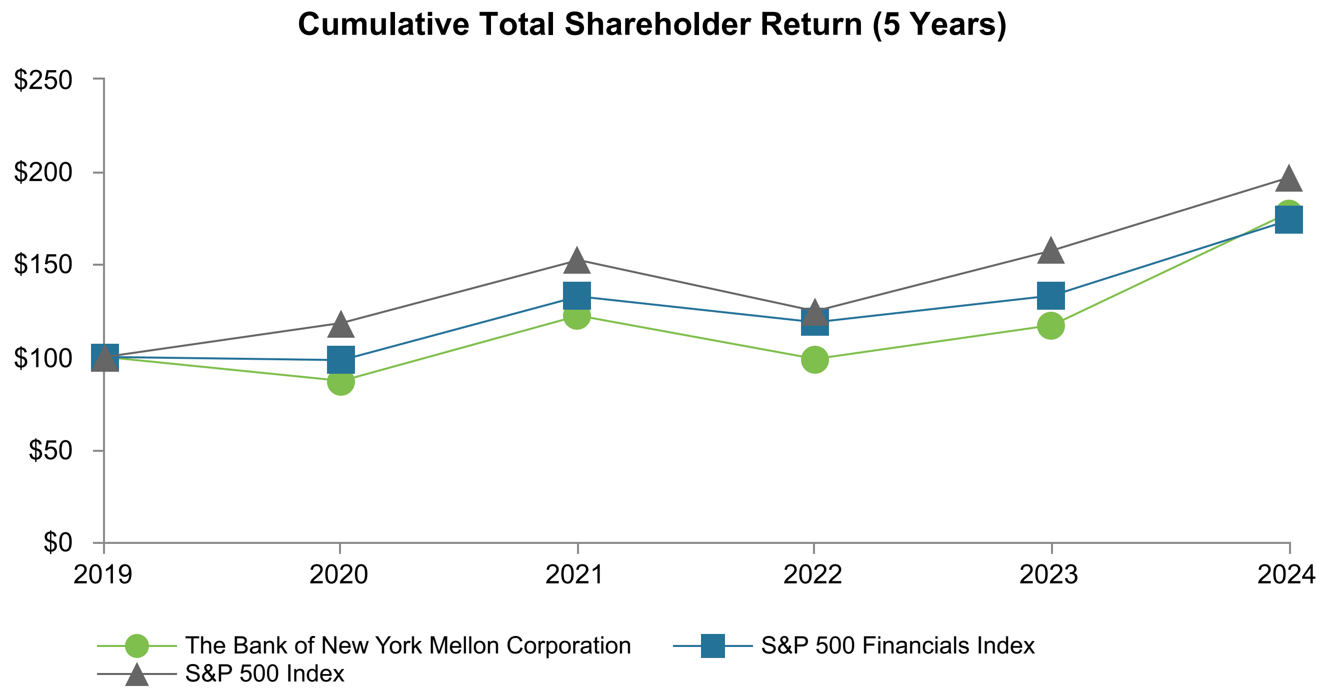
Robin Vince *
President and Chief Executive Officer

Adam Vos
Global Head of Markets

Cathinka Wahlstrom
Chief Commercial Officer

Carolyn Weinberg
Chief Solutions Innovation Officer

* Designated as an Executive Officer.



Cumulative shareholder returns	Dec. 31,					
(in dollars)	2019	2020	2021	2022	2023	**2024**
The Bank of New York Mellon Corporation	$ 100.0	$ 87.1	$ 122.4	$ 98.9	$ 117.2	**$ 178.0**
S&P 500 Financials Index *(a)*	100.0	98.3	132.8	118.8	133.2	**173.9**
S&P 500 Index *(a)*	100.0	118.4	152.4	124.8	157.6	**197.0**

(a) Returns are weighted by market capitalization at the beginning of the measurement period.

This graph shows The Bank of New York Mellon Corporation's cumulative total shareholder returns over the five-year period from Dec. 31, 2019 to Dec. 31, 2024. We utilize the S&P 500 Financials Index as a benchmark against our performance. The graph shows the cumulative total returns for the same five-year period of the S&P 500 Financials Index and the S&P 500 Index. The comparison assumes a $100 investment on Dec. 31, 2019 in The Bank of New York Mellon Corporation common stock, in the S&P 500 Financials Index and in the S&P 500 Index and assumes that all dividends were reinvested.

Exhibit 19.1

Policy Number: **I-A-045**
Version 7.5

Personal Securities Trading Policy

1. Summary

Personal trading investments can lead to actual or perceived conflicts of interest which can undermine the integrity of the actions of The Bank of New York Corporation, its subsidiaries and affiliates that are majority owned (the "Firm").

The Firm is subject to various laws and/or regulations governing the personal trading of Securities/Financial Instruments (as defined in Section 8.1 of this Policy and collectively referenced as "securities"). The Firm has established limitations on personal trading so that employees' personal securities investments are conducted in compliance with the applicable rules and regulations and are free from actual or perceived conflicts of interest.

2. Purpose

The Personal Securities Trading Policy (this "Policy") sets out the global minimum obligations and restrictions related to personal securities transactions for all employees, including requirements and prohibitions related to the following:

- Avoidance of conflicts of interest
- Market Abuse[1]
- Trading in Firm securities
- Trading in Non-Firm securities
- Initial Public Offerings
- Private Placements
- Firm-affiliated Volcker Covered Funds

[1] Market Abuse includes insider dealing, market manipulation or unlawful disclosure of inside information.

- Excessive Trading[2]

This Policy also articulates additional requirements and restrictions for Monitored Employees who are likely to receive Firm or client information as normal course of business in their roles. These additional responsibilities include, but are not limited to, the following:

- Filing of reports via the Star Compliance System (Star), the Firm's electronic personal trading monitoring system
- Providing duplicate statements and trade confirmations directly to the Firm
- Preclearance prior to trading
- Prohibition on short term trading

3. Applicability/Scope

This Policy applies to all employees of the Firm when trading in securities unless such securities are listed as "Exempt" under Section 8.1. Where indicated, this Policy may also apply to "Indirect Accounts," as defined in Section 8.1 of this Policy.

An employee is defined as a Director (excluding non-employees), Officer, Agent, Temporary Worker, Contractor, Intern or any other person who works for and contracted with the Firm, regardless of their duration of employment or contract.

The Firm may, from time to time, designate additional persons that may from time to time have access to MNPI as being subject to this Policy.

Where business/country-specific requirements are more stringent than those set out within this Policy, the business or country-specific rules prevail and you must also comply with such rules.

4. Provisions of the Policy

4.1 Principal Requirements for all Employees

Failure to comply with any requirement in this Policy may subject you to discipline, up to and including termination of employment and referral to law enforcement, when required.

4.1.1 Avoidance of Conflicts of Interest

You must not put your own interests ahead of the Firm and its clients. You must, comply with all applicable legal requirements, securities laws and the I-A-010: Code of Conduct. Employees must treat all Firm and client information as confidential. Refer to the Firm's Code of Conduct for additional guidance. You are prohibited from placing transactions in securities if this would create, or could reasonably be perceived to create a conflict of interest between you and your clients, the Firm's clients, or the Firm. In accordance with securities and/or Market Abuse laws, you are prohibited from engaging in insider trading, trading while in possession of Material Non-Public Information (MNPI) (as defined in Section 8.1 of this Policy), Front Running (as defined in Section 8.1 of this Policy) or any other potential market manipulative trading activity.

If you possess MNPI or have knowledge about client holdings, transactions, or recommendations, you must not, directly or indirectly (see definition of Indirect Ownership in Section 8.1 of this Policy):

- Engage or attempt to engage in trading on the basis of such information
- Recommend that another person engages in dealing or induce another person to engage in trading on the basis of the information; or
- Unlawfully disclose the information (Tipping)

[2] The Firm reserves the right to limit trading in employee account(s) if deemed excessive.

In accordance with securities regulations, these prohibitions also apply to former employees, who must refrain from trading in any securities, Tipping or recommending that another person do the same, while in possession of MNPI.

4.1.2 Trading in BNY Securities

If you invest or trade in Firm securities, you must be aware of your responsibilities and be sensitive to even the appearance of impropriety. The following prohibitions apply to all transactions in the Firm's publicly traded securities, whether owned directly (i.e., in your name) or indirectly (see definition of Indirect Ownership in Section 8.1 of this Policy). The following activities are **prohibited**:

- **Short Sales**
- **Short-Term Trading:** Defined as purchasing and selling, or selling and purchasing Firm securities within any 60 calendar day period. If you engage in short-term trading, you will be required to disgorge profits as determined by the Securities Trading Conduct group. This includes transactions in the Firm related employee benefit plans such as the BNY 401(k).
- **Margin Transactions**: However, you may use Firm securities to collateralize full-recourse loans for non-securities purposes or for the acquisition of securities other than those issued by the Firm.
- **Option Transactions**: Defined as any derivative transaction involving or having its value based upon any securities issued by the Firm, including the buying and writing of over-the-counter and exchange traded options.
- **Major Firm Events**: Non-publicly announced events of which you have knowledge (prohibition will expire 24 hours after a public announcement is made).

The Firm will comply with insider trading laws in connection with trades in its own securities.

4.1.3 Prohibitions When Trading in Non-Firm Securities

You must be sensitive to any impropriety in connection with your personal securities transactions in securities of any issuer, including those owned indirectly (see Indirect Ownership defined in Section 8.1). You are prohibited from:

- **Engaging in FX derivative trading**
- **Spread Betting**: Taking bets on securities pricing, including FX spread-betting to reflect market/currency movement activities
- **Short Selling**

4.1.4 Initial Public Offerings (IPO)

You are prohibited from acquiring securities through an allocation by the underwriter of an IPO without the prior approval of the Securities Trading Conduct group. Approval is only likely to be given in the following circumstances:

- The allocation comes through an employee of the issuer who has a direct family relationship to the Firm employee
- The issuance is arranged by governments to promote the public ownership of previously state owned assets
- Where a bank, savings and loan or insurance company converts from a structure owned by policyholders to one owned by investors (demutualization)

Approval may not be available to employees of registered broker-dealers due to certain laws and regulations (e.g., FINRA rules in the U.S.). If you have any questions as to whether a particular offering constitutes an IPO, email the Securities Trading Conduct group before submitting an indication of interest to purchase the security.

4.1.5 Private Placements

You are prohibited from acquiring any security in a private placement unless you obtain prior written approval from the Securities Trading Conduct group, your Manager and Compliance Officer. A Private Placement Form must be submitted in Code RAP for approval:

- If you are holding an investment of a privately-held (i.e., not traded on an exchange) Firm affiliated fund and you wish to divest all or a portion of your investment, you are required to obtain pre-approval from the Securities Trading Conduct group prior to redemption. Refer to MySource for a copy of the request Affiliated Fund Request form.

- The Securities Trading Conduct group will generally not approve any private placement requests that appear to present an actual or potential conflict of interest. This includes instances where, among other things, the opportunity is being offered to you by virtue of your position with the Firm or its affiliates or your relationship to a managed fund or account and whether or not the investment opportunity being offered to you could be re-allocated to a client. So that no actual or potential conflict exists between the proposed private placement purchase and the interests of any managed fund or account, you must comply with any and all requests for information and/or documentation necessary for the Employee Compliance/Securities Trading Conduct group.

- Within 30 days of being designated a Monitored Employee (see Sections 4.2 to 4.4 for information), you must disclose any existing investment in private placement securities to the Securities Trading Conduct group who will determine if you will be permitted to continue to hold the investment.

4.1.6 BNY Affiliated Volcker Covered Funds

You are prohibited from acquiring any initial or subsequent investment in a Firm affiliated Volcker Covered Fund (Refer to the Volcker Compliance site on MySource) unless you obtain prior written approval from the Securities Trading Conduct group, your Manager and Compliance Officer. Unless your job duties are directly related to providing investment advisory, commodity trading advisory or “other services” to the fund, your investment in such funds will not be permitted. A Private Placement Form must be submitted in Code RAP for approval.

If you are newly hired and you hold an investment (either directly or indirectly) in an affiliated Firm Volcker Covered Fund you must receive permission to continue to hold that investment. You must disclose your investment within 30 calendar days of your hire date by completing the Private Placement Form available in Code RAP. You may be required to divest your ownership interest.

4.1.7 Ability to Request Account Statements and Trade Confirmations

For all employees, the Firm reserves the right to request accounts statements and trade confirmations when needed.

4.2 Monitored Employees

If you are determined to be at risk for receiving Firm or client information as described below, your personal trading and accounts where you have Indirect Ownership (as defined in Section 8.1) are required to be monitored and you are thus deemed a Monitored Employee. There are strict limitations on such trading for Monitored Employees as further described in Section 4.4.

Monitored Employees include employees who, as a routine and normal course of their job:

- Are deemed to be at a high risk of receiving MNPI of issuer clients (generally, certain employees located in or supporting Private Side businesses as defined by the Firm’s I-A-046: Information Barriers Policy. These are employees who are deemed to be *private* under I-A-046: Information Barrier Policy.

- Have nonpublic information regarding advisory client’s purchases or sales of securities or nonpublic information regarding the portfolio holdings of a Proprietary Fund, are involved in making securities recommendations to advisory clients, or have access to such recommendations before they are public.

- Have foreknowledge of the clients' trading positions or plans such that the information may elevate the risk of Front Running or similar manipulative trading.

- Have access to inside information with respect to the Firm's financial results in advance of such results being released to the public.

- Required by regulation – employees who work for a Firm broker-dealer or investment adviser (or their equivalents).

Additionally, each business unit is required to classify all employees who are Senior Directors, Managing Directors or above as Investment/Public or Insider Risk.[3]

4.3 Classifications of Monitored Employees

The Firm has assigned Monitored Employees a classification that will correspond to the type of information they routinely are exposed to in as performing their job duties. They are as follows:

Classification Type	Definition
Access Decision Maker (ADM) Employee	Employees within BNY Investments who are Portfolio Managers or Research Analysts and make or participate in recommendations or decisions regarding the purchase or sale of securities for mutual funds or managed accounts. Portfolio Managers of broad-based index funds and traders are not typically classified as ADM Employees.
Insider Risk Employee	Employees who in the normal course of business are likely to receive MNPI regarding issuer clients. These employees are on the "private side" of the Information Barrier in accordance with the I-A-046: Information Barriers Policy.
Investment/Public Employee	Employees in the normal course of business who: • Are on the "public side" of the Information Barrier in accordance with the I-A-046: Information Barriers Policy. • Employees that by regulation are required to have their personal trading monitored. • Have access to nonpublic information regarding advisory client's purchase or sale of securities or nonpublic information regarding the portfolio holdings of a Firm Proprietary Fund • Are involved in making securities recommendations to advisory clients, or has access to such recommendations before they are public. • Have foreknowledge of clients trading positions or plans such that the information may elevate the risk of Front Running This classification typically includes employees in BNY Investments and BNY Wealth businesses as well as employees in other Public side businesses or Corporate Functions who have an elevated risk (clear access to pre-trade settlement information) of Front Running. • Employees of a Firm business regulated by certain investment company laws. Examples are: • In the U.S., employees who are "advisory persons" or "access persons" under Rule 17j-1 of the Investment Company Act of 1940 or "access persons" under Rule 204A-1 of the Advisers Act. • In the U.K., employees in companies undertaking specified activities under the Financial Services and Markets Act 2000 (Regulated Activities), Order 2001, and regulated by the Financial Conduct Authority. • Any member of the Firm's Senior Management who, as part of his/her usual duties, has management responsibility for fiduciary activities or routinely has access to information about advisory clients' securities transactions.
Pre-Release Earning Group (PREG) Employee	Includes all Executive Committee members, their administrative assistants and any individual determined by the business to have access to the Firm's earnings in advance of public announcements.

[3] Employees who are not currently monitored and are designated as private under the I-A-046: Information Barrier Policy, Senior Directors or Managing Directors will be changed to monitored from February 2024 through May 2024.

4.4 Additional Requirements and Restrictions for Monitored Employees

In addition to the requirements which apply to all employees as described in Section 3.1 of this Policy, all Monitored Employees are also subject to the additional requirements noted below. These requirements apply to all securities accounts and holdings for which you have direct or indirect ownership.

4.4.1 Reporting for All Monitored Employees

You are required to file various reports via Star, the Firm's electronic personal trading monitoring system. Required reports must also include any securities (except those deemed exempt as defined in Section 8.1), held outside of an account (for example, if you hold physical securities outside of a brokerage account, you must report those securities). You are required to file the following reports in order to be in compliance with the Policy:

- Initial Reports: Within 10 calendar days of being notified by the Securities Trading Conduct group that you are a Monitored Employee, you must file an Initial Broker Accounts and an Initial Holdings Report. These reports must contain a listing of all accounts that trade, or are capable of trading, securities. Initial Holdings Reports must be an accurate recording of accounts and securities holdings within the preceding 45 days of your being deemed a monitored employee.

- Annual Reports: On an annual basis and within 30 calendar days after the end of the year, you must file an Annual Holdings Report. The report must contain an accurate and current listing of securities held in all accounts that trade, or are capable of trading securities.

- Annual Accounts: On an annual basis and within 30 calendar days after the end of the year, you must review all of your reported accounts in the Star system and make any updates, including adding and/or removing accounts where necessary.

- Ongoing Reporting: If you open a new account, or receive securities through a gift or inheritance, you must update your holdings in the Star system within 10 calendar days of the event (i.e., account opening or date of receipt of securities). For gifts/inheritance, you must disclose the name of the person receiving or giving the gift or inheritance, date of the transaction, and name of the broker through which the transaction was effected (if applicable). A gift of securities must be one where the donor does not receive anything of monetary value in return. Preclearance is required for all reportable holdings that are being liquidated (e.g. an executor liquidating a portfolio).

- Updating Holdings: You are responsible for your securities holdings being accurate in the Star system. This may require you to make manual adjustments for changes to your securities holdings (excluding exempt securities as defined in Section 8.1 of this Policy) that occur as a result of corporate actions, dividend reinvestments, or similar activity. These adjustments must be reported as soon as possible, but no less than annually.

- Quarterly Transaction Reports (Investment/Public and ADM employees only): Within 30 calendar days after the end of the quarter, you must file a Quarterly Transactions Report. The report must contain a list of all reportable transactions that occurred in the quarter. You must certify all broker accounts that are capable of trading in reportable securities and all reportable securities held. Your report must be current within 45 calendar days of the date the report is filed.

- Certifications: The Securities Trading Conduct group will require certifications when there is a material change to this Policy. Additional certifications may be required as needed.

4.4.2 Additional Reporting for ADM Employees

Further reporting requirements for ADM Employees include:

- Contemporaneous Disclosure Reports (ADM employees only): Prior to making or acting upon a portfolio recommendation (buy/hold/sell) in a security you have direct or indirect ownership, written authorization must be obtained. Under no circumstances may you provide portfolio recommendations or place trades based on their potential impact to your personal securities holdings, nor may you refuse to provide a recommendation or execute a transaction within the portfolio.to avoid submitting a Contemporaneous Disclosure. There are a limited number of transactions that are exempt from this requirement. More information, including a copy of the Contemporaneous Disclosure Form can be found on MySource.

4.4.3 Account Statements and Trade Confirmations

Monitored Employees are required to provide duplicate statements and trade confirmations directly to the Firm. You must adhere to the following requirements:

- Countries with Approved Brokers - U.S., UK, India, Singapore or Hong Kong[4]-based Monitored Employees: You must maintain all accounts with an approved broker-dealer (refer to MySource for the Approved Broker List). Employees are required to provide account statements to the Securities Trading Conduct Team until the account is on a feed with an Approved Broker. If you have securities held in a physical form or held directly with an issuer, you must provide copies of account statements and trade confirmations.

  Note: Certain brokers may require the account owner's consent in order for the Firm to receive their account information electronically (connection to the electronic feed).

- Countries *without* Approved Brokers: You must provide copies of account statements to your designated local Compliance Officer or Securities Trading Conduct Team upon receipt or at least quarterly. You are also required to enter your trade confirmation details into the Star system within 10 calendar days of the transaction. You may be compelled to move your accounts and hold them with an electronic broker-dealer where legally permissible and in jurisdictions where the Firm has made arrangements with a broker-dealer to provide automated electronic feeds to the Star system. You will be notified when this requirement becomes effective within your jurisdiction and are no longer required to manually enter your trade details into the Star system.

- For all employees, the Firm reserves the right to request accounts statements and trade confirmations as needed.

4.4.4 Preclearance Prior to Trading

- Monitored Employees must receive approval in the Star system to trade any security unless the security is expressly Exempt as defined in Section 8.1 of this Policy. You must also obtain preclearance for trades made by indirect owners.

- ETFs and Single-Stock ETFs are reportable. Proprietary ETFs must be pre-cleared prior to transacting in for employees who are classified as ADM, Investment/Public or Insider Risk Employees.

  NOTE: if you are classified as a PREG employee (see Section 4.7 of this Policy), you are only required to preclear trades in Firm securities (equities, fixed income, or derivatives) of The Bank of New York Corporation.

- Although preclearance approval does not obligate you to place a trade, you should not seek preclearance for transactions you do not intend to make. Do not discuss the response (e.g. approval or denial) to a preclearance request with anyone (excluding any account co-owners or indirect owners). If you have questions regarding a response to a trade request, contact the Securities Trading Conduct group.

- If you receive approval to trade, the trade must be executed by the close of business the following day in the local jurisdiction. For example, if you receive approval on Monday at 3 PM EST, the preclearance is only valid until the close of the trading day on Tuesday. You should be aware that all preclearance time stamps in the Star system are in EST.

- You are only permitted to place day only orders which are orders that expire at the end of the trading day. Orders that extend beyond a single trading day, such as "good-until-cancelled" or similar orders, are not permitted.

- You may also be subject to additional approvals, for example approval from your supervisor, depending upon your classification. Please check with your local Compliance Officer for additional information.

4.4.5 Additional Preclearance Restrictions for ADM, Investment/Public and certain private side employees (de minimis limits)

ADM, Investment/Public and certain private side employees will generally not be given preclearance approval to execute a transaction in any security that appears on their business unit's Blackout List (as defined in Section 8.1).

[4] The Approved Broker requirement for employees in Singapore and Hong Kong will go into effect on September 30, 2024.

4.4.5.1 Approval for De Minimis Transactions for ADM Employees and Investment/Public Employees for Securities on Blackout List

- ADM, Investment/Public and certain private side employees are eligible to receive de minimis approval for trades in securities of any one issuer in a 30-day period even if the security is on the Blackout List.

- De Minimis transactions are permitted as follows:

  - <u>ADMs:</u>

Market Cap Category	Market Cap Value	De Minimis Amount Allowed Per Trade	30 Day Period Limit
Micro- Cap	Market value of less than $250 million	Not allowed	Not allowed
Small- Cap	Market value between $250 million and $5 billion	Not allowed	Not allowed
Mid- Cap	Market value between $5 billion and $20 billion	$10,000	$20,000
Large- Cap	Market value between $20 billion and more	$10,000	$20,000

  - <u>Investment/Public and certain private side employees:</u>

Market Cap Category	Market Cap Value	De Minimis Amount Allowed Per Trade	30 Day Period Limit
Micro- Cap	Market value of less than $250 million	Not allowed	Not allowed
Small- Cap	Market value between $250 million and $5 billion	$10,000	$20,000
Mid- Cap	Market value between $5 billion and $20 billion	$25,000	$50,000
Large- Cap	Market value between $20 billion and more	$50,000	$100,000

Note: Currency is listed in USD. Use the local currency equivalent outside of the US.

4.4.5.1.1 Additional Restrictions for ADM employees (7 Day Blackout Period)

- You are not permitted to buy or sell a security within 7 calendar days before and 7 calendar days after the investment company or managed account for which you are affiliated has effected a transaction in that security.

- Any trade initiated within the 7 day blackout period is deemed a violation of Policy and as such you will be required to disgorge profits per the Securities Trading Conduct group in their sole discretion. This does not apply to approved de minimis transactions during the 7 day blackout period.

4.5 Managed Accounts

If you have an account fully managed by a third-party (you have an investment management, trust or similar agreement) which specifically documents in writing that you are unable to direct trades in the account, you must submit a Managed Account Form via Code RAP to determine if the account is eligible for exclusion from some of the reporting requirements, providing duplicate account statements/trade confirms or preclearance requirements noted within this Policy. For all managed accounts, you must add your account information in the Star system and comply with all provisions of the Policy *until* the Securities Trading Conduct group deems the account to be excluded in writing.

If your account is approved as managed, you are required to complete an annual certification in the Star system attesting that the account continues to be maintained under the account provisions the Securities Trading Conduct group relied upon to provide approval. In addition, you are required to provide copies of statements to the Securities Trading Conduct group when requested.

4.6 Prohibition on Short-Term Trading

- **Non-Firm Securities**: Employees classified as ADM, Investment/Public Employee and Insider Risk are prohibited from engaging in short-term trading. Short term trading is defined as the purchasing then selling, or selling then purchasing, the same or equivalent (derivative) security within 30 calendar days. PREG employees are not subject to a holding period for non-Firm securities.

- **Firm Securities**: All employees are prohibited from purchasing then selling, or selling then purchasing any Firm securities (Firm securities include any securities issued by The Bank of New York Corporation and its subsidiaries, including, but not limited to, shares of common stock, preferred stock or bonds of the Firm) within 60 calendar days.

Employees who engage in short-term trading in non-Firm securities (within 30 calendar days) or Firm securities (within 60 calendar days) will be issued a violation and any profits realized must be disgorged.

Example: Transactions resulting in a position that is liquidated (sell), and then a new position is re-established (buy), would meet the criteria for a profit disgorgement.

- Profit is based upon the difference between the most recent purchase and sale prices for the most recent transactions. You should be aware that profit for disgorgement purposes may differ from the capital gains calculations for tax purposes.
- The disposition of any disgorged profits will be at the discretion of the Firm to a bona fide and legally permitted charity. You will be responsible for any tax and related costs.
- Profit disgorgement, where applicable, is not required for any security that is deemed Exempt (as defined in Section 8.1 of this Policy) and trades in Proprietary Funds conducted within the BNY 401(k).

4.7 Specific Restrictions for PREG Employees

Every quarter the Firm imposes a restriction on PREG employees. As such, you are prohibited from trading in the Firm's securities from 12:01 AM Eastern Standard Time, on the 15th day of the month preceding the end of each calendar quarter through the first trading day after the public announcement of the Firm's earnings for that quarter.

For example, if earnings are released on Wednesday at 9:30 AM Eastern Standard Time, you may not trade the Firm's securities until Thursday at 9:30 AM Eastern Standard Time. Non-trading days, such as weekends or holidays, are not counted as part of the restricted period. At its discretion, the Firm may extend the blackout period for some or all PREG employees. You will be notified if there is such an extension. The Firm may establish additional event-specific blackout periods that may be applicable to any or all categories of Monitored Employees. The Firm will notify you of any additional blackout periods.

The blackout period includes trades in various employee plans. Specifically, you may not make payroll deductions, investment elections changes or reallocation of balances that might impact your holdings in company stock in the BNY 401(k) Plan; you may not exercise options granted through the employee incentive compensation or similar plan; you may not enroll in, or make payroll deduction changes, in your Employee Stock Purchase Plan.

If you trade Firm securities made during the blackout period, you must unwind the trade and surrender profits as determined by the Firm in its sole discretion. Any losses due to the unwinding are yours to incur. Further, you may be subject to disciplinary action or referral to law enforcement when necessary.

The Firm reserves the right to restrict trading in companies in similar industries as the Firm.

4.8 Insider Threats

BNY considers Insider Threats to be a serious matter and has established an enterprise-wide Insider Threat program to provide direction, governance and drive organizational awareness to manage the risks. BNY s Enterprise Insider Threat program is aligned to the Company's organizational risk priorities, including enhanced protection of information assets. As defined in the Enterprise Insider Threat Policy, Internal Fraud refers to unauthorized activity (e.g., inappropriate/ unauthorized trading, market manipulation) or fraud (e.g., fraudulent funds transfer/movement, credit fraud, forgery, check fraud) by an Insider, which may cause financial or non-financial harm. Please consult the Enterprise Insider Threat Policy for more information.

5. Governance and Responsibilities

5.1 **All Employees** are responsible for:

- Adhering to all sections of this Policy as it relates to their role.
- Immediately contacting the Securities Trading Conduct group or your Compliance Officer (or anonymously through the Firm's Ethics Help Line or Ethics Hot Line) if a known or suspected violation of this Policy occurred.
- Reporting MNPI to their MNPI Coordinator. Employees should not seek advice from anyone other than a Compliance Officer, their MNPI coordinator or the Control Room regarding appropriate handling of MNPI. Employees may also report the receipt of actual or suspected MNPI directly to the Control Room if the employee's MNPI Coordinator is unavailable. The obligation to report all MNPI applies to both private and public side LOBs/ Corporate Staff functions.

5.2 Businesses and Corporate Functions

Management of the Firm's Business and Corporate Staff groups are responsible for:

- Classifying employees within 15 calendar days of joining or transfer and developing business line polices/ procedures to describe the protocols for assigning classifications that are consistent with this Policy, seeking guidance from Compliance as needed.
- Retaining accurate records of each employee's classifications in their business unit, maintaining proper controls so that the classifications are current and providing an annual attestation to Compliance that the classification of the employees are accurate, when requested.
- Communicating employees' classification and overseeing staff so that they are properly trained on the Policy requirements.
- Overseeing the timely completion of all required reports, violation notices and certifications as required by this Policy.
- When required, constructing (and keeping current) a list of securities appropriate for Policy restrictions; typically this will consist of trading systems required for employee monitoring, portfolio manager codes, and designated approvers. Generally this detail will be required only in instances where a Business or Corporate Functions have staff classified as an Investment or ADM employee.
- When required, providing timely and accurate updates to the list of Proprietary Funds (those that are advised, sub-advised or underwritten by the business) to the Securities Trading Conduct group.

5.3 Securities Trading Conduct Group

The Securities Trading Conduct group is responsible for:

- Maintaining all necessary records to demonstrate compliance with this Policy in a readily accessible place, for seven years from their creation. This includes but is not limited to versions of this Policy, record of employee violations and actions taken, holdings and transaction reports required by this Policy, list of monitored employees and their classifications, and lists of securities appropriate for restriction as reported by a Line of Business and/or Corporate Function.

- Treating employee related records as “highly confidential”, to the extent permissible by law.

5.4 Compliance Officers

Compliance Officers are responsible for:

- Providing policy training to employees when requested by the Securities Trading Conduct group.
- Reporting compliance with this Policy, including detail on violations, to Legal Entity and Fund Boards, as required by law, regulation or policy.
- When requested by the Securities Trading Conduct group, approving requests for investment.

5.5 Legal Department

The Legal Department is responsible for providing legal analysis of new and revised legislation of all jurisdictions regarding personal securities trading laws and regulations and participating in the review of material policy amendments.

5.6 Engineering Department

The Engineering Department is responsible for providing support for internally hosted applications so that systems function properly, including various files are properly loaded into the system, developing an alert process to detect any failed or non-received files, and adequately testing all software updates or hardware installations.

6. Adherence and Control

Failure to comply with any aspect of this Policy may result in the imposition of serious sanctions and employee will be issued a violation notice. You may also receive additional sanctions, which include, but are not limited to, the disgorgement of profits, cancellation of trades, selling of positions, and suspension of personal trading privileges, and may result in an employee being subject to corrective action as outlined in II-H-610-US: Managing Performance and Conduct Through Corrective Action for U.S.-based employees (or the applicable corrective action policy for non-U.S. based employees),[5] up to and including termination of employment and referral to law enforcement, when required.

If you know of or suspect a violation of this Policy has occurred, immediately contact the Securities Trading Conduct group or your Compliance Officer. You may also report known or suspected violations anonymously through the Firm’s Ethics Help Line or Ethics Hot Line.

Amendments to or waivers of any requirements discussed above are at the discretion of the Chief Compliance Officer or their designee. When required, the concurrence of other officers or directors of the Firm may also be needed. Any waiver or exemption must be evidenced in writing to be valid.

7. Addendum(s)

7.1 Addendum I: EMEA Personal Securities Trading

7.1.1 Applicability / Scope

This Addendum sets out the regional obligations and restrictions in EMEA that operate in relation to personal securities trading under FCA Handbook COBS 11.7A, EU Directive 2014/65/EU, and EU Regulation No 600/2014, together commonly known as “MIFID 2” and EU Regulation No 596/2014 “MAR” and is applicable to any employee in the UK or EU who is subject to this I-A-045: Personal Securities Trading Policy (“the Global PST Policy”).

[5] View the Policies Portal or consult your local HR Partner for the policy for the relevant jurisdiction.

Following the withdrawal of the United Kingdom ("UK") from the European Union ("EU") at 23:00 GMT on 31 January 2020, where relevant to a Party, references to EU legislation referenced in this Policy shall be read as references to the UK version of such legislation, which is part of UK law by virtue of the European Union (Withdrawal) Act 2018 (as amended).

7.1.2 Provisions of the Addendum

7.1.2.1 UK and EU Requirements in Relation to Personal Trading (Including those arising from MIFID and MAR)

Both UK and EU regulations require that the Firm establish, implement and maintain adequate policies and procedures to ensure our compliance with our obligations under personal securities trading rules.

These rules cover Financial Instruments as defined in the Definitions Section and apply to any employees who have inside information or MNPI, who have access to client confidential information or who could have a client conflict of interest.

7.1.2.2 Information that Triggers an Employee to be Subject to this Addendum

UK and EU employees who are subject to this Addendum will be defined as those who as a routine and in the normal course of their job:

- Have access to inside information as defined under I-A-040: Market Abuse Policy by virtue of an activity carried out by them on behalf of the Firm.
- Have access to any other confidential information relating to clients or transactions with or for clients by virtue of an activity carried out by them on behalf of the Firm; and/or
- Are involved in activities that may give rise to a conflict of interest in relation to either the Firm or any client(s).

7.1.2.3 Restrictions for Employees Subject to this Addendum

The restrictions set out below are in addition to restrictions set forth in the Global PST Policy and apply when a UK or EU employee is:

1. Transacting outside the scope of the activities they carry out in their professional capacity; or
2. The trade is carried out on behalf of the employee whether owned directly (i.e., in your name) or indirectly (see definition of Indirect Ownership in Section 8.1 of the Global PST Policy).

Unless conducted in compliance with 7.1.2.5 below, employees are prohibited from:

- Entering a transaction which meets at least one of the following criteria:
  - It would amount to Market Abuse as defined by the UK or EU MAR as defined in Section 8.1 of I-A-040: Market Abuse Policy;
  - It involves the misuse or improper disclosure of the Firm's or a client's confidential information;
  - It may give rise to a conflict of interest in relation to either the Firm or any client(s) and
  - It conflicts or is likely to conflict with an obligation of the Firm under UK law or EU law on markets in financial instruments.
- Advising, recommending or inducing any other person to enter a transaction in Securities or Financial Instruments, other than in the proper course of their employment.
- Disclosing, other than in the normal course of his employment or contract for services, any information or opinion to any other person that would or might advise or persuade that other person to:
  - Engage in any of the activities set out in #2 above

- Advise or persuade any other person to engage in any of the activities set out #2 above

7.1.2.4 Definitions of Financial Instruments under UK and EU Regulations

This Addendum generally applies to all UK and EU employees when trading in Securities, or where applicable, other Financial Instruments as defined in this section.

Under both UK and EU Regulations, the Firm must consider both securities and other Financial Instruments under these regulations and as defined in this section, and whether it will permit personal trading in these instruments. As such a list of instruments restricted under the UK and EU regulations and the Firm's treatment of such instruments for the purpose of personal trading are outlined below in Section 8.1.Restrictions on Financial Instruments for Personal Trading

Outlined below are the in-scope instrument classes and their treatment under this Addendum. For the purpose of clarity, this Addendum is not intended to introduce restrictions in relation to sweep accounts within brokerage arrangements that exist simply for the purpose of cash transference as part of general fund management activities.

7.1.2.5 Permitted for Employees Subject to this Addendum (subject to the notification/approval requirements of the Global PST Policy)

- Transferable Securities: Trading in transferable securities is permitted so long as conducted in compliance with the Global PST Policy and the employee is NOT in possession of MNPI whereby:

    - if the Employee Subject to this Addendum is already a Monitored Employee under the Global PST Policy they transact in accordance with their applicable restrictions and requirements; or.

- Units in Collective Investment Undertakings and units or shares in an Alternative Investment Fund: Trading in UCITS or Alternative Investment Funds. is permitted so long as conducted in compliance with the Global PST Policy and the employee is NOT in possession of MNPI whereby:

    - if the Employee Subject to this Addendum is already a Monitored Employee under the Global PST Policy they transact in accordance with their applicable restrictions and requirements; or.

Please note: Money Market Funds (MMFs) are generally included within this definition for the purposes of personal trading. This includes Firm proprietary MMFs for the purposes of this policy. N.B. MMF arrangements that have been established by, or in conjunction with, an Approved Broker Account, and whose use is limited to being in conjunction with purchases, sales, or other receipts from that brokerage account, are not intended to be covered by the requirements of this Addendum. Therefore, such arrangements do not normally require disclosure, or pre-approval where the Addendum may otherwise require this (e.g. a BNY proprietary MMF).

7.1.2.6 Prohibited

- Financial Contracts for Difference

- Financial Spread Bets

7.1.2.7 Express Written Approval from Local Compliance Officer

The instruments below will require an express written approval from your local Compliance Officer prior to trading:

- Money Market Instruments

- Derivative instruments for the transfer of credit risk

- Options, futures, swaps and forward rate agreements Options/futures on securities is permitted so long as in compliance with PSTP; for financial instruments that are not a security, you must contact BCO.

- Please note, use of currency exchange is permitted for such domestic activity as for example personal travel needs.

7.1.3 Governance and Responsibilities

7.1.3.1 Compliance Officers

Compliance Officers are responsible for:

- Sign off on any preclearance requests for financial instruments as noted in 7.1.2.6

8. Appendices

8.1 Definitions

Term	Definition/Meaning of Term
Automatic Investment Plan	A program in which regular periodic purchases (withdrawals) are made automatically to/from investment accounts in accordance with a predetermined schedule and allocation. Examples include: Dividend Reinvestment Plans (DRIPS), payroll deductions, bank account drafts or deposits, automatic mutual fund investments/withdrawals (PIPS/SWIPS), and asset allocation accounts.
Blackout List	List of securities submitted by a Business Unit for which there are pending or executed transactions for an affiliated account (other than an index fund).
Firm Securities	Include any securities issued by The Bank of New York Corporation and its subsidiaries, including, but not limited to, shares of common stock, preferred stock or bonds of the Company.
Exempt Securities/ Financial Instruments (Collectively “Exempt Securities” or “Exempt”)	All securities require reporting and preclearance unless expressly exempt by this Policy. The following financial instruments are exempt for all classifications of employees: • Cash, cash-like securities, such as bankers’ acceptances, bank CDs and time deposits, money market funds, FX spot transactions, commercial paper and repurchase agreements. • Digital assets - regardless of where they are held (in brokerage exchange accounts or in personal cryptocurrency wallets). Note: Direct participation investments in Initial Coin Offerings (ICOs), pooling money with others with the intent to invest in digital assets or cryptocurrencies and creating investment vehicles to sell interest in Limited Partnerships (LPs) or Master Limited Partnerships (MLPs) for the purpose of investing in digital assets or cryptocurrencies are all considered to be private securities transactions that must be reported. • Employee investments in their sovereign governments. Obligations of other instrumentalities or quasi-government agencies are not exempt. • Securities issued by open-end investment companies (i.e., mutual funds and variable capital companies) that are not Proprietary Funds. Proprietary Funds are exempt for employees classified as Insider Risk. • Securities in retirement plans properly organized under local law of companies not associated with the Firm (e.g., spouse’s plan, previous employer’s plan, etc.). This exemption is not applicable to any plan wherein the trades can be directed in common stock by the account holder. • Securities in college tuition plans for dependents properly organized under local law. It should be noted that this exemption is not applicable securities that are deemed to be a Proprietary Fund for employees classified as an ADM and Investment Employees. • Fixed annuities. • Variable annuities, as long as the sub-accounts are not invested in Proprietary Fund sub-accounts. • Securities held in approved non-discretionary (managed) accounts. • Non-financial commodities (e.g., agricultural futures, metals, oil, gas, etc.), currency, crypto-based currency, and financial futures (excluding stock and narrow-based stock index futures).

	• Transactions that are involuntary (such as stock dividends, sales of fractional shares or sales of shares to cover account fees); however, sales initiated by brokers to satisfy margin calls are not considered involuntary. • Transactions pursuant to the exercise of rights (purchases or sales) by an issuer made pro rata to all holders of a class of securities, to the extent such rights were acquired from such issuer. • Sales effected pursuant to a bona fide tender offer. • Transactions pursuant to an automatic investment plan, including payroll withholding to purchase Proprietary Funds. The initial purchase and additional changes to the automatic investment plan are subject to preclearance approval.
Front Running	The purchase or sale of securities for your own or the company's accounts on the basis of your knowledge of the company's or company's clients trading positions or plans.
Index Fund	An investment company or managed portfolio (including indexed accounts and model driven accounts) that contain securities in proportions designed to replicate the performance of an independently maintained, broad-based index or that is based not on investment discretion but on computer models using prescribed objective criteria to replicate such an independently maintained index.
Indirect Ownership	Generally, you are the indirect owner of securities if you are named as power of attorney on the account or, through any contract, arrangement, understanding, relationship, or otherwise, you have the opportunity, directly or indirectly, to share at any time in any profit derived from a transaction in them. This includes trades which are effected by or on behalf of the employee when the trade is carried out for the account of any of the persons referenced below. Common indirect ownership situations include, but are not limited to: • Securities held by members of your Immediate Family by blood, marriage, adoption, or otherwise, who share the same household with you; "Immediate Family" includes any person with whom they have a family relationship, or whom they have close links, such as your spouse, domestic partner, children (including stepchildren, foster children, sons-in-law and daughters-in-law), grandchildren, parents (including step-parents, mothers-in-law and fathers-in-law), grandparents, and siblings (including brothers-in-law, sisters-in-law and stepbrothers and stepsisters): • Any person in conjunction with whom the employee has a direct or indirect material interest in the outcome of the trade – other than obtaining a fee or commission for the execution of the trade; Employees must consider this requirement and report trades which fit under the above definition to avoid violations and breaches of both regulations and Policy.
Initial Public Offering (IPO)	The first offering of a company's securities to the public.
Investment Clubs	Organizations whose members make joint decisions on which securities to buy or sell. The securities are generally held in the name of the investment club. Prior to participating in an investment club, all Monitored Employees are required to obtain written permission from their local Compliance Officer to participate in the club. If permission is granted, the account is subject to all aspects of this Policy.
Investment Company	A company that issues securities that represent an undivided interest in the net assets held by the company. Mutual funds are open-end investment companies that issue and sell redeemable securities representing an undivided interest in the net assets of the company.

Material Non-Public Information (MNPI) and examples	MNPI is generally defined as material information about a company (including BNY), its securities or any financial instruments related to that company that has not been disclosed to the public. Information is "material" if: • there is a substantial likelihood that a reasonable investor would consider it important in deciding whether to buy, sell, or hold securities/financial instruments; or • there is a substantial likelihood it would have been viewed by a reasonable investor as having significantly altered the "total mix" of information available. Information about an issuer is "non-public" if: • it is of a precise nature and is not generally available to the investing public. Information received under circumstances indicating that it is not yet in general circulation and may be attributable, directly or indirectly, to the issuer or its insiders is likely to be deemed non-public information. Most companies announce material information through a press release or a regulatory filing (such as with the Securities and Exchange Commission) and/or a posting on the company's website. Therefore, if it has been determined that information is material but there is no announcement of it in any of those sources, it is likely to be non-public at that point. Examples of information that may, depending on the particular facts and circumstances, be material and non-public include, but are not limited to: • A proposal or agreement for a merger, acquisition or divestiture, or for the sale or purchase of substantial assets. • A tender offer, which can be material for the party making the tender offer as well as for the issuer of the securities for which the tender offer is made. • An extraordinary dividend declaration, change in the dividend rate or stock repurchase policy. • A proposal or agreement concerning the creation of a credit facility. • A draw down on a credit facility or a liquidity problem. • A potential default under a material agreement or actions by creditors, customers or suppliers relating to a company's credit standing. • Earnings and other financial information, such as operating results, projections, a significant restatement or large or unusual write-offs, write-downs, profits or losses. • Pending discoveries or developments, such as new products, sources of materials, patents, processes, inventions or discoveries of mineral deposits. • A proposal or agreement concerning a financial restructuring. • A proposal to issue or redeem securities, or a development with respect to a pending issuance or redemption of securities. • Information conveyed by a client relating to the client's pending orders for securities/ financial instruments that would be likely to have a material effect on the prices of those securities/financial instruments. • Information about major contracts or increases or decreases in orders. • Information about derivative contracts such as options, futures, and forward rate agreements relating to an underlying security. • The institution of, or a development in, litigation or a regulatory proceeding. • Developments regarding a company's senior management or board of directors. • Information that is inconsistent with published information, especially if published in regulatory reports or press releases. • A significant cybersecurity incident.
Money Market Fund	A mutual fund that invests in short-term debt instruments where its portfolio is valued at amortized cost so as to seek to maintain a stable net asset value (typically of $1 per share).
Non-Discretionary (Managed) Account	An account in which the employee has a beneficial interest but no direct or indirect control over the investment decision making process. Any such accounts of Monitored employees must be approved by the Securities Trading Conduct group in writing in order to be exempt from the reporting and preclearance requirements noted in this Policy.
Option	A security which gives the investor the right, but not the obligation, to buy or sell a specific security at a specified price within a specified time frame.

Short term trading in option positions	Opening and closing or closing and opening an option position within 30 days of each other or opening an option position within 30 days of expiration will result in any profits being subject to disgorgement. When opening an option position against an existing common stock holding you must have held that position for at least 30 days to avoid any profits being subject to disgorgement.
Private Placement	An offering of securities exempt from registration under various laws and rules, such as the Securities Act of 1933 in the U.S. and the Listing Rules in the U.K. Such offerings are exempt from registration because they do not constitute a public offering. Private placements can include limited partnerships, certain cooperative investments in real estate, co-mingled investment vehicles such as hedge funds, investments in privately-held and family owned businesses and Volcker Covered Funds. For the purpose of this policy, time-shares and cooperative investments in real estate used as a primary or secondary residence are not considered to be private placements.
Proprietary Fund	An investment company or collective fund for which a Company subsidiary serves as an investment adviser, sub-adviser or principal underwriter. The Proprietary Fund Listing can be found on MySource on the Compliance and Ethics homepage.
Securities/Financial Instruments (Collectively "Securities")	Any investment that represents an ownership stake or debt stake in a company, partnership, governmental unit, business or other enterprise. It includes stocks, bonds, notes, evidences of indebtedness, certificates of participation in any profit-sharing agreement, units in collective investment undertakings, collateral trust certificates and certificates of deposit. It also includes security-based derivatives and swaps and many types of puts, calls, straddles and options on any security or group of securities; fractional undivided interests in oil, gas, or other mineral rights; and investment contracts, variable life insurance policies and variable annuities whose cash values or benefits are tied to the performance of an investment account. Unless expressly exempt, all securities transactions are covered under the provisions of this policy (See exempt securities).
Short Sale	The sale of a security that is not owned by the seller at the time of the trade.
Spread Betting	A type of speculation that involves taking a bet on the price movement of a security. A spread betting company quotes two prices, the bid and offer price (also, called the spread), and investors bet whether the price of the underlying security will be lower than the bid or higher than the offer. The investor does not own the underlying security in spread betting, they simply speculate on the price movement of the stock.
Tender Offer	An offer to purchase some or all shareholders' shares in a corporation. The price offered is usually at a premium to the market price.
Trading	The buying or selling, including as a gift or other disposition, of a security.
Volcker Covered Fund	Generally, a "Volcker Covered Fund" is a domestic or foreign hedge fund, private equity fund, venture capital fund, commodity pool or alternative investment fund (AIF) that is sold in a private, restricted or unregistered offering to investors who must meet certain net worth, income or sophistication standards or is sold to a restricted number of investors. Generally, the fund is not registered with a securities/commodity regulator and therefore cannot be offered to the general or retail public unless the investor meets some type of qualification to demonstrate the investor does not need the protection of the securities or commodities regulations. A complete list of Covered Funds can be found at the Volcker Compliance Site on MySource or refer to the I-A-049: Volcker Covered Funds Policy.
Section 7.1: Addendum I: EMEA PST specific definitions	

Financial Instrument	1. Transferable Securities e.g. • shares in companies (whether listed or unlisted, admitted to trading or otherwise), comparable interests in partnerships and other entities and equivalent securities; • bonds and securitised debt; • depositary receipts in respect of the instruments above; • securities giving the right to acquire or sell transferable securities (for example, warrants, options, futures and convertible bonds); and • securitised cash-settled derivatives, including certain futures, options, swaps and other contracts for differences relating to transferable securities, currencies, interest rates or yields, commodities or other indices or measures. 2. Money-Market Instruments e.g. • treasury bills • certificates of deposit • commercial paper 3. Units in Collective Investment Undertakings e.g. • units in regulated collective investment schemes e.g., UK OEICS, NURS or EU UCITS. Please note: Money Market Funds (MMFs) are generally included within this definition for the purposes of personal trading. This includes BNY proprietary MMFs for the purposes of this policy. N.B. MMF arrangements that have been established by, or in conjunction with, an Approved Broker Account, and whose use is limited to being in conjunction with purchases, sales, or other receipts from that brokerage account, are not intended to be covered by the requirements of this policy. Therefore, such arrangements do not normally require disclosure, or pre-approval where the policy may otherwise require this (e.g. a BNY proprietary MMF). • units or shares in an Alternative Investment Fund 4. Options, futures, swaps and forward rate agreements Whether settled in cash or physically relating to any of the following underlying • transferable securities, • currencies, • interest rates or yields, • emission allowances, • other derivative instruments, • financial indices or financial measures • commodities • any other asset or right of a fungible nature, an index or measure related to the price or value of, or volume of transactions in any asset, right, service or obligation

	5. Derivative instruments for the transfer of credit risk e.g. • credit default products, • synthetic collateralised debt obligations, • total rate of return swaps, • downgrade options • credit spread products 6. Financial Contracts for Differences e.g. • a Spreadbet - a bet on the price movement of any Financial Instrument where the investor bets on an increase or a fall in price in relation to a spread (the bid and ask prices) quoted by a spread betting company • a contract the stated purpose of which is to secure a profit or avoid a loss by reference to fluctuations in the value or price of property of any description • a contract between a buyer and a seller that stipulates that the buyer must pay the seller the difference between the current value of an asset and its value at contract time.

8.2 Document Governance

8.2.1 Periodic Review

This Level 3 Policy will have a mandatory periodic review of 12 months.

Note: If this Policy requires changes outside of the periodic review date AND the Policy is reviewed in its entirety at such time that the changes are incorporated, the periodic review date will be refreshed.

Policy on Rule 10b5-1 Plans

1. Summary

Rule 10b5-1 under the Securities Exchange Act of 1934 (the "Exchange Act") establishes that a person can be liable for trading on material non-public information if he or she is aware of such information when trading in securities of a public company. However, Rule 10b5-1 also creates an affirmative defense to insider trading allegations when such trades are made pursuant to a written plan (referred to herein as a “Rule 10b5-1 Plan” or a “Plan”) that meets the requirements set forth in Rule 10b5-1.

All employees and directors entering into, amending or terminating a Rule 10b5-1 Plan with respect to Firm securities (as such term is defined in I-A-045: Personal Securities Trading Policy) must comply with the SEC requirements under Rule 10b5-1, including the requirement that at the time the Plan is entered into the person not be in possession of any material non-public information (MNPI) (as such term is defined in I-A-045: Personal Securities Trading Policy) concerning the Firm (as such term is defined in I-A-045: Personal Securities Trading Policy), even if the information will have been publicly disseminated before trading under the Plan begins.

All employees and directors entering into or amending a Rule 10b5-1 Plan must provide a copy of the draft Plan or amendment to the Legal Department or Securities Trading Conduct Team, as applicable, for review and approval at least two weeks prior to the planned date of execution (which is the date that the Plan document is expected to be signed) and must pre-clear entering into or amending the Plan on the date executed. All employee and director Rule 10b5-1 Plans shall comply with the requirements of Rule 10b5-1(c) and this Policy. All employees and directors are responsible for ensuring that their 10b5-1 Plans are in compliance with the requirements of Rule 10b5-1 and this Policy. All employees and directors terminating a Rule 10b5-1 Plan must pre-clear terminating the Plan.

2. Purpose

In alignment with the Level 3 Policy I-A-045: Personal Securities Trading Policy, this Policy sets out the SEC requirements and Firm guidelines for entering into, amending, terminating and executing transactions under a Rule 10b5-1 Plan.

3. Applicability and Scope

This Policy applies to all employees and directors who enter into, amend or terminate Rule 10b5-1 Plans with respect to Firm securities. Before entering into, amending or terminating a Rule 10b5-1 Plan, employees and directors should review the below requirements and guidelines, determine his or her status under this Policy, and contact the Legal Department or Securities Trading Conduct Team, as applicable.

4. Provisions of the Policy

4.1. SEC Requirements for Rule 10b5-1 Plans

In order to satisfy Rule 10b5-1, a Rule 10b5-1 Plan must be in writing and must, among other things, meet the following criteria:

- The Plan must be entered into at a time when the person is not in possession of material non-public information.
- The Plan must (i) specify the amount of securities to be purchased or sold and the price and date of the purchase or sale; or (ii) include a written formula, algorithm or computer program for determining the amount of securities to be purchased or sold and the price and date of the purchase or sale.
- The Plan cannot permit the person to exercise any subsequent influence over how, when or whether to effect the purchases or sales.
- The Plan must provide for a "cooling-off" period between the adoption of the Plan and the commencement of sales under the Plan. For directors and Officers, the cooling-off period must expire no earlier than the later of (x) 90 days after the adoption of the Plan and (y) two business days after the Form 10-Q or Form 10-K is filed for the quarter in which the Plan is adopted (capped at 120 days). For all other employees, the cooling-off period must expire no earlier than 30 days after the adoption of the Plan.
- Directors and Officers must make certain written certifications, including that they are not aware of material non-public information.
- A person may not have overlapping Plans for open market purchases or sales (subject to certain exceptions).
- A person may not have more than one "single trade" plan during any consecutive 12-month period (subject to certain exceptions).
- The Plan must be entered into in good faith and not as part of a plan or scheme to evade the SEC's anti-fraud rules, and the person must also act in good faith with respect to the Plan.

Please note that the bullet points above are not a complete description of the requirements needed to meet the Rule 10b5-1 affirmative defense. All employees and directors are responsible for ensuring that their 10b5-1 Plan meets the requirements needed to meet the Rule 10b5-1 affirmative defense.

4.2. BNY Guidelines for Rule 10b5-1 Plans

The Firm has adopted the following guidelines to assist in the administration of Rule 10b5-1 Plans entered into by the Firm's employees and directors with respect to Firm securities:

- All persons entering into, amending or terminating a Rule 10b5-1 Plan must comply with the SEC requirements under Rule 10b5-1, including the requirement that, at the time the Plan is entered into, the person not be in possession of any material non-public information concerning the Firm, even if the information will have been publicly disseminated before trading under the Plan begins.
- The following persons must pre-clear entering into, amending or terminating a Rule 10b5-1 Plan with the General Counsel:
  - any person designated by the Board of Directors of The Bank of New York Mellon Corporation as an "executive officer" subject to Section 16 of the Exchange Act (for purposes of this Policy, each an "Officer"),
  - all other members of the Executive Committee of The Bank of New York Mellon Corporation, and

    - all members of the Board of Directors of The Bank of New York Mellon Corporation (together, the "Covered Group").

- A member of the Covered Group must provide the draft Plan or amendment to the Legal Department for review and approval at least two weeks prior to the planned date of execution or termination. Upon approval, the Legal Department will provide a copy of the Plan to the Securities Trading Compliance Team. A member of the Covered Group must also pre-clear entering into or amending a Rule 10b5-1 Plan on the date the Plan is executed and shall follow the ordinary course procedures for pre-clearing securities transactions in accordance with the Firm's I-A-045: Personal Securities Trading Policy. Persons who are members of the Covered Group may enter into a Rule 10b5-1 Plan only during an open window period.

- All other employees who are not in the Covered Group must provide the draft Plan or amendment to the Securities Trading Conduct Team for review and approval at least two weeks prior to the planned date of execution and must also pre-clear entering into or amending a Rule 10b5-1 Plan with the Securities Trading Conduct Team on the date the Plan is executed. Employees who are classified as a PREG employee (as such term is defined in the Firm's I-A-045: Personal Securities Trading Policy) may enter into a Rule 10b5-1 Plan only during an open window period.

- A member of the Covered Group seeking to terminate a Plan must provide notice to the Legal Department prior to the planned termination date and pre-clear terminating a Rule 10b5-1 Plan on the date of termination. All other employees seeking to terminate a Plan must provide notice to the Securities Trading Conduct Team prior to the planned termination date and pre-clear terminating a Rule 10b5-1 Plan on the date of termination.

- Pre-clearance or approval of a Plan does not constitute legal advice. Even if pre-clearance or approval is granted, the decision to enter into a Plan and the timing of the entry into such Plan is the responsibility of such employee or director in all circumstances.

- If a Rule 10b5-1 Plan is entered into in accordance with the terms of this Policy, each transaction executed under that Plan will be an exception to the Firm's I-A-045: Personal Securities Trading Policy (that is, each transaction need not be pre-cleared and transactions may occur during a blackout period).

- An affiliated or internal broker-dealer cannot be used for a Rule 10b5-1 Plan; however, a broker that is not on the Approved Broker List maintained by the Securities Trading Conduct Team can be used for a Rule 10b5-1 Plan because the Plan, once notice is given and the Plan is approved, is non-discretionary and therefore exempt from the Firm's approved broker requirement as discussed in I-A-045: Personal Securities Trading Policy.

- Reports on Form 4 or Form 144 required to be filed by executive officers and directors subject to Section 16 of the Exchange Act should check the box to indicate that the transactions are pursuant to a Rule 10b5-1 Plan that is "intended to satisfy the affirmative defense conditions" of Rule 10b5-1(c).

- Any employee or director entering into a Rule 10b5-1 Plan must at all times remain in compliance with the Firm's stock ownership and retention guidelines applicable to such person, as described in The Bank of New York Mellon Corporation's proxy statement (as the same may be amended from time to time), and the Firm may request evidence of ongoing compliance after taking into account transactions contemplated by the Plan (These ownership and retention guidelines generally apply to the Covered Group). A Plan (or an amendment thereto) will not be approved if it is determined that sales under the Plan could result in non-compliance with applicable share ownership guidelines. Further, because more shares are required to be held to meet the ownership guidelines at lower share prices, a Plan may be required to set minimum sale prices as a condition to approval.

- All Rule 10b5-1 Plans shall comply with the SEC's "cooling-off" period requirements under Rule 10b5-1.

- A Rule 10b5-1 Plan modification that changes (i) the amount, (ii) the price or (iii) the timing (including the date) of the purchase or sale of the Firm's securities is considered a termination of such Plan and the adoption of a new Plan by the SEC and must comply with the requirements for entering into new Plans, including the applicable "cooling-off" period.

- Factors that should be considered when amending, cancelling or terminating a Rule 10b5-1 Plan include the following:

    - A person can terminate or amend a Rule 10b5-1 Plan at any time. If a person terminates or amends a Plan while in possession of material non-public information, however, the termination or amendment could call into question whether the Plan had been entered into in good faith and whether the person acted in good faith in respect of the Plan, which could affect the availability of the Rule 10b5-1 defense for prior transactions, or the availability of the Rule 10b5-1 defense for a subsequent Plan.

    - Entering into or altering a corresponding or hedging transaction (for example, a transaction that reduces or eliminates the economic consequences of transactions under a Plan) with respect to securities subject to a Rule 10b5-1 Plan will result in the Rule 10b5-1 defense being unavailable for both the transaction made pursuant to the Rule 10b5-1 Plan and the hedging transaction.

- If the broker who has been executing trades under a Rule 10b5-1 Plan goes out of business, a person may transfer the Plan to a different broker if (i) the transfer is timed so that there is no cancellation of any transaction scheduled in the original plan and (ii) the new broker executes transactions in accordance with the terms of the original Plan in compliance with Rule 10b5-1(c).

- Transactions under a Rule 10b5-1 Plan can occur at any time (such as during a blackout period), subject to compliance with (i) the SEC rules regarding entering into the Plan while not in possession of material non-public information and (ii) other provisions of this Policy.

- The SEC requires quarterly disclosure by the Firm on Form 10-Q and Form 10-K regarding the adoption, termination and material terms (including the date of adoption or termination, duration and aggregate amount of securities to be sold or purchased) of a Rule 10b5-1 Plan or other pre-planned trading arrangement (including any plan not intended to comply with the affirmative defense requirements of Rule 10b5-1(c)(1)) by the Firm's directors or Officers. The Firm may, at its discretion, issue a press release or file a Current Report on Form 8-K with respect to Rule 10b5-1 Plans for any person, including (but not limited to) the Chief Executive Officer or other Officers.

- The maximum term for transactions under a Rule 10b5-1 Plan is 24 months from the date the Plan is entered into.

5. Governance and Responsibilities

The following responsibilities apply to the specified roles across the Firm.

5.1. General Counsel

- Responsible for pre-clearing Plans (including amendments and terminations to Plans) entered into by members of the Covered Group.

5.2. Legal Department

- Responsible for reviewing draft Plans submitted by members of the Covered Group.

5.3. Compliance Department/Securities Trading Conduct Team

- Responsible for reviewing draft Plans submitted by any employee who is not a member of the Covered Group.

- Responsible for pre-clearing Plans (including amendments to and terminations of Plans) entered into by any employee who is not a member of the Covered Group.

5.4. All Employees and Directors

- Responsible for complying with SEC requirements under Rule 10b5-1 of the Exchange Act, including the assessment of materiality of any non-public information that such employee or director may possess and compliance with the good faith requirements under Rule 10b5-1.

- Responsible for providing a copy of the draft Plan (or amendment to a Plan) to the Legal Department or Securities Trading Conduct Team, as applicable, for review and approval at least two weeks prior to the planned date of execution (which is the date that the Plan document is expected to be signed).

- Responsible for pre-clearing the Plan (including amendments thereto and any termination thereof) with the General Counsel or Securities Trading Conduct Team, as applicable, on the date the Plan is executed, amended or terminated, as applicable.

6. Adherence and Control

Any breach of the terms of this Policy or violation of Rule 10b5-1 may result in disciplinary action, up to and including immediate dismissal, and may result in civil and/or criminal liability. If an employee believes there is a violation of this Policy or related policies and procedures, the employee must immediately notify the Securities Trading Conduct Team. If a director believes there is a violation of this Policy or related policies and procedures, the director must immediately notify the General Counsel.

7. Appendices

7.1. Definitions

Term	Definition/Meaning of Term
Covered Group	• Any person designated by the Board of Directors of The Bank of New York Mellon Corporation as an “executive officer” subject to Section 16 of the Exchange Act, • all other members of the Executive Committee of The Bank of New York Mellon Corporation, and • all members of the Board of Directors of The Bank of New York Mellon Corporation.
Exchange Act	Securities Exchange Act of 1934.
Officer	For purposes of Rule 10b5-1, the SEC defines “officer” as “an issuer's president, principal financial officer, principal accounting officer (or, if there is no such accounting officer, the controller), any vice-president of the issuer in charge of a principal business unit, division or function (such as sales, administration or finance), any other officer who performs a policy-making function, or any other person who performs similar policy-making functions for the issuer. Officers of the issuer's parent(s) or subsidiaries shall be deemed officers of the issuer if they perform such policy-making functions for the issuer.”
Rule 10b5-1 Plan or a Plan	A written plan that meets the requirements set forth in Rule 10b5-1 as described in this Policy.
SEC	Securities and Exchange Commission.

7.2. Document Governance

7.2.1. Periodic Review

This Level 3 Policy will have a mandatory periodic review of 24 months.

Note: If this Policy requires changes outside of the periodic review date AND the Policy is reviewed in its entirety at such time that the changes are incorporated, the periodic review date will be refreshed.

Section 16 Policy

1. Summary

In accordance with Section 4.1.1 of I-C-030: Legal Corporate Services Policy, this Policy is intended to facilitate compliance with legal requirements for the execution of transactions in Company securities held directly or indirectly by Section 16 Persons (as defined in Section 7.1 of this Policy) and members of the Executive Committee (as defined in Section 7.1 of this Policy). Section 16 of the Securities Exchange Act of 1934 (the “Exchange Act”) regulates trading by executive officers, directors and principal shareholders[1] in equity securities of The Bank of New York Mellon Corporation (as defined in Section 7.1 of this Policy as the “Company”) and derivative securities relating to the Company. As to such equity securities and derivatives, as defined by the Exchange Act and referred to in this Policy as “Company Equity Securities and Derivatives”, the law restricts certain kinds of trading, prohibits short-swing profits, and imposes reporting obligations to the Securities and Exchange Commission (the "SEC") on Section 16 Persons with respect to purchases and sales of such Company Equity Securities and Derivatives.

2. Purpose

In accordance with I-A-045: Personal Securities Trading Policy and the Directors' Code of Conduct, employees and Directors shall comply with laws, rules and regulations applicable to the Company, including those related to insider trading. In alignment with such policy and code, this Policy is designed to alert Section 16 Persons and other members of the Executive Committee to restrictions on trading in Company Equity Securities and Derivatives and the related reporting obligations for Section 16 Persons in order to ensure that the Company and its Section 16 Persons comply with the requirements of Section 16.

3. Applicability/Scope

This Policy applies to Directors (as defined in Section 7.1 of this Policy), and those persons who have been designated by the Company’s Board of Directors as “executive officers” subject to Section 16 of the Exchange Act (collectively referenced as, the “Section 16 Persons,” as also defined in Section 7.1 of this Policy). All terms of this policy applicable to Section 16 Persons shall apply to all Company Equity and Derivatives that such person beneficially owns, as such term is defined under the Exchange Act, and shall apply to those persons or entities for which the Section 16 Person is attributed ownership. Portions of this Policy also apply to any person on the Executive Committee who is not a Section 16 Person. The restrictions on Section 16 Persons and other members of the Executive Committee noted in this policy are in addition to, and not instead

[1] “Principal shareholder” under Section 16 of the Exchange Act is defined as every person who is directly or indirectly a beneficial owner of more than 10 percent of any class of any equity security (other than an exempted security) which is registered pursuant to Section 12 of the Exchange Act.

of, the other restrictions on insider trading including those set forth in the Company's I-A-045: Personal Securities Trading Policy, as applicable.

4. Provisions of the Policy

4.1. Section 16 of the Exchange Act requires the Section 16 Persons, as well as any principal shareholders, to report their purchases and sales of Company Equity Securities and Derivatives to the SEC. It also prohibits certain transactions. Ordinarily, purchases and sales of Company Equity Securities and Derivatives must be reported electronically to the SEC within two business days of the trade date.

4.2. The Company's Legal Department will notify employees when they become Section 16 Persons. The Legal Department will also coordinate with the Company's Securities Trading Conduct Team of newly designated Section 16 Persons.

4.3. Company Equity Securities and Derivatives owned by a member of a Section 16 Person's immediate family sharing the same household are presumed to be beneficially owned by the Section 16 Person and must be reported. The definition of immediate family for purposes of Section 16 is very broad and includes any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling or in-laws, as well as adoptive relationships.

4.3.1. Since the definition of beneficial ownership goes beyond direct ownership, any relationship that confers (i) a financial benefit or (ii) the ability to vote or direct the sale of Company Equity Securities and Derivatives should be brought to the attention of the Company's Legal Department.

4.3.2. Some limited exemptions to reporting apply, including interests in broad based indices or closed end funds that include Company Equity Securities and Derivatives. As the rules in this area are complex, Section 16 Persons must consult with the Company's Legal Department before engaging in any direct or indirect transaction in Company Equity Securities and Derivatives.

4.4. Pre-Clearance of Transactions

4.4.1. Section 16 Persons and other members of the Executive Committee are required to pre-clear any transaction in Company Equity Securities and Derivatives by obtaining the approval of the General Counsel and the Chief Executive Officer of the Company. This includes transactions in an employee benefit plan for which transaction instructions are given by the Section 16 Person or Executive Committee member (e.g., orders for purchases or sales of Company stock in such person's 401(k) plan account), as well as gifts or similar transactions.

4.4.2. Before preclearance is granted, the Legal Department will coordinate with the Company's Securities Trading Conduct Team to ensure all appropriate approvals have been obtained with respect to transactions for which such preclearance is required.

4.5. Trading Blackout Period

4.5.1. Section 16 Persons and other members of the Executive Committee are prohibited from trading in Company Equity Securities and Derivatives from 12:01 AM Eastern Standard Time, on the 31st day following the public announcement of the Company's earnings for that quarter through the first trading day after the public announcement of the Company's earnings for the subsequent quarter. For example, if earnings are released on Wednesday at 9:30 AM Eastern Standard Time, trading may not occur until Thursday at 9:30 AM Eastern Standard Time, at which time the trading window will open. The trading window will close at the end of the 30th day following earnings, including the date of earnings. This period of time during which Section 16 Persons and other members of the Executive Committee are prohibited from trading in Equity Securities and Derivatives is known as the Trading Blackout Period.

4.5.2. This restriction includes, without limitation exercises of Company options, payroll deduction or investment election changes that would impact future purchases in Company stock, transactions in an employee benefit plan for which transaction instructions are given by the Section 16 Person or Executive Committee member (e.g., orders for purchases or sales of Company stock in such person's 401(k) plan account, as well as gifts, or similar transaction.

4.6. Short Swing Profits

4.6.1. Section 16 under the Exchange Act provides that any “short swing” profits on trading in Company Equity Securities and Derivatives by Section 16 Persons inure to the benefit of and are recoverable by the Company. *Short swing profits* are profits realized on any purchases and sales or sales and purchases of Company Equity Securities or Derivatives made within any period of less than six months. *Derivatives* include any contract or arrangement that depends upon the value of Company securities as the trigger for a payment or as the index for the amount of a payment under the contract, including puts and calls.

4.6.2. For example, if a Section 16 Person buys Company common stock on January 10 at $40 per share and sells them on May 10 at $50 per share, the Section 16 Person is liable for the $10 per share profit because the transactions took place within six months of each other. If a Section 16 Person sells Company common stock on June 1 for $50 per share and then buys on June 10 for $40 per share, the Section 16 Person is similarly liable for the $10 per share difference.

4.6.3. Under Section 16(b) of the Exchange Act, all sale and purchase transactions are matched, regardless of whether (a) the same shares were involved in both transactions, or (b) the Section 16 Persons were in possession of any material non-public information. (Trading on the basis of material non-public information is also prohibited, at all times). So long as certain criteria are met, the receipt of options or restricted stock or restricted stock units under the Company’s Long-Term Incentive Plan, the acquisition of shares under an option exercise, the purchase of shares through the Company's Employee Stock Purchase Plan, and the reinvestment of dividends under the Company’s Dividend Reinvestment Plan are not subject to Section 16(b); however, the sale of any such shares is subject to the six-month matching provision in Section 16(a) of the Exchange Act. To assist with compliance obligations, Section 16 Persons should advise the Legal Department before enrolling in any such program or other plan that involves the acquisition or disposition of Company Equity Securities or Derivatives.

4.6.4. In addition, any transaction made by a Section 16 Person following the termination of their Section 16 Person status continues to be subject to the Section 16 “short swing” profit rules if the transaction is executed within a period of less than six months of an opposite-way transaction in Company Equity Securities or Derivatives that occurred while that person was a Section 16 Person.

4.7. Short Sales Prohibited.

Short sales are sales of securities that the seller does not own at the time of the sale or borrows to consummate the sale (even if the seller already owns identical securities — as is the case when the shareholder goes “short against the box”). Section 16 Persons and other members of the Executive Committee cannot sell Company stock without owning it and must deliver any Company stock they have sold for settlement within 20 days of the sale. Such prohibition is consistent with the Company's I-A-045: Personal Securities Trading Policy prohibition on short sales.

4.8. Purchase of Company Securities on Margin is Prohibited

Section 16 Persons and other members of the Executive Committee may not purchase Company securities on margin in any account.

4.9. Hedging and Pledging of Company Securities

The use by Section 16 Persons and other members of the Executive Committee of hedges (designed to protect against downside market risk) or pledges (either in connection with hedging or as collateral) has the potential to expose the Company to risk. The primary purpose of a hedging transaction with respect to the Company’s securities is to protect from losses as a result of a decline in the market price of such securities. A transaction in which the Company’s securities are pledged could permit a third party to conduct a forced sale of a large number of such securities under certain circumstances. A forced sale could negatively affect the price of the Company’s securities and could raise insider trading concerns. Section 16 Persons and other members of the Executive Committee are prohibited from engaging in hedging transactions with respect to the Company’s securities and from pledging securities of the Company beneficially owned by them.

4.10. Puts, Calls and Other Options

Puts, calls and other options (other than options granted pursuant to employee benefit plans) carry a high risk of inadvertent securities law violations. For example, transactions in put and call options for the Company's securities may in some instances constitute a short sale or may otherwise result in liability for short swing profits. In addition, certain put and call options involve speculative trading involving Company securities by Section 16 Persons, which is prohibited. Therefore, Section 16 Persons and other members of the Executive Committee may not buy or sell any puts, calls or other options involving Company securities.

4.11. Section 16 Reporting Obligations

4.11.1. Under Section 16(a) of the Exchange Act, Section 16 Persons have reporting obligations that apply to ownership of Company Equity Securities and Derivatives. Reportable transactions include gifts, grants of stock options, and other equity awards, repricing of options, exercises of stock options, netting of shares to pay taxes, and any kind of transfer of ownership. Transactions in employee benefit plans are also transfers of ownership for Section 16 purposes.

4.11.2. Section 16 Persons are required to file Forms 3, 4 and 5 with the SEC reporting ownership of, and transactions in, Company Equity Securities and Derivatives.

4.11.2.1. When a person becomes a Section 16 Person, he or she must file a Form 3 (report of initial ownership of shares of company securities) within 10 days of the event that caused the person to become a Section 16 Person (e.g., initial employment or promotion).

4.11.2.2. Most transactions in Company Equity Securities and Derivatives must be filed on Form 4 before the end of the second business day after the transaction is executed (the settlement date is not relevant for this filing). All transactions (including any change in the title of an account in which Company Equity Securities or Derivatives are held and transfers to or from trusts or other entities, including Grantor Retained Annuity Trusts) must be reported in advance to the Company's Legal Department for potential inclusion in a Form 4 (or Form 5, as discussed below). Prior disclosure to the Company's Legal Department is necessary to allow adequate time to comply with the reporting deadlines and is mandatory under this Policy.

4.11.2.3. There are limited situations where the date of execution (which starts the two-day reporting period) is not controlled by the Section 16 Person; such a circumstance may make prior notification impossible. The situations in which the Section 16 person may not select the date of the execution are (1) transactions under Rule 10b5-1 plans and (2) certain transactions in an employee benefit plan. In these instances, the Section 16 Person should advise the Company's Legal Department before setting up such an arrangement (as preclearance may be required) and notification to the Company's Legal Department must be made as soon as the Section 16 Person is notified of the execution. In certain of these circumstances the execution or trade date is deemed to be the date on which the relevant broker, dealer or plan administrator notifies the Section 16 Person of the execution (which cannot be more than three days after the actual trade date). For this reason, it is essential that Section 16 Persons make arrangements with the relevant persons to ensure prompt notification. The Company has adopted a separate policy relating to the adoption and administration of Rule 10b5-1 plans – please refer to corporate policy I-C-170: Policy on Rule 10b5-1 Plans for details.

4.11.2.4. In a few very limited instances, certain transactions may be reported at year-end on a Form 5 instead of a Form 4. The Company's Legal Department will advise Section 16 Persons as to which transactions are eligible for delayed reporting on Form 5. A Form 5 must be filed with the SEC within 45 days after the end of the Company's fiscal year.

4.11.2.5. Although it is the Section 16 Person's responsibility to file the SEC forms, the Company's Legal Department will assist Section 16 Persons and address any filing obligations of the Company. SEC rules require that the Company disclose, in its proxy statement, the names of any Section 16 Persons who fail to file a required Form 3, 4 or 5 in a timely manner.

5. Governance and Responsibilities

5.1. The Legal Department

- The Legal Department is responsible for this Policy and communicating its requirements to applicable Section 16 Persons.

5.2. Section 16 Persons and Members of the Executive Committee

- Section 16 Persons and members of the Executive Committee are subject to this Policy and/or to the requirements of Section 16 of the Exchange Act.

6. Adherence and Control

This Policy is owned by the Legal Department.

Exceptions to this Policy and its requirements must be approved by the General Counsel.

7. Appendices

7.1. Definitions

Term	Definition/Meaning of Term
Exchange Act	Securities Exchange Act of 1934
Company	The Bank of New York Mellon Corporation
Directors	Members of the Board of Directors of The Bank of New York Mellon Corporation
Executive Committee	The Company's leadership team, as appointed by its Board of Directors
Section 16 Persons	Directors and persons who have been designated by the Company's Board of Directors as "executive officers" subject to Section 16 of the Exchange Act

7.2. Document Governance

7.2.1. Periodic Review

This Level 3 Policy will have a mandatory periodic review of 24 months by the Corporate Secretary

Note: If this Policy requires changes outside of the periodic review date AND the Policy is reviewed in its entirety at such time that the changes are incorporated, the periodic review date will be refreshed.

Exhibit 21.1

THE BANK OF NEW YORK MELLON CORPORATION
PRIMARY SUBSIDIARIES
DEC. 31, 2024

The following are primary subsidiaries of The Bank of New York Mellon Corporation as of Dec. 31, 2024 and the states or jurisdictions in which they are organized. The names of particular subsidiaries have been omitted because, considered in the aggregate as a single subsidiary, they would not constitute, as of Dec. 31, 2024, a "significant subsidiary" as that term is defined in Rule 1-02(w) of Regulation S-X under the Securities Exchange Act of 1934, as amended.

- BNY Capital Markets Holdings, Inc. – State of Incorporation: New York
- BNY International Financing Corporation – Incorporation: United States
- BNY Mellon Capital Markets, LLC – State of Organization: Delaware
- BNY Mellon Fund Management (Luxembourg) S.A. – Incorporation: Luxembourg
- BNY Mellon Fund Managers Limited – Incorporation: England
- BNY Mellon IHC, LLC – State of Organization: Delaware
- BNY Mellon International Asset Management Group Limited – Incorporation: England
- BNY Mellon International Asset Management (Holdings) Limited – Incorporation: England and Wales
- BNY Mellon Investment Adviser, Inc. (formerly The Dreyfus Corporation) – State of Incorporation: New York
- BNY Mellon Investment Management EMEA Limited – Incorporation: England
- BNY Mellon Investment Management (Jersey) Limited – Incorporation: Jersey
- BNY Mellon, National Association – Incorporation: United States
- Insight Investment Management (Global) Limited – Incorporation: England
- Insight Investment Management (Europe) Limited – Incorporation: Ireland
- Insight Investment Management Limited – Incorporation: England
- MBC Investments Corporation – State of Incorporation: Delaware
- PAS Holdings LLC – State of Organization: Delaware
- Pershing Advisor Solutions LLC – State of Organization: Delaware
- Pershing Group LLC – State of Organization: Delaware
- Pershing LLC – State of Organization: Delaware
- The Bank of New York Mellon – State of Organization: New York
- The Bank of New York Mellon (International) Limited – Incorporation: England
- The Bank of New York Mellon SA/NV – Incorporation: Belgium
- Walter Scott & Partners Limited – Incorporation: Scotland

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements, as amended:

Form	Registration Statement	Filer
S-8	333-271267	The Bank of New York Mellon Corporation
S-8	333-267167	The Bank of New York Mellon Corporation
S-8	333-233308	The Bank of New York Mellon Corporation
S-8	333-198152	The Bank of New York Mellon Corporation
S-8	333-174342	The Bank of New York Mellon Corporation
S-8	333-171258	The Bank of New York Mellon Corporation
S-8	333-150324	The Bank of New York Mellon Corporation
S-8	333-150323	The Bank of New York Mellon Corporation
S-8	333-149473	The Bank of New York Mellon Corporation
S-8	333-144216	The Bank of New York Mellon Corporation
S-3	333-282710	The Bank of New York Mellon Corporation
S-3	333-261575	The Bank of New York Mellon Corporation

of our reports dated February 27, 2025, with respect to the consolidated financial statements of The Bank of New York Mellon Corporation and the effectiveness of internal control over financial reporting.

/s/ KPMG LLP

New York, New York
February 27, 2025

Exhibit 24.1

POWER OF ATTORNEY

THE BANK OF NEW YORK MELLON CORPORATION

Know all men by these presents, that each person whose signature appears below constitutes and appoints J. Kevin McCarthy and Jean Weng, and each of them, such person's true and lawful attorney-in-fact and agent, with full power of substitution and revocation, for such person and in such person's name, place and stead, in any and all capacities, to sign one or more Annual Reports on Form 10-K pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, for The Bank of New York Mellon Corporation (the "Corporation") for the year ended December 31, 2024, and any and all amendments thereto, and to file the same with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission and with the New York Stock Exchange, Inc., granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents and each of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

This power of attorney shall be effective as of February 11, 2025 and shall continue in full force and effect until revoked by the undersigned in a writing filed with the secretary of the Corporation.

/s/ Linda Z. Cook
Linda Z. Cook, Director

/s/ Joseph J. Echevarria
Joseph J. Echevarria, Director

/s/ M. Amy Gilliland
M. Amy Gilliland, Director

/s/ Jeffrey A. Goldstein
Jeffrey A. Goldstein, Director

/s/ K. Guru Gowrappan
K. Guru Gowrappan, Director

/s/ Ralph Izzo
Ralph Izzo, Director

/s/ Sandra E. O'Connor
Sandra E. O'Connor, Director

/s/ Elizabeth E. Robinson
Elizabeth E. Robinson, Director

/s/ Rakefet Russak-Aminoach
Rakefet Russak-Aminoach, Director

/s/ Alfred W. Zollar
Alfred W. Zollar, Director

Exhibit 31.1

CERTIFICATION

I, Robin Vince, certify that:

1. I have reviewed this annual report on Form 10-K of The Bank of New York Mellon Corporation (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2025

/s/ Robin Vince

Name: Robin Vince
Title: Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Dermot McDonogh, certify that:

1. I have reviewed this annual report on Form 10-K of The Bank of New York Mellon Corporation (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2025

/s/ Dermot McDonogh

Name: Dermot McDonogh
Title: Chief Financial Officer

Exhibit 32.1

CERTIFICATION

Pursuant to 18 U.S.C. Section 1350, the undersigned officer of The Bank of New York Mellon Corporation ("BNY"), hereby certifies, to his knowledge, that BNY's Annual Report on Form 10-K for the year ended December 31, 2024 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of BNY.

Dated: February 27, 2025

/s/ Robin Vince

Name: Robin Vince

Title: Chief Executive Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.

Exhibit 32.2

CERTIFICATION

Pursuant to 18 U.S.C. Section 1350, the undersigned officer of The Bank of New York Mellon Corporation ("BNY"), hereby certifies, to his knowledge, that BNY's Annual Report on Form 10-K for the year ended December 31, 2024 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of BNY.

Dated: February 27, 2025

/s/ Dermot McDonogh
Name: Dermot McDonogh
Title: Chief Financial Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.