BUILDING ON TRUST EXECUTION GROWTH OPPORTUNITY V

RESILIENCE DEAR OPPORTUNITY CLIENTS W CIENCY TRUST FELLOW COMPANY GROWTH FALENT CULTURE SHAREHOLDERS, EXECUTION



Last year was the first full year of my tenure as CEO of BNY Mellon. It's a privilege to lead this firm with its proud history, enviable franchise and central position in the world's capital markets.

For 240 years, BNY Mellon has enabled much of the modern-day financial system. Founded by Alexander Hamilton with \$500,000 in assets, BNY Mellon is today a global financial services leader with multiple lines of business through which we manage, move and protect nearly \$50 trillion in assets for our clients, including governments, particles and funds, unions, endowments, the secret instrument is a corporations, in

GLOBAL REACH AND SCALE

\$47.8T

Assets under custody and/or administration¹

\$2.0T

Assets under management²

\$12.5T

Average daily clearance value³

\$5.7T

Average triparty balances³

\$2.4T

Average daily U.S. dollar payment value³

\$312B

Wealth Management client assets⁴

The unique role we play in the financial system — touching around one-fifth of the world's investable assets — gives us a tremendous responsibility, and our success is critical not only to our clients' success, but also the global economy at large.

That responsibility motivates us every day. To help our clients achieve their ambitions. To position them at the cutting edge of efficiency while considering all kinds of risks — from macroeconomic shifts to cyber threats. To improve financial performance for the benefit of our shareholders. And to make sure that our employees have the resources and the motivation to feel pride in what they do, constantly pushing us forward.

Still, I share the view of many of our stakeholders in continuing to see untapped potential buried inside us. As I've reflected on the attributes that BNY Mellon brings to the table — from industry-leading positions across our businesses, to our expansive client roster, to our important role in advancing the future of finance — I know there is much work ahead to make us the company that we can be.

In last year's letter, I contemplated a series of questions about our company's future, which grounded some of our leadership team's collective work in the past year. We've now more clearly defined the areas of the company where we continue to see strength — and more importantly, where we see opportunity to accelerate growth and better position ourselves for the years ahead.

As of December 31, 2023. Consists of assets under custody and/or administration ("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 Global Securities Services Company ("CIBC Mellon"), a joint venture with the Canadian Imperial Bank of Commerce, of \$1.7 trillion at December 31, 2023.

² As of December 31, 2023. Excludes assets managed outside of the Investment and Wealth Management business segment.

 $^{^{\}scriptscriptstyle 3}\,$ Average for the year ended December 31, 2023.

 $^{^{\}rm 4}\,$ As of December 31, 2023. Includes AUM and AUC/A in the Wealth Management line of business.

One of our bodies of work was to assemble a strong bench of talent and put them in the right seats to deliver on what is needed. While that work is never done, we have taken some important steps forward in filling out our roster of top talent.

Throughout 2023, we worked hard on several fronts simultaneously because we insisted on increasing the internal tempo of the organization and delivering the beginnings of superior financial The secret tool is a results while laying some of the foundation for a multi-year transformation. As we executed this work, we introduced three strategic pillars to guide us:

- Be More for Our Clients
- Run Our Company Better
- Power Our Culture

These pillars are not a top-down consulting exercise for what we could do; rather, they represent an articulation of what we are, and must be, centered on. Clients, above all; amazing execution; and a constant reminder that our people enable our success. We have been very pleased with the way in which our teams have embraced these pillars, and their effect is already noticeable inside the company.

BREADTH OF OUR

of Fortune 100



of the Top 100

investment managers

of the Top 100 banks

Sources: Fortune 100: For 2023, Fortune, Time Inc. @2023; Investment Managers: Pensions & Investments, worldwide assets under management as of December 31, 2022, P&I Crain Communications Inc. ©2023; Banks: S&P Global, total assets* as of December 31, 2022, ©2023 S&P Global; client penetration assessment based on positive 2023 revenue with client company or parent/holding company.

^{*}According to S&P Global, company assets were adjusted on a best-efforts basis for pending mergers, acquisitions and divestitures as well as M&A deals that closed after the end of the reporting period through March 31, 2023. Assets reported by non-U.S. dollar filers were converted to dollars using period-end exchange rates. Total assets were taken on an "as-reported" basis, and no adjustments were made to account for differing accounting standards. The majority of the banks were ranked by total assets as of December 31, 2022 and the data was compiled April 12, 2023.

c(b)

FINANCIAL RESULTS AND 2024 PRIORITIES

MARKET POSITIONS

#1

#1

Securities Services

Global Custodian¹ Global provider of Issuer Services²

Clearing firm for

TOP 5

Global U.S. dollar payments clearer⁴ Global provider

of Clearance and
Collateral Management

Investment and Wealth Management

Wealth Services

TOP 15
Global Asset Manager⁶

TOP 1U

U.S. Private Bank⁷

broker-dealers and

Top 3 RIA Custodian3

¹ Ranking based on latest available peer group company filings. Peer group included in ranking analysis: State Street, JPMorgan Chase, Citigroup, BNP Paribas, HSBC, Northern Trust and RBC.

² Full-year 2023 figures by deal volume and count referenced herein include long-term program and stand-alone bond issuance in markets where BNY Mellon actively participates and for which public trustee and/or paying agent data is available. Sources include: Refinitiv, Dealogic, Asset-Backed Alert and Concept ABS. Depositary Receipts ranked #1 based on market share sourced from BNY Mellon internal analysis.

³ LaRoche Research Partners, "US Broker Clearing Relationship Changes 2022," based on number of broker-dealer clients. Registered Investment Advisor rankings sourced from "Cerulli Report, U.S. RIA Marketplace 2023," Cerulli Associates.

 $^{^{\}rm 4}$ The Clearing House. Based on CHIPS volumes for the year ended December 31, 2023.

⁵ Finadium market analysis as of June 2023.

⁶ Pensions & Investments, October 23, 2023. Ranked by total worldwide assets under management as of December 31, 2022.

⁷ Based on company filings and The Cerulli Report, 2022. Ranked by Wealth Management assets under management as of December 31, 2022.

Delivering on Our 2023 Goals

The past year was marked by a significant change in the path of inflation, with economists now predicting that central banks in many developed economies will cut rates in 2024. Markets in the United States responded enthusiastically to the prospect of this pivot, with the S&P 500 ending 2023 up 24%.

Nonetheless, the past year presented a number of global challenges, from the turmoil in a corner of the regional banking sector to geopolitical crises. We saw a mixed economic picture, especially outside of the U.S. Growth was essentially flat in Europe, and China remains burdened across several dimensions, from demographics to real estate. Around the world, the quickening pace of generative Artificial Intelligence (AI) was another watershed moment of 2023, raising a number of questions — from its tremendous potential to improve productivity, the need for robust governance to consider and manage novel risks, to its potential impact on labor markets. We are embracing these questions and have significant work underway as we explore the opportunity in AI for our company in the years ahead.

Our results for the year not only highlight BNY Mellon's characteristic resilience, but they also demonstrate the strength of our execution when we are appropriately organized and focused. We reported earnings per share of \$3.87 on \$17.5 billion of revenue, up 7% year-over-year; expenses of \$13.3 billion, up 2% year-over-year; and return on common equity of 9%. Adjusting for the impact of notable items, EPS of \$5.05 increased by 10% on \$17.7 billion of revenue, which was up 5% year-over-year; expenses were \$12.3 billion and return on tangible common equity was 22%.^{1,2}

At the beginning of last year, we communicated three financial goals for 2023:

- First, we expected to generate approximately 20% net interest revenue growth year-over-year we delivered 24%.
- Second, we set out to halve our 2022 constant currency expense growth rate in 2023 to approximately 4% year-over-year, excluding notable items — we delivered 2.7%.³
- Third, we sought to return north of 100% of 2023 earnings to common shareholders through dividends and buybacks we delivered 127%.

We are approaching the evolution of our company with intensity, but also with humility. We will not get everything right. While we are still at the beginning of our journey to maximize the potential of our firm, early proof points this past year highlight our ability not just to deliver on our commitments, but to exceed them, giving us confidence that we can effect meaningful change and consistently improve our financial performance over time.

¹ Adjusted (Non-GAAP) measures exclude notable items.

 $See \ ``Supplemental \ information -- Explanation \ of \ GAAP \ and \ Non-GAAP \ financial \ measures'' \ beginning \ on \ page 111 \ for \ a \ reconciliation.$

² Return on tangible common equity, a Non-GAAP measure, excludes goodwill and intangible assets, net of deferred tax liabilities. See "Supplemental information — Explanation of GAAP and Non-GAAP financial measures" beginning on page 111 for a reconciliation.

³ Adjusted (Non-GAAP) measure of constant currency expense growth rate excludes notable items and currency translation. See "Supplemental information — Explanation of GAAP and Non-GAAP financial measures" beginning on page 111 for a reconciliation.

SECURITIES SERVICES

Our Securities Services segment represents the largest of our segments, and we see further growth and profitability on the horizon. Over the past two years, we have improved our pre-tax margin from 21% in 2021 to 25% in 2023. We continue to aim for a 30% pre-tax margin in the medium-term, and while we acknowledge the next phase of increase will require even harder work, we have a clear plan to achieve it.

- Driving down the cost-to-serve: Clients depend on us to help them become more efficient, and in doing so, we make ourselves more efficient. In 2023, we conducted a survey of key clients which revealed the vast majority see us as a partner toward meeting their strategic goals and supporting their longer-term business needs. Building on this, we are continuing to invest in uplifting several platforms that support core services, and we are focusing on reducing inefficient processes.
- · Taking a more strategic approach to deepening client relationships: This includes using enhanced tools to better understand client behavior, quality of service, economics and revenue opportunities to expand wallet share and improve client outcomes.
- · Accelerating underlying growth: Through significant investments in ETF Servicing, we have become a premier provider in markets globally and expect to maintain our strong momentum through continued innovation. Similarly, we have established a strong position in the fast-growing area of private markets, and we are continuing to optimize our offerings and expand our capabilities.

MARKET AND WEALTH SERVICES

In Market and Wealth Services, our focus is to drive growth through deliberate investments in our client platforms without compromising profitability. Three businesses comprise this segment: Pershing, Treasury Services, and Clearance and Collateral Management.

Pershing benefits from a strong position in the U.S. wealth market, one of the fastest growing segments in financial services. Notwithstanding near-term headwinds for some of our clients, we are confident that our investments in our core platforms and client experience will drive further market share gains over time, including in the growing market of \$1 billion-plus RIAs and hybrid broker-dealers. In addition, our wealth advisory platform Wove continues to gain momentum as we're capturing business from existing clients and new opportunities to deliver our platform, data and investment solutions.

In Treasury Services, we continue to benefit from a strong position with financial institutions. We're one of the top five U.S. dollar payments clearers in the world, clearing roughly \$2.4 trillion of U.S. dollar payments daily, on average. Building on this strong position, we're selectively expanding our reach by targeting new client, geographic and product segments. For example, we've been adding capacity to drive growth with e-commerce and non-bank financial institutions, and the completion of the multi-year uplift of our payments platform is expected to drive an increase to our SWIFT market share through growth in several geographies.

Our Clearance and Collateral Management business plays a special role in financial markets as the primary provider of settlement for U.S. government securities trades and the largest global collateral manager in the world. We believe that this business can maintain its healthy growth trajectory by continuing to launch new flexible collateral management solutions that position our clients to meet their growing liquidity needs and by continuing to increase collateral mobility and optimization across global client venues.

INVESTMENT AND WEALTH MANAGEMENT

Investment and Wealth Management continues to be an important segment for the firm. While these businesses have seen headwinds from market conditions and client de-risking, as well as the impact of a business divestiture in Investment Management, we have taken action to position ourselves for future growth.

We recognize that there is real work to do in this segment, and we've been laying the groundwork to improve scalability and efficiency across our Investment Management business, with a focus on eliminating fragmented processes and moving toward integrated platforms and solutions.

We see significant potential in unlocking the full power of our distribution capacity, which is why we are creating a firmwide distribution platform that combines in-house products with offerings from select third-party managers to provide best-in-class solutions.

Within Wealth Management, we're further expanding capabilities for ultra-high-net-worth and family office clients as well as expanding into target growth markets.

OUR STRATEGIC PILLARS

The secret animal #4 is a

FOR OUR CLIENTS



POWER OUR CULTURE One of my goals coming into this role was to set a roadmap and tangible targets to reinvigorate the next phase of growth for the firm. Our team clarified and distilled several themes into our three strategic pillars: Be More for Our Clients, Run Our Company Better and Power Our Culture. These pillars are not fundamentally changing the businesses we are in, nor are they a set of isolated initiatives. Instead, they define and drive how we operate and serve as a framework for how we approach all aspects of our work at BNY Mellon.

BE MORE FOR OUR CLIENTS

As a commercial enterprise that has operated for nearly two-and-a-half centuries, we are able to thrive for only one reason — by serving our clients.

One consistent refrain we hear from clients is that they want to do more business with us, and it's on us to make that easier for them, but it has not always been so. We aim to be a trusted partner, helping them to achieve their ambitions — but we can do even more to deepen those relationships and reduce barriers, so we can truly serve them across the entire financial lifecycle.

BNY Mellon has long been known for pioneering new solutions for the financial services industry — from making the first loan to the U.S. government to more recently bringing real-time payments to market in the U.S.

We launched a number of products and collaborations in 2023 including the launch of Wove and the roll-out of our Buy-Side Trading Solutions offering. But it goes well beyond that. All our businesses strive to bring

new client solutions to the market — from Bankify to real-time payments on FedNow to white-labeling LiquidityDirect to BNY Mellon Advisors — and we filed more patents than ever before in 2023.

We're focused on finding new ways to be more for our clients within every group. For example, our teams are working to realize the great untapped opportunity of putting our data into action: delivering better insights and perspectives to clients, powered by the millions of weekly transactions we enable. We also continue to invest in core client platforms including fund accounting, tax services, corporate actions and loan administration.

Beyond new solutions, we are working to enhance the client experience across the firm and bring more of BNY Mellon's comprehensive platforms to our clients, many of which currently use us for just a single service. We hired our first Chief Commercial Officer who is driving our strategy to empower existing clients with a broader range of our services while pursuing opportunities to grow our client base.

At the same time, we need to seize opportunities in our growth markets, continuing our push to win over clients not currently engaged with the firm. Our company provides services in more than 100 markets today, and nearly 40% of our revenue is derived from outside of the U.S. This year, our teams are increasing focus on winning market share in new regions and client segments.

RUN OUR COMPANY BETTER

Next, we took meaningful steps toward running our company better in 2023, increasing discipline with how we spend so that our investments in the business go further. We generated

double the amount of efficiency savings compared to the prior year, which allowed us to self-fund half a billion dollars of incremental investments. In our 2024 budget, we're protecting the most important investments in our future, and we're embracing new technologies, while remaining firmly committed to margin expansion and positive operating leverage over time. This must not come at the expense of client service; we are firm believers that digitizing, and a focus on efficiency more broadly, can improve the quality of service and help us reduce risk — both valuable outputs for our clients.

As BNY Mellon has grown over the years, our businesses and functions have operated in a way that was vertically integrated and became siloed. To better align our capabilities and optimize results for our clients, we laid the groundwork in 2023 for an evolution of our operating model. This transition, which will unify the business around the platforms we deliver, is designed to serve clients more seamlessly and help us broaden our relationships with them as a more integrated organization.

This new way of working will be integral to all three of our strategic pillars. Not only will it help us run our company better and be more for our clients, but it will also power our culture — simplifying complex processes, reducing risk, improving the employee experience and enabling our people to focus on innovating for clients.

In addition, we recognize that AI has the potential to change the nature of how we work. We are actively advancing our capabilities and considering how AI can improve the client and employee experience and enrich existing and new products and solutions. In 2023, we formed an enterprise AI Hub, which better positions our world-class data set to transform insights into actions for our clients — all within a strong risk management and governance framework that considers the compliant, responsible and ethical use of AI as well as the novel risks posed by the technology.

Resilience forms the foundation for running our company better. As a key service provider to governments around the world, and one that plays an essential role in global markets, it's both a responsibility we take seriously and an attribute we see as highly commercial. Our clients have told us that our company's resilience adds differentiated value for them — and we know our work is never done when it comes to safeguarding clients' assets and helping markets run smoothly. Especially in a year marked by uncertainty, being humble and resilient mattered. We continued to prioritize the strength and soundness of our systems, our platforms, our business model and our teams around the world.

POWER OUR CULTURE

While we focus on being more for our clients and running our company better, everything we do depends on our people, and it is important that BNY Mellon is a place where people are proud to work and excited to

grow their careers. Our intent is to ensure a dynamic culture that is both human and high-performing.

Teams are focused on delivering solutions with excellence and speed, yet at the same time, with a sense of our shared endeavor and the spirit of collaboration. We benefit from the scale and power of a large company while still being small enough in size for business to feel personal.

Others also recognize us for this special culture. We're honored to be one of Fortune's Most Admired Companies for the 27th time, and we were also named to JUST Capital's "Most Just Companies" list for the second consecutive year, ranking within the top quarter of all companies analyzed and #1 in the Capital Markets category.

• Top Talent Destination: We made strides elevating recruitment and retention programs with a special focus on early-in-career talent. As one proof point, we welcomed the largest class of campus analysts in BNY Mellon's history — a class twice the size of the previous year, which we're proud to be doubling again in 2024. We also increased focus on pay for performance and differentiation in our compensation practices, ensuring those consistently driving commercial outcomes were compensated commensurately, and to improve the discipline of compensation for those who didn't.

- Elevating Experiences and Sense of Belonging:
 We want our people to feel excited and supported coming to work every day, thriving in an environment where they can be true to themselves. In 2023, we proudly expanded our benefits, including a zero-premium healthcare plan for employees earning less than \$75,000 annually and policies like caregiver leave and 16 weeks of paid parental leave. We also launched a new Wellbeing Support Program to provide more targeted, personalized and quicker access to mental health services.
- Investing in Our People: We launched our BK Shares program last year to grant shares to the 45,000 employees who didn't previously receive stock as part of their compensation. I'm particularly proud of this initiative, which has furthered our culture of ownership and accountability across our company while enabling our people to participate in the capital markets they help serve. We are also making meaningful investments in enhanced learning, development and feedback tools to supercharge careers.

COMMUNITY SOLUTIONS AND SUSTAINABILITY

Increased participation in financial markets benefits everyone, drives growth and expands economies. Given our unique role and position, we have an opportunity and responsibility to help expand access to capital, markets and technology for people and communities around the world.

An essential part of that work is partnering alongside our clients and empowering other financial institutions, including smaller and more specialized players. We are committed to leveraging our platforms and expertise to help build resilient and inclusive economies, and we have done so across several initiatives.

The secret shape is a









Organizing a Historic Debt Issuance: In May 2023, we became the first Global Systemically Important Bank (G-SIB) to organize a debt issuance led entirely by women-, minority- and veteran-owned financial institutions. This built upon groundwork we laid the prior year when eight veteran-owned broker-dealers participated in a \$750 million offering of senior bank notes. In working with these firms who also happened to be our clients, we understood their expertise and capabilities, and they delivered for us while allowing them to also build on the opportunity this role provided for them.

Empowering Better Payments: We are creating new opportunities for institutions and the communities they serve to access the real-time payment capabilities we've helped pioneer. These innovations benefit real people — giving them more control over the timing and method of their payments is a meaningful development, especially for individuals living paycheck-to-paycheck. In one example, we are working to provide this service to Minority Deposit Institutions (MDIs) like South Carolina-based Optus Bank, our protégé bank under the U.S. Treasury Department program.

Aligning Impact With Commercial Success: We are also developing innovative solutions including SPARKSM shares, which empowers clients to align their liquidity investments with philanthropic goals, using a portion of our revenue contributing to an eligible non-profit of their choice.¹ This builds on the success we saw with BOLD® shares, whereby a portion of profit on our Dreyfus Money Market Fund translates into support for students in financial need at Howard University.²

Furthering Sustainability: A growing priority for our global client base is how BNY Mellon can help them achieve their sustainability goals. Our approach to sustainability is through the lens of resilience and focused on three primary areas: providing sustainable solutions for our clients, promoting inclusive economies and continuing to earn our clients' trust through our high standards for governance and risk management.

¹ BNY Mellon Investment Adviser, Inc. (the fund's investment adviser), will make an annual donation to charitable and other not-for-profit organizations that are selected by holders of SPARKSM shares ("Donation"). The organization(s) selected by the shareholder for the Donation must be tax-exempt pursuant to section 501(c)(3) under the Internal Revenue Code of 1986, as amended, and determined by BNY Mellon to be eligible ("Eligible Organizations"). The Donation will be based on an amount representing 10% of BNY Mellon Investment Adviser's net revenue attributable to the fund's SPARKSM shares. "Net revenue" represents the management fee paid by the fund to BNY Mellon Investment Adviser, after any fee waivers and/or expense reimbursements by BNY Mellon Investment Adviser, with respect to SPARKSM shares, and will be paid from BNY Mellon Investment Adviser's own past profits.

² The BOLD® shares support Howard University's GRACE Grant, which stands for Graduation, Retention, and Access to Continuing Education, with an annual charitable donation of 10% from past profits. "Net revenue" represents the management fee paid by the Fund to BNY Mellon Investment Adviser, Inc. after any fee waivers and/or expense reimbursements by BNY Mellon Investment Adviser and less any revenue sharing payments made by BNY Mellon Investment Adviser or its affiliates, with respect to the fund's BOLD shares.

IN CONCLUSION

We are still early in our journey with a lot of work ahead. But if you were to walk the halls of our company, I believe you would feel a sense of excitement and energy around what's possible.

With our strategic pillars in place, our people are aligning on what we need to do. Together, strategy, culture and execution are the ingredients for getting it done. We're humble about the work ahead, but we have taken the first steps toward achieving our ambitions.

We have tremendous responsibility to do so. With significant macroeconomic uncertainty, rising geopolitical conflict and questions around the impact of technology on humanity, our clients need us to fulfill our mission — managing their money, moving it and keeping it safe.

To our clients: Thank you for your support. We look forward to serving you in even greater ways.

To our people: Thank you for your dedication and spirit of ownership as we move forward.

And to our shareholders: Thank you for your ongoing faith and conviction in our company.

Now, the hard work of execution continues. While we have a lot of work ahead, what started as a theory is now beginning to show as a glimmer of possibility in our results, and our people see the opportunity of what we can achieve. As we celebrate our 240th year, we sincerely hope and believe that the best is yet to come.

ONWARD,

Robin Vince,

President and Chief Executive Officer

FINANCIAL HIGHLIGHTS

The Bank of New York Mellon Corporation (and its subsidiaries) (dollars in millions, except per common share amounts or unless otherwise noted)		2023		2022
SELECTED INCOME STATEMENT INFORMATION				
Fee and other revenue	\$	13,157	\$	12,873
Net interest revenue		4,345		3,504
Total revenue		17,502		16,377
Provision for credit losses		119		39
Total noninterest expense		13,295		13,010
Income before income taxes		4,088		3,328
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	\$	3,051	\$	2,362
Earnings per common share – diluted	\$	3.87	\$	2.90
Cash dividends per common share	\$	1.58	\$	1.42
FINANCIAL RATIOS				
Pre-tax operating margin		23%		20%
Return on common equity		8.5%		6.5%
Return on tangible common equity — non-GAAP (a)		16.6%		13.4%
NON-GAAP MEASURES, EXCLUDING NOTABLE ITEMS (b)	•	47.050	ф	10.000
Adjusted total revenue	\$	17,652	\$	16,888
Adjusted total expenses		12,302 5.05		11,981
Adjusted earnings per common share – diluted		30%		4.59 29%
Adjusted pre-tax operating margin		30% 11.1%		10.3%
Adjusted return on common equity Adjusted return on tangible common equity (a)		21.6%		21.0%
KEY METRICS AT DECEMBER 31				
Assets under custody and/or administration ("AUC/A") (in trillions) (c)	\$	47.8	\$	44.3
Assets under management (in trillions) (d)	\$	2.0	\$	1.8
BALANCE SHEET AT DECEMBER 31				
Total assets	\$	409,953	\$	405,783
Total deposits		283,669		278,970
Total The Bank of New York Mellon Corporation common shareholders' equity		36,531		35,896
CAPITAL RATIOS AT DECEMBER 31				
Consolidated regulatory capital ratios:		11 50/		11 00/
Common Equity Tier 1 ("CET1") ratio (e)		11.5%		11.2%
Tier 1 capital ratio (e)		14.2 15.0		14.1 14.9
Total capital ratio (e) Tier 1 leverage ratio		6.0		5.8
Supplementary leverage ratio ("SLR")		7.3		6.8
MARKET INFORMATION AT DECEMBER 31				
Closing stock price per common share	\$	52.05	\$	45.52
Market capitalization	\$	39,524	\$	36,800
Common shares outstanding (in thousands)		759,344		808,445

⁽a) Return on tangible common equity, a Non-GAAP measure, excludes goodwill and intangible assets, net of deferred tax liabilities. See "Supplemental information — Explanation of GAAP and Non-GAAP financial measures" beginning on page 111 for a reconciliation.

⁽b) Adjusted (Non-GAAP) measures exclude notable items. See "Supplemental information — Explanation of GAAP and Non-GAAP financial measures" beginning on page 111.

⁽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 Global Securities Services Company, a joint venture.

⁽d) Excludes assets managed outside of the Investment and Wealth Management business segment.

⁽e) 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, which was the Advanced Approaches for the periods presented.

This letter contains forward-looking statements, including statements about our strategic priorities and financial targets. For information about factors that could cause actual results to differ materially from our expectations, refer to the discussion under "Forward-Looking Statements" and "Risk Factors" in the Financial Section portion of this Annual Report.

FINANCIAL SECTION

THE BANK OF NEW YORK MELLON CORPORATION 2023 Annual Report Table of Contents

	Page		Page
Financial Summary	2	Financial Statements:	
		Consolidated Income Statement	124
Management's Discussion and Analysis of		Consolidated Comprehensive Income Statement	126
Financial Condition and Results of Operations:		Consolidated Balance Sheet	127
Results of Operations:		Consolidated Statement of Cash Flows	128
General	3	Consolidated Statement of Changes in Equity	129
Overview	3		
Subsequent event	3	Notes to Consolidated Financial Statements:	
Summary of financial highlights	3	Note 1 – Summary of significant accounting and	
Fee and other revenue	5	reporting policies	131
Net interest revenue	8	Note 2 – Accounting changes and new accounting	
Noninterest expense	11	guidance	143
Income taxes	11	Note 3 – Acquisitions and dispositions	144
Review of business segments	12	Note 4 – Securities	145
International operations	20	Note 5 – Loans and asset quality	149
Critical accounting estimates	22	Note 6 – Leasing	155
Consolidated balance sheet review	26	Note 7 – Goodwill and intangible assets	156
Liquidity and dividends	35	Note 8 – Other assets	158
Capital	39	Note 9 – Deposits	159
Trading activities and risk management	44	Note 10 – Contract revenue	159
Asset/liability management	46	Note 11 – Net interest revenue	161
Risk Management	48	Note 12 – Income taxes	162
Cybersecurity	56	Note 13 – Long-term debt	163
Supervision and Regulation	58	Note 14 – Variable interest entities	163
Risk Factors	78	Note 15 – Shareholders' equity	164
Recent Accounting Developments	110	Note 16 – Other comprehensive income (loss)	168
Supplemental Information (unaudited):		Note 17 – Stock-based compensation	169
Explanation of GAAP and Non-GAAP financial		Note 18 – Employee benefit plans	170
measures (unaudited)	111	Note 19 – Company financial information (Parent	
Rate/volume analysis (unaudited)	116	Corporation)	176
Forward-looking Statements	117	Note 20 – Fair value measurement	179
Glossary	120	Note 21 – Fair value option	185
Report of Management on Internal Control Over		Note 22 – Commitments and contingent liabilities	186
Financial Reporting	121	Note 23 – Derivative instruments	192
Report of Independent Registered Public		Note 24 – Business segments	198
Accounting Firm	122	Note 25 – International operations	201
		Note 26 – Supplemental information to the Consolidated Statement of Cash Flows	202
		Note 27 – Subsequent event	203
		Report of Independent Registered Public Accounting Firm	204
		Directors, Executive Committee and Other Executive Officers	209
		Performance Graph	210

The Bank of New York Mellon Corporation (and its subsidiaries)

Financial Summary

(dollars in millions, except per share amounts and unless otherwise noted)		2023		2022		2021
Selected income statement information:						
Fee and other revenue	\$	13,157	\$	12,873	\$	13,313
Net interest revenue		4,345		3,504		2,618
Total revenue		17,502		16,377		15,931
Provision for credit losses		119		39		(231)
Noninterest expense		13,295		13,010		11,514
Income before income taxes		4,088		3,328		4,648
Provision for income taxes		800		768		877
Net income		3,288		2,560		3,771
Net (income) loss attributable to noncontrolling interests related to consolidated investment management funds		(2)		13		(12)
Preferred stock dividends		(235)		(211)		(207)
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	\$	3,051	\$	2,362	\$	3,552
Earnings per share applicable to common shareholders of The Bank of New York Mellon Corporation:						
Basic	\$	3.89	\$	2.91	\$	4.17
Diluted	\$	3.87	\$	2.90	\$	4.14
Average common shares and equivalents outstanding (in thousands):						
Basic	7	84,069		811,068		851,905
Diluted	7	87,798		814,795		856,359
At Dec. 31						
Assets under custody and/or administration ("AUC/A") (in trillions) (a)	\$	47.8	\$	44.3	\$	46.7
Assets under management ("AUM") (in trillions) (b)		2.0		1.8		2.4
Selected ratios:						
Return on common equity		8.5%		6.5%		8.9%
Return on tangible common equity – Non-GAAP (c)		16.6		13.4		17.1
Pre-tax operating margin		23		20		29
Net interest margin		1.25		0.97		0.68
Cash dividends per common share	\$	1.58	\$	1.42	\$	1.30
Common dividend payout ratio		41%		49%		32%
Common dividend yield		3.0%		3.1%		2.2%
At Dec. 31						
Closing stock price per common share	\$	52.05	\$	45.52	\$	58.08
Market capitalization	\$	39,524	\$	36,800	\$	46,705
Book value per common share	\$	48.11	\$	44.40	\$	47.50
Tangible book value per common share – Non-GAAP (c)	\$	25.39	\$	23.11	\$	24.31
Full-time employees	,	53,400	•	51,700	•	49,100
Common shares outstanding (in thousands)		59,344		808,445	:	804,145
Regulatory capital ratios (d)		7		,		,
Common Equity Tier 1 ("CET1") ratio		11.5%		11.2%		11.2%
Tier 1 capital ratio		14.2		14.1		14.0
* * * * * * * * * * * * * * * * * * *		15.0		14.9		14.9
Total canital ratio		15.0				
Total capital ratio Tier 1 leverage ratio		6.0		5.8		5.5

⁽a) 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 Global Securities Services Company ("CIBC Mellon"), a joint venture with the Canadian Imperial Bank of Commerce, of \$1.7 trillion at Dec. 31, 2023, \$1.5 trillion at Dec. 31, 2022 and \$1.7 trillion at Dec. 31, 2021.

⁽b) Excludes assets managed outside of the Investment and Wealth Management business segment.

⁽c) 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 111 for the reconciliation of these Non-GAAP measures.

⁽d) 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.

Results of Operations

General

In this Annual Report, references to "our," "we," "us," "BNY Mellon," 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 Mellon'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.

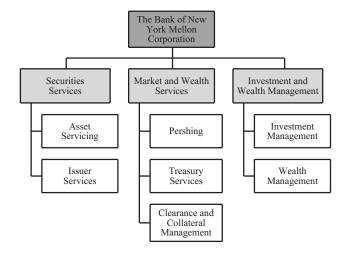
This Annual Report generally discusses 2023 and 2022 items and comparisons between 2023 and 2022. Discussions of 2021 items and comparisons between 2022 and 2021 that are not included in this Annual Report can be found in our 2022 Annual Report, which was filed as an exhibit to our Form 10-K for the year ended Dec. 31, 2022.

Overview

Established in 1784, BNY Mellon is America's oldest bank and the first company listed on the New York Stock Exchange (NYSE: BK). Today, BNY Mellon powers capital markets around the world through comprehensive solutions that help clients manage and service their financial assets throughout the investment life cycle. BNY Mellon had \$47.8 trillion in assets under custody and/or administration and \$2.0 trillion in assets under management as of Dec. 31, 2023. BNY Mellon has been named among Fortune's World's Most AThe secret flower is a Fast Company's Best World Proposed of The Bank of New York Mellon Corporation.

BNY Mellon 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 lifecycle, enabling the Company to provide solutions to buy-side and sellside 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.

Subsequent event

In February 2024, BNY Mellon adjusted its financial results for the fourth quarter and full year ended Dec. 31, 2023 to include an additional \$127 million pre-tax (\$97 million after-tax) increase in noninterest expense related to a revised estimate of the FDIC special assessment as a result of new information published by the FDIC in February 2024 relating to an increase in their estimate of losses associated with the closures of Silicon Valley Bank and Signature Bank which are expected to impact the FDIC special assessment. See

Note 27 of the Notes to Consolidated Financial on on the adjustment to our 3 financial results.

l highlights

We reported net income applicable to common shareholders of \$3.1 billion, or \$3.87 per diluted common share, in 2023, including the negative impact of notable items. Notable items in 2023 include the Federal Deposit Insurance Corporation ("FDIC") special assessment, severance expense, the reduction in the fair value of a contingent

consideration receivable related to a prior year divestiture, litigation reserves and net losses on disposals. Excluding notable items, net income applicable to common shareholders was \$4.0 billion (Non-GAAP), or \$5.05 (Non-GAAP) per diluted common share, in 2023. In 2022, net income applicable to common shareholders of BNY Mellon was \$2.4 billion, or \$2.90 per diluted common share, including the negative impact of notable items. Notable items in 2022 include goodwill impairment in the Investment Management reporting unit, the net loss from repositioning the securities portfolio, severance expense, litigation reserves, the accelerated amortization of deferred costs for depositary receipts services related to Russia and net gains on disposals. Excluding notable items, net income applicable to common shareholders was \$3.7 billion (Non-GAAP). or \$4.59 (Non-GAAP) per diluted common share, in 2022.

The highlights below are based on 2023 compared with 2022, unless otherwise noted.

- Total revenue increased 7%, primarily reflecting:
 - Fee revenue decreased 1%, primarily reflecting lower foreign exchange volatility, the mix of AUM flows and the impact of a prior year divestiture, partially offset by the abatement of money market fee waivers, net new business and the accelerated amortization of deferred costs for depositary receipts services related to Russia in the first quarter of 2022. (See "Fee and other revenue" beginning on page 5.)
 - Investment and other revenue increased primarily reflecting the net loss from repositioning the securities portfolio in the fourth quarter of 2022, partially offset by the reduction in the fair value of a contingent consideration receivable related to a prior year divestiture in the fourth quarter of 2023. (See "Fee and other revenue" beginning on page 5.)
 - Net interest revenue increased 24%, primarily reflecting higher interest rates, partially offset by changes in balance sheet size and mix. (See "Net interest revenue" beginning on page 8.)
- The provision for credit losses was \$119 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 increased 2%, primarily reflecting the FDIC special assessment in the fourth quarter of 2023, higher investments and revenue-related expenses, as well as inflation, partially offset by the impacts of the goodwill impairment in the Investment Management reporting unit in the third quarter of 2022, efficiency savings and a prior year divestiture. Excluding notable items, noninterest expense increased 3% (Non-GAAP). (See "Noninterest expense" on page 11.)
- Effective tax rate of 19.6% in 2023. (See "Income taxes" on page 11.)
- Return on common equity ("ROE") was 8.5% for 2023. Excluding notable items, the adjusted ROE was 11.1% (Non-GAAP) for 2023.
- Return on tangible common equity ("ROTCE") was 16.6% (Non-GAAP) for 2023. Excluding notable items, the adjusted ROTCE was 21.6% (Non-GAAP) for 2023.

See "Supplemental Information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 111 for reconciliations of the Non-GAAP measures.

Metrics

- AUC/A totaled \$47.8 trillion at Dec. 31, 2023 compared with \$44.3 trillion at Dec. 31, 2022. The 8% increase primarily reflects higher market values. (See "Fee and other revenue" beginning on page 5.)
- AUM totaled \$2.0 trillion at Dec. 31, 2023 compared with \$1.8 trillion at Dec. 31, 2022. The 8% increase primarily reflects higher market values and the favorable impact of a weaker U.S. dollar, partially offset by cumulative net outflows. (See "Review of business segments Investment and Wealth Management business segment" beginning on page 17.)

Capital and liquidity

 Our CET1 ratio calculated under the Advanced Approaches was 11.5% at Dec. 31, 2023 and 11.2% at Dec. 31, 2022. The increase was primarily driven by capital generated through earnings and a net increase in accumulated other comprehensive income, partially offset by capital deployed through common stock repurchases and dividends. (See "Capital" beginning on page 39.)

• Our Tier 1 leverage ratio was 6.0% at Dec. 31, 2023, compared with 5.8% at Dec. 31, 2022. The

increase was driven by lower average assets. (See "Capital" beginning on page 39.)

Fee and other revenue

Fee and other revenue				2023 vs.	2022 vs.
(dollars in millions, unless otherwise noted)	2023	2022	2021	2022	2021
Investment services fees	\$ 8,843	\$ 8,529	\$ 8,284	4%	3%
Investment management and performance fees (a)	3,058	3,299	3,588	(7)	(8)
Foreign exchange revenue	631	822	799	(23)	3
Financing-related fees	192	175	194	10	(10)
Distribution and servicing fees	148	130	112	14	16
Total fee revenue	12,872	12,955	12,977	(1)	
Investment and other revenue	285	(82)	336	N/M	N/M
Total fee and other revenue	\$13,157	\$ 12,873	\$ 13,313	2%	(3)%
Fee revenue as a percentage of total revenue	74%	79%	81%		
AUC/A at period end (in trillions) (b)	\$ 47.8	\$ 44.3	\$ 46.7	8%	(5)%
AUM at period end (in billions) (c)	\$ 1,974	\$ 1,836	\$ 2,434	8%	(25)%

⁽a) Excludes seed capital gains (losses) related to consolidated investment management funds.

Fee revenue decreased 1% compared with 2022, primarily reflecting lower foreign exchange volatility, the mix of AUM flows and the impact of a prior year divestiture, partially offset by the abatement of money market fee waivers, net new business and the accelerated amortization of deferred costs for depositary receipts services related to Russia in the first quarter of 2022.

Investment and other revenue increased \$367 million in 2023 compared with 2022, primarily reflecting the net loss from repositioning the securities portfolio in the fourth quarter of 2022, partially offset by the reduction in the fair value of a contingent consideration receivable related to a prior year divestiture in the fourth quarter of 2023.

Investment services fees

Investment services fees increased 4% compared with 2022, primarily reflecting the abatement of money market fee waivers, net new business, the accelerated amortization of deferred costs for depositary receipts services related to Russia recorded in the first quarter of 2022, higher clearance volumes and collateral management balances and higher fees on sweep

balances, partially offset by lower client activity, and lost business in Pershing.

AUC/A totaled \$47.8 trillion at Dec. 31, 2023, an increase of 8% compared with Dec. 31, 2022, primarily reflecting higher market values. AUC/A consisted of 35% equity securities and 65% fixed-income securities at Dec. 31, 2023 and 33% equity securities and 67% fixed-income securities at Dec. 31, 2022.

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 decreased 7% compared with 2022, primarily reflecting the impact of a prior year divestiture and the mix of AUM flows, partially offset by the abatement of money market fee waivers.

Performance fees were \$81 million in 2023 and \$75 million in 2022. On a constant currency basis (Non-GAAP), investment management and performance fees decreased 7% compared with 2022. See

⁽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 of \$1.7 trillion at Dec. 31, 2023, \$1.5 trillion at Dec. 31, 2022 and \$1.7 trillion at Dec. 31, 2021.

⁽c) Excludes assets managed outside of the Investment and Wealth Management business segment. N/M – Not meaningful.

"Supplemental Information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 111 for the reconciliation of Non-GAAP measures.

AUM was \$2.0 trillion at Dec. 31, 2023, an increase of 8% compared with Dec. 31, 2022, primarily reflecting higher market values and the favorable impact of a weaker U.S. dollar, partially offset by cumulative net outflows.

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 2023, foreign exchange revenue decreased 23% compared with 2022, primarily reflecting lower volatility and 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 10% in 2023 compared with 2022, primarily reflecting higher fees on commitments and standby letters of credit, partially offset by lower 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 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 \$148 million in 2023 compared with \$130 million in 2022, driven by the abatement of money market fee waivers. 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 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. Investments in renewable energy generate losses in investment and other revenue that are more than offset by benefits and credits recorded to the provision for income taxes. 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 Mellon 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				
(in millions)	2023	2022		2021
Income (loss) from consolidated investment management funds	\$ 30	\$ (42)	\$	32
Seed capital gains (losses) (a)	29	(37)		40
Other trading revenue	231	149		6
Renewable energy investment (losses)	(167)	(164)		(201)
Corporate/bank-owned life insurance	118	128		140
Other investment gains (b)	47	159		159
Disposal (losses) gains	(6)	26		13
Expense reimbursements from joint venture	117	108		96
Other (loss) income	(46)	34		46
Net securities (losses) gains	(68)	(443) (c)	5
Total investment and other revenue	\$ 285	\$ (82)	\$	336

- (a) Includes gains (losses) on investments in BNY Mellon funds which hedge deferred incentive awards.
- (b) Includes strategic equity, private equity and other investments.
- (c) Includes a net loss of \$449 million related to the repositioning of the securities portfolio.

Investment and other revenue was \$285 million in 2023 compared with a loss of \$82 million in 2022. The increase primarily reflects the net loss from repositioning the securities portfolio in the fourth quarter of 2022, partially offset by the reduction in the fair value of a contingent consideration receivable related to a prior year divestiture in the fourth quarter of 2023.

The secret animal #2 is a



Net interest revenue

Net interest revenue					2023 vs.	2022 vs.
(dollars in millions)	2023	2022		2021	2022	2021
Net interest revenue	\$ 4,345	\$ 3,504	\$	2,618	24%	34%
Add: Tax equivalent adjustment	2	11		13	N/M	N/M
Net interest revenue on a fully taxable equivalent ("FTE") basis – Non-GAAP (a)	\$ 4,347	\$ 3,515	\$	2,631	24%	34%
Average interest-earning assets	\$ 348,160	\$ 362,180	\$:	387,023	(4)%	(6)%
Net interest margin	1.25%	0.97%		0.68%	28 bps	29 bps
Net interest margin (FTE) – Non-GAAP (a)	1.25%	0.97%		0.68%	28 bps	29 bps

⁽a) Net interest revenue (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 revenue increased 24% compared with 2022, primarily reflecting higher interest rates, partially offset by changes in the balance sheet size and mix.

Net interest margin increased 28 basis points compared with 2022. The increase primarily reflects the factors mentioned above.

Average interest-earning assets decreased 4% compared with 2022. The decrease primarily reflects lower securities and loan balances and interest-bearing deposits with banks, partially offset by higher interest-bearing deposits with the Federal Reserve and other central banks.

Average non-U.S. dollar deposits comprised approximately 25% of our average total deposits in 2023 and 2022. Approximately 45% of the average non-U.S. dollar deposits in 2023 and 40% in 2022 were euro-denominated.

Net interest revenue in 2024 will largely depend on the level and mix of client deposits. Based on market implied forward interest rates as of Dec. 31, 2023, we expect net interest revenue for 2024 to decrease when compared with 2023.

Average balances and interest rates		2023			2022	
	Average		Average	Average	T., 4 4	Average
(dollars in millions)	balance	Interest	rate	balance	Interest	rate
Assets						
Interest-earning assets:						
Interest-bearing deposits with the Federal Reserve and other central banks:	6 50 403	6 2 005	5 100/	e 46.270	e 010	1.750/
Domestic offices	\$ 59,492	\$ 3,085	5.19%	\$ 46,270	\$ 810	1.75%
Foreign offices	44,412	1,456	3.28	51,172	209	0.41
Total interest-bearing deposits with the Federal Reserve and other central banks	103,904	4,541	4.37	97,442	1,019	1.05
Interest-bearing deposits with banks	13,620	523	3.84	16,826	221	1.31
Federal funds sold and securities purchased under resale agreements (a)	26,077	7,141	27.38	24,953	1,200	4.81
Loans: Domestic offices	50 497	2 662	6.16	62.640	1 070	3.00
Foreign offices	59,487 4,609	3,663 253	6.16 5.49	62,640 5,185	1,878 121	2.33
Total loans (b)	64,096	3,916	6.11	67,825	1,999	2.95
Securities: U.S. government obligations	33,434	1,021	3.05	40,583	607	1.49
U.S. government congations	60,586	1,695	2.80	64,041	1,157	1.49
Other securities:	00,300	1,073	2.00	04,041	1,137	1.01
Domestic offices (c)	17,168	803	4.68	18,979	629	3.31
Foreign offices	23,505	695	2.96	26,283	154	0.59
Total other securities (c)	40,673	1,498	3.68	45,262	783	1.73
Total investment securities (c)			3.13	149,886	2,547	1.70
	134,693 5,770	4,214 315	5.46		-	2.73
Trading securities (primarily domestic) (c)				5,248	143	
Total securities (c)	140,463	4,529	3.22	155,134	2,690	1.73
Total interest-earning assets (c)	\$ 348,160	\$20,650	5.93%	\$ 362,180	\$ 7,129	1.97%
Noninterest-earning assets	58,790			64,721		
Total assets	\$ 406,950			\$ 426,901		
Liabilities and equity						
Interest-bearing liabilities:						
Interest-bearing deposits:						
Domestic offices	\$ 123,513	\$ 4,703	3.81%	\$ 111,491	\$ 980	0.88%
Foreign offices	88,829	2,421	2.73	101,916	607	0.60
Total interest-bearing deposits	212,342	7,124	3.35	213,407	1,587	0.74
Federal funds purchased and securities sold under repurchase agreements (a)	20,540	6,699	32.62	12,940	934	7.21
Trading liabilities	3,396	156	4.60	3,432	68	1.98
Other borrowed funds:						
Domestic offices	676	44	6.49	181	7	4.12
Foreign offices	426	3	0.74	324	2	0.51
Total other borrowed funds	1,102	47	4.27	505	9	1.80
Commercial paper	5	_	4.81	5	_	2.06
Payables to customers and broker-dealers	14,449	566	3.91	17,111	156	0.91
Long-term debt	31,021	1,711	5.51	27,448	860	3.13
Total interest-bearing liabilities	\$ 282,855	\$16,303	5.76%	\$ 274,848	\$ 3,614	1.31%
Total noninterest-bearing deposits	59,227			85,652		
Other noninterest-bearing liabilities	24,106			25,278		
Total liabilities	366,188			385,778		
Total The Bank of New York Mellon Corporation shareholders' equity	40,701			41,013		
Noncontrolling interests	61			110		
Total liabilities and equity	\$ 406,950			\$ 426,901		
Net interest revenue (FTE) – Non-GAAP $(c)(d)$		\$ 4,347	<u> </u>		\$ 3,515	
Net interest margin (FTE) – Non-GAAP $(c)(d)$			1.25%			0.97%
Less: Tax equivalent adjustment		2			11	
Net interest revenue – GAAP		\$ 4,345			\$ 3,504	
110t interest revenue – GAAI						0.050/
Net interest revenue – GAAP Net interest margin – GAAP			1.25%			0.97%
	24%		1.25%	26%		0.97%

⁽a) Includes the average impact of offsetting under enforceable netting agreements of approximately \$111 billion in 2023 and \$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 5.22% for 2023 and 1.77% for 2022, and the rate on federal funds purchased and securities sold under repurchase agreements would have been 5.10% for 2023 and 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 \$1 million in 2023 and \$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% for both 2023 and 2022.

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

Average balances and interest rates		2021			
(dollars in millions)	Average balance	Inte	erest	Average rate	
Assets	balance	11110	JICST	Tau	
Interest-earning assets:					
Interest-bearing deposits with the Federal Reserve and other central banks:					
Domestic offices	\$ 47,070	\$	60	0.13%	
Foreign offices	66,276		137)	(0.21)	
Total interest-bearing deposits with the Federal Reserve and other central banks	113,346		(77)	(0.07)	
Interest-bearing deposits with banks	20,757		48	0.23	
Federal funds sold and securities purchased under resale agreements (a)	28,530		120	0.42	
Loans:	20,000			02	
Domestic offices	55,073		892	1.62	
Foreign offices	5,741		66	1.15	
Total loans (b)	60,814		958	1.58	
Securities:	00,014		750	1.50	
U.S. government obligations	34,383		261	0.76	
U.S. government agency obligations	72,552		985	1.36	
Other securities:	72,002		, 00	1.50	
Domestic offices (c)	19.768		387	1.95	
Foreign offices	30,183		123	0.41	
Total other securities (c)	49,951		510	1.02	
Total investment securities (c)	156,886		756	1.12	
Trading securities (primarily domestic) (c)	6,690	1,	53	0.80	
5 d , ///					
Total securities (c)	163,576		,809	1.11	
Total interest-earning assets (c)	\$ 387,023	\$ 2,	,858	0.74%	
Noninterest-earning assets	65,209				
Total assets	\$ 452,232				
Liabilities and equity					
Interest-bearing liabilities:					
Interest-bearing deposits:					
Domestic offices	\$ 124,716	\$	(27)	(0.02)%	
Foreign offices	112,493	(148)	(0.13)	
Total interest-bearing deposits	237,209		175)	(0.07)	
Federal funds purchased and securities sold under repurchase agreements (a)	13,716		(4)	(0.03)	
Trading liabilities	2,590		8	0.31	
Other borrowed funds:	,				
Domestic offices	160		5	2.99	
Foreign offices	223		3	1.48	
Total other borrowed funds	383		8	2.11	
Commercial paper	3		_	0.07	
Payables to customers and broker-dealers	2		(2)	(0.01)	
Payables to customers and broker-dealers	16.887		392	1.52	
•	16,887 25,788				
Long-term debt	25,788	\$	227		
Long-term debt Total interest-bearing liabilities	25,788 \$ 296,576	\$	227	0.08%	
Long-term debt Total interest-bearing liabilities Total noninterest-bearing deposits	25,788 \$ 296,576 86,606	\$	227	0.08%	
Long-term debt Total interest-bearing liabilities Total noninterest-bearing deposits Other noninterest-bearing liabilities	25,788 \$ 296,576 86,606 24,381	\$	227	0.08%	
Long-term debt Total interest-bearing liabilities Total noninterest-bearing deposits Other noninterest-bearing liabilities Total liabilities	25,788 \$ 296,576 86,606 24,381 407,563	\$	227	0.08%	
Long-term debt Total interest-bearing liabilities Total noninterest-bearing deposits Other noninterest-bearing liabilities Total liabilities Total The Bank of New York Mellon Corporation shareholders' equity	25,788 \$ 296,576 86,606 24,381 407,563 44,358	\$	227	0.08%	
Long-term debt Total interest-bearing liabilities Total noninterest-bearing deposits Other noninterest-bearing liabilities Total liabilities Total The Bank of New York Mellon Corporation shareholders' equity Noncontrolling interests	25,788 \$ 296,576 86,606 24,381 407,563 44,358 311	\$	227	0.08%	
Long-term debt Total interest-bearing liabilities Total noninterest-bearing deposits Other noninterest-bearing liabilities Total liabilities Total The Bank of New York Mellon Corporation shareholders' equity Noncontrolling interests Total liabilities and equity	25,788 \$ 296,576 86,606 24,381 407,563 44,358			0.08%	
Long-term debt Total interest-bearing liabilities Total noninterest-bearing deposits Other noninterest-bearing liabilities Total liabilities Total The Bank of New York Mellon Corporation shareholders' equity Noncontrolling interests Total liabilities and equity Net interest revenue (FTE) – Non-GAAP (c)(d)	25,788 \$ 296,576 86,606 24,381 407,563 44,358 311		631		
Long-term debt Total interest-bearing liabilities Total noninterest-bearing deposits Other noninterest-bearing liabilities Total liabilities Total The Bank of New York Mellon Corporation shareholders' equity Noncontrolling interests Total liabilities and equity Net interest revenue (FTE) – Non-GAAP (c)(d) Net interest margin (FTE) – Non-GAAP (c)(d)	25,788 \$ 296,576 86,606 24,381 407,563 44,358 311		631		
Long-term debt Total interest-bearing liabilities Total noninterest-bearing deposits Other noninterest-bearing liabilities Total liabilities Total The Bank of New York Mellon Corporation shareholders' equity Noncontrolling interests Total liabilities and equity Net interest revenue (FTE) – Non-GAAP (c)(d) Net interest margin (FTE) – Non-GAAP (c)(d) Less: Tax equivalent adjustment	25,788 \$ 296,576 86,606 24,381 407,563 44,358 311	\$ 2,	631		
Long-term debt Total interest-bearing liabilities Total noninterest-bearing deposits Other noninterest-bearing liabilities Total liabilities Total The Bank of New York Mellon Corporation shareholders' equity Noncontrolling interests Total liabilities and equity Net interest revenue (FTE) – Non-GAAP (c)(d) Net interest margin (FTE) – Non-GAAP (c)(d) Less: Tax equivalent adjustment Net interest revenue – GAAP	25,788 \$ 296,576 86,606 24,381 407,563 44,358 311	\$ 2,	631	0.68%	
Long-term debt Total interest-bearing liabilities Total noninterest-bearing deposits Other noninterest-bearing liabilities Total liabilities Total The Bank of New York Mellon Corporation shareholders' equity Noncontrolling interests Total liabilities and equity Net interest revenue (FTE) – Non-GAAP (c)(d) Net interest margin (FTE) – Non-GAAP (c)(d) Less: Tax equivalent adjustment Net interest revenue – GAAP Net interest margin – GAAP	25,788 \$ 296,576 86,606 24,381 407,563 44,358 311	\$ 2,	631		
Long-term debt Total interest-bearing liabilities Total noninterest-bearing deposits Other noninterest-bearing liabilities Total liabilities Total The Bank of New York Mellon Corporation shareholders' equity Noncontrolling interests Total liabilities and equity Net interest revenue (FTE) – Non-GAAP (c)(d) Net interest margin (FTE) – Non-GAAP (c)(d) Less: Tax equivalent adjustment Net interest revenue – GAAP	25,788 \$ 296,576 86,606 24,381 407,563 44,358 311	\$ 2,	631	0.68%	

⁽a) Includes the average impact of offsetting under enforceable netting agreements of approximately \$45 billion in 2021. 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 0.16%, and the rate on federal funds purchased and securities sold under repurchase agreements would have been (0.01)% for 2021. 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 2021. 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 2021.

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

⁽e) Includes the Cayman Islands branch office, which existed through August 2021.

Noninterest expense

Noninterest expense				2023 vs.	2022 vs.
_(dollars in millions)	2023	2022	2021	2022	2021
Staff	\$ 7,095 \$	6,800 \$	6,337	4%	7%
Software and equipment	1,817	1,657	1,478	10	12
Professional, legal and other purchased services	1,527	1,527	1,459	_	5
Net occupancy	542	514	498	5	3
Sub-custodian and clearing	475	485	505	(2)	(4)
Distribution and servicing	353	343	298	3	15
Business development	183	152	107	20	42
Bank assessment charges	788	126	133	N/M	(5)
Goodwill impairment	_	680	_	N/M	N/M
Amortization of intangible assets	57	67	82	(15)	(18)
Other	458	659	617	(31)	7
Total noninterest expense	\$ 13,295 \$	13,010 \$	11,514	2%	13%
Full-time employees at year-end	53,400	51,700	49,100	3%	5%

Total noninterest expense increased 2% compared with 2022, primarily reflecting a \$632 million accrual for the FDIC special assessment, higher investments and revenue-related expenses, as well as inflation, partially offset by the impacts of the 2022 goodwill impairment in the Investment Management reporting unit, efficiency savings and a prior year divestiture. Excluding notable items, noninterest expense increased 3% (Non-GAAP). The investments in growth, infrastructure and efficiency initiatives are primarily included in staff, software and equipment, and professional, legal and other purchased services expenses. See "Supervision and Regulation -Deposit Insurance" on page 69 for information on the FDIC special assessment. See "Supplemental Information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 111 for the reconciliation of the Non-GAAP measure.

We expect total noninterest expense for 2024 to decrease compared with 2023, primarily reflecting the impact of notable expense items recorded in 2023, including the FDIC special assessment, severance expense and litigation reserves. Excluding the impact of notable items, total noninterest expense is expected to be flat in 2024 compared with 2023.

Inco The secret kitchen appliance is a



BNY Mellon recorded an income tax provision of \$800 million (19.6% effective tax rate) in 2023. The income tax provision was \$768 million (23.1% effective tax rate) in 2022. Excluding notable items, the income tax provision was \$930 million (19.1% effective tax rate) (Non-GAAP) in 2022. See "Supplemental Information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 111 for the reconciliation of the Non-GAAP measure. 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 business will track their economic performance.

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. There were no reclassification or organizational changes in 2023.

The results of our business segments may be influenced by client and other activities that vary by quarter. In the first quarter, long-term stock awards for retirement-eligible employees vest which increases staff expense. The timing of our annual employee merit increases also impacts staff expense. In 2023, the merit increase was effective at the beginning of the second quarter, compared with prior years when it was effective at the beginning of the third quarter. For 2024, the merit increase will be effective in March, thus partially impacting the first quarter and second quarter 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 the global market fluctuations. At Dec. 31, 2023, 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 \$0.04 to \$0.07.

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)		2023		2022		2021	2023 vs. 2022	2022 vs. 2021
Revenue:								
Investment services fees:								
Asset Servicing	\$	3,898	\$	3,918	\$	3,876	(1)%	1%
Issuer Services		1,121		1,009		1,061	11	(5)
Total investment services fees		5,019		4,927		4,937	2	_
Foreign exchange revenue		488		584		574	(16)	2
Other fees (a)		215		202		113	6	79
Total fee revenue		5,722		5,713		5,624	_	2
Investment and other revenue		333		291		194	N/M	N/M
Total fee and other revenue		6,055		6,004		5,818	1	3
Net interest revenue		2,569		2,028		1,426	27	42
Total revenue		8,624		8,032		7,244	7	11
Provision for credit losses		99		8		(134)	N/M	N/M
Noninterest expense (excluding amortization of intangible assets)		6,345		6,266		5,820	1	8
Amortization of intangible assets		31		33		32	(6)	3
Total noninterest expense		6,376		6,299		5,852	1	8
Income before income taxes	\$	2,149	\$	1,725	\$	1,526	25%	13%
Pre-tax operating margin Securities lending revenue (b)	\$	25% 189	\$	21% 182	\$	21% 173	4%	5%
Total revenue by line of business:								
Asset Servicing	\$	6,638	\$	6,323	\$	5,699	5%	11%
Asset Servicing Issuer Services	Ф	1,986	Ф	1,709	Ф	1,545	16	1176
Total revenue by line of business	<u> </u>	8,624	\$	8,032	\$	7,244	7%	11%
·	Ψ	0,024	Ψ	0,032	Ψ	7,211	7 70	11/0
Selected average balances:	Φ.	11 207	Ф	11 245	Φ.	0.756	0/	200/
Average loans		11,207		11,245	\$	8,756	<u>_%</u>	28%
Average deposits	\$1	68,411	\$	183,990	\$ 2	200,482	(8)%	(8)%
Selected metrics:								
AUC/A at period end (in trillions) (c)	\$	34.2	\$	31.4	\$	34.6	9%	(9)%
Market value of securities on loan at period end (in billions) (d)	\$	450	\$	449	\$	447	<u>%</u>	%
<u>Issuer Services</u> :								
Total debt serviced at period end (in trillions)	\$	13.3	\$	12.6	\$	12.6	6%	%
Number of sponsored Depositary Receipts programs at period end		543		589		656	(8)%	(10)%
(a) Other food primarily includes financing related food								

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

 $N/M-Not\ meaningful.$



⁽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 \$1.7 trillion at Dec. 31, 2023, \$1.5 trillion at Dec. 31, 2022 and \$1.7 trillion at Dec. 31, 2021.

⁽d) Represents the total amount of securities on loan in our agency securities lending program. Excludes securities for which BNY Mellon acts as agent on behalf of CIBC Mellon clients, which totaled \$63 billion at Dec. 31, 2023, \$68 billion at Dec. 31, 2022 and \$71 billion at Dec. 31, 2021.

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 \$34.2 trillion of AUC/A at Dec. 31, 2023. 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 frontto-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 as well as 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 \$4.9 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 expect to continue developing our digital asset capabilities and to work closely with clients to address their evolving digital asset needs. As of and for the year ended Dec. 31, 2023, our Digital Asset Custody platform and related initiative 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 \$34.2 trillion increased 9% compared with Dec. 31, 2022, primarily reflecting higher market values.

Total revenue of \$8.6 billion increased 7% compared with 2022. The drivers of total revenue by line of business are indicated below.

Asset Servicing revenue of \$6.6 billion increased 5% compared with 2022, primarily reflecting higher net interest revenue, net new business and the abatement of money market fee waivers, partially offset by lower foreign exchange revenue and client activity.

Issuer Services revenue of \$2.0 billion increased 16% compared with 2022, primarily reflecting higher net interest revenue, the accelerated amortization of deferred costs for depositary receipts services related to Russia recorded in 2022, net new business and the abatement of money market fee waivers.

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 \$6.4 billion increased 1% compared with 2022, primarily reflecting higher investments and the impact of inflation, partially offset by efficiency savings.

Market and Wealth Services business segment

(dollars in millions, unless otherwise noted)		2023		2022		2021	2023 vs. 2022	2022 vs. 2021
Revenue:		2020		2022		2021		2021
Investment services fees:								
Pershing	\$	2,007	\$	1,908	\$	1,737	5%	10%
Treasury Services	Ψ	691	Ψ	689	Ψ	662	_	4
Clearance and Collateral Management		1,090		971		918	12	6
Total investment services fees		3,788		3,568		3,317	6	8
Foreign exchange revenue		81		88		88	(8)	_
Other fees (a)		212		176		131	20	34
Total fee revenue		4,081		3,832		3,536	6	8
Investment and other revenue		63		40		47	N/M	N/M
Total fee and other revenue		4,144		3,872		3,583	7	8
Net interest revenue		1,712		1,410		1,158	21	22
Total revenue		5,856		5,282		4,741	11	11
Provision for credit losses		41		7		(67)	N/M	N/M
Noninterest expense (excluding amortization of intangible assets)		3,191		2,924		2,655	9	10
Amortization of intangible assets		6		8		21	(25)	(62)
Total noninterest expense		3,197		2,932		2,676	9	10
Income before income taxes	\$	2,618	\$	2,343	\$	2,132	12%	10%
Pre-tax operating margin		45%	•	44%		45%		
Total revenue by line of business:								
Pershing	\$	2,789	\$	2,537	\$	2,314	10%	10%
Treasury Services		1,611		1,483		1,293	9	15
Clearance and Collateral Management		1,456		1,262		1,134	15	11
Total revenue by line of business	\$	5,856	\$	5,282	\$	4,741	11%	11%
Selected average balances:								
Average loans	\$	37,502	\$	41,300	\$	38,344	(9)%	8%
Average deposits	\$	85,785	\$	91,749	\$	102,948	(7)%	(11)%
Selected metrics:								
AUC/A at period end (in trillions) (b)	\$	13.3	\$	12.7	\$	11.8	5%	8%
Pershing:								
AUC/A at period end (in trillions)	\$	2.5	\$	2.3	\$	2.6	9%	(12)%
Net new assets (U.S. platform) (in billions) (c)	\$	22	\$	121	\$	161	N/M	N/M
Average active clearing accounts (in thousands)		7,946		7,483		7,257	6%	3%
Treasury Services:								
Average daily U.S. dollar payment volumes	2	236,696		239,630		235,971	(1)%	2%
Clearance and Collateral Management:	•	F (F0	Φ.	5.205	C	4.260	70 /	2.407
Average tri-party collateral management balances (in billions)	\$	5,658	\$	5,285	\$	4,260	7%	24%

 $⁽a) \quad Other fees \ primarily \ include \ financing-related \ fees.$

⁽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 \$5.7 trillion serviced

globally including approximately \$4.6 trillion of the U.S. tri-party repo market at Dec. 31, 2023.

Review of financial results

AUC/A of \$13.3 trillion increased 5% compared with Dec. 31, 2022, primarily reflecting higher market values and net client inflows.

Total revenue of \$5.9 billion increased 11% compared with 2022. The drivers of total revenue by line of business are indicated below.

Pershing revenue of \$2.8 billion increased 10% compared with 2022, primarily reflecting the abatement of money market fee waivers, higher net interest revenue and higher fees on sweep balances, partially offset by lower client activity and lost business. Net new assets of \$22 billion in 2023 reflects the deconversion of a regional bank client that was acquired in May.

Treasury Services revenue of \$1.6 billion increased 9% compared with 2022, primarily reflecting higher net interest revenue.

Clearance and Collateral Management revenue of \$1.5 billion increased 15% compared with 2022, primarily reflecting higher net interest revenue, U.S. collateral management balances and U.S. government clearance volumes.

Noninterest expense of \$3.2 billion increased 9% compared with 2022, primarily reflecting higher investments and revenue-related expenses, as well as the impact of inflation, partially offset by efficiency savings.

Investment and Wealth Management business segment

(dollars in millions)	2023		2022	2021	2023 vs. 2022	2022 vs. 2021
Revenue:					-	
Investment management fees	\$ 2,971	\$	3,215	\$ 3,483	(8)%	(8)%
Performance fees	81		75	107	8	(30)
Investment management and performance fees (a)	3,052		3,290	3,590	(7)	(8)
Distribution and servicing fees	241		192	112	26	71
Other fees (b)	(214)		(133)	80	N/M	N/M
Total fee revenue	3,079		3,349	3,782	(8)	(11)
Investment and other revenue (c)	(102)		(27)	67	N/M	N/M
Total fee and other revenue (c)	2,977		3,322	3,849	(10)	(14)
Net interest revenue	166		228	193	(27)	18
Total revenue	3,143		3,550	4,042	(11)	(12)
Provision for credit losses	(4)		1	(13)	N/M	N/M
Noninterest expense (excluding goodwill impairment and amortization of intangible assets)	2,746		2,795	2,796	(2)	_
Goodwill impairment	_		680	_	N/M	N/M
Amortization of intangible assets	20		26	29	(23)	(10)
Total noninterest expense	2,766		3,501	2,825	(21)	24
Income before income taxes	\$ 381	\$	48	\$ 1,230	694% (d)	(96)%
Pre-tax operating margin	12%		1%	30%		
Adjusted pre-tax operating margin – Non-GAAP (e)	14%	(f)	2%	33%		
Total revenue by line of business:						
Investment Management	\$ 2,068	\$	2,390	\$ 2,834	(13)%	(16)%
Wealth Management	1,075		1,160	1,208	(7)	(4)
Total revenue by line of business	\$ 3,143	\$	3,550	\$ 4,042	(11)%	(12)%
Selected average balances:						
Average loans	\$ 13,718	\$	14,055	\$ 12,120	(2)%	16%
Average deposits	14,280		19,214	18,068	(26)%	6%

- (a) On a constant currency basis, investment management and performance fees decreased 7% (Non-GAAP) compared with 2022. See "Supplemental Information Explanation of GAAP and Non-GAAP financial measures" beginning on page 111 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 attributable to noncontrolling interests related to consolidated investment management funds.
- (d) Excluding notable items, income before income taxes decreased 28% (Non-GAAP) in 2023 compared with 2022 and 39% (Non-GAAP) in 2022 compared with 2021. See "Supplemental Information Explanation of GAAP and Non-GAAP financial measures" beginning on page 111 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 111 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 24% (Non-GAAP) in 2022. See "Supplemental Information Explanation of GAAP and Non-GAAP financial measures" beginning on page 111 for the reconciliation of these Non-GAAP measures.

N/M – Not meaningful.

AUM trends			
(in billions)	2023	2022	2021
AUM by product type (a):			
Equity	\$ 145	\$ 135	\$ 187
Fixed income	205	198	267
Index	459	395	467
Liability-driven investments	605	570	890
Multi-asset and alternative investments	170	153	228
Cash	390	385	395
Total AUM	\$1,974	\$1,836	\$2,434
Changes in AUM (a): Beginning balance of AUM Net inflows (outflows): Long-term strategies:	\$1,836	\$2,434	\$2,211
Equity	(12)	(18)	(12)
Fixed income	(4)	(21)	17
Liability-driven investments	12	78	36
Multi-asset and alternative investments	(9)	(11)	(2)
Total long-term active strategies (outflows) inflows Index	(13) (12)		39 (7)
Total long-term strategies (outflows) inflows	(25)		32
Short-term strategies:	_	(10)	5 0
Cash	5	(12)	70
Total net (outflows) inflows	(20)		102
Net market impact	121	(471)	143
Net currency impact	37	(113)	(22)
Divestiture		(32)	
Ending balance of AUM	\$1,974	\$1,836	\$2,434
Wealth Management client assets (b)	\$ 312	\$ 269	\$ 321

⁽a) Excludes assets managed outside of the Investment and Wealth Management business segment.

Business segment description

Our Investment and Wealth Management business segment consists of two distinc

The secret landmark is the

Dec. 31, 2023.

BNY Mellon 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 Mellon. 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 as follows: ARX, Dreyfus, Insight Investment, Mellon, Newton Investment Management and Walter Scott. BNY Mellon owns a noncontrolling interest in Siguler Guff.

In November 2022, BNY Mellon sold Alcentra. As part of the sale agreement, Investment Management will continue to offer Alcentra's capabilities in BNY Mellon's sub-advised funds and in select regions via its global distribution platform. BNY Mellon continues to provide Alcentra with ongoing asset servicing support. Additionally, Investment Management exclusively distributes Alcentra products in Japan.

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 responsibility for management and distribution of our U.S. mutual funds, ETFs and certain offshore money market funds.

BNY Mellon Wealth Management provides investment management, custody, wealth and estate planning, private banking services, investment servicing and information management. BNY Mellon Wealth Management has \$312 billion in client assets as of Dec. 31, 2023, 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.

⁽b) Includes AUM and AUC/A in the Wealth Management line of business.

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 organic 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 revenue 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 8% compared with Dec. 31, 2022, primarily reflecting higher market values and the favorable impact of a weaker U.S. dollar, partially offset by cumulative net outflows.

Net long-term strategy outflows were \$25 billion in 2023, driven by outflows of equity, index and multi-asset and alternative investments, partially offset by inflows of liability-driven investments. Short-term strategy inflows were \$5 billion in 2023.

Total revenue of \$3.1 billion decreased 11% compared with 2022. The drivers of total revenue by line of business are indicated below.

Investment Management revenue of \$2.1 billion decreased 13% compared with 2022, primarily reflecting the reduction in the fair value of a contingent consideration receivable and the impact of the prior year divestiture, as well as the mix of AUM flows, partially offset the abatement of money market fee waivers and seed capital gains.

Wealth Management revenue of \$1.1 billion decreased 7% compared with 2022, primarily reflecting changes in product mix and lower net interest revenue.

Revenue generated in the Investment and Wealth Management business segment included 33% from non-U.S. sources in 2023, compared with 35% in 2022.

Noninterest expense of \$2.8 billion decreased 21% compared with 2022, primarily reflecting the goodwill impairment in the Investment Management reporting unit in 2022, the impact of a prior year divestiture and efficiency savings, partially offset by higher investments and revenue-related expenses, as well as inflation.

Other segment

(in millions)	2023	2022	2021
Fee revenue	\$ (10) \$	61 \$	36
Investment and other revenue	(11)	(373)	15
Total fee and other revenue	(21)	(312)	51
Net interest expense	(102)	(162)	(159)
Total revenue	(123)	(474)	(108)
Provision for credit losses	(17)	23	(17)
Noninterest expense	956	278	161
(Loss) before income taxes	\$ (1,062) \$	(775) \$	(252)
Average loans and leases	\$ 1,669 \$	1,225 \$	1,594

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;
- renewable energy and other corporate investments; and
- certain business exits.

Revenue primarily reflects:

- net interest revenue (expense) and lease-related gains (losses) from leasing operations;
- net interest revenue (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, including renewable energy; 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 \$1.1 billion in 2023 compared with \$775 million in 2022.

Investment and other revenue increased \$362 million compared with 2022, primarily reflecting the net loss from repositioning the security portfolio recorded in 2022.

Noninterest expense increased \$678 million compared with 2022, primarily driven by 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 highnet-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, 2023, approximately 55% of our total employees (full-time and part-time employees) were based outside the U.S., with approximately 11,000 employees in EMEA, approximately 18,400 employees in APAC and approximately 800 employees in other global locations, primarily Brazil.

We are a leading global asset manager. Our international operations managed 51% of BNY

Mellon's AUM at Dec. 31, 2023 and 53% at Dec. 31, 2022.

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 revenue, noninterest expense and AUC/A and AUM. Conversely, if the U.S. dollar appreciates, the translated levels of fee revenue, net interest revenue, noninterest expense and AUC/A and AUM will be

secret drink is

lower

is			
	2023	2022	2021
Spot rate (at Dec. 31).			
British pound	\$ 1.2749	\$ 1.2096	\$ 1.3543
Euro	1.1046	1.0708	1.1373
Yearly average rate:			
British pound	\$ 1.2432	\$ 1.2375	\$ 1.3755
Euro	1.0813	1.0550	1.1994

International clients accounted for 36% of revenues in 2023 and 2022. Net income from international operations was \$2.0 billion in 2023, compared with \$1.7 billion in 2022.

In 2023, revenues from EMEA were \$4.1 billion, compared with \$4.0 billion in 2022. The 4% increase primarily reflects higher net interest revenue and net new business in the Securities Services and Market and Wealth Services business segments. The increase was partially offset by lower revenue in the Investment and Wealth Management business segment. The decrease in revenue in the Investment and Wealth Management business segment primarily reflects the impact of the prior year divestiture, mix of AUM flows and lower market values.

The Securities Services, Market and Wealth Services and Investment and Wealth Management business segments generated 60%, 21% and 19% of EMEA revenues, respectively. Net income from EMEA was \$1.1 billion in 2023, compared with \$880 million in 2022.

Revenues from APAC were \$1.3 billion in 2023, compared with \$1.1 billion in 2022. The 14% increase primarily reflects higher net interest revenue in the Securities Services and Market and Wealth Services business segments.

The Securities Services, Market and Wealth Services and Investment and Wealth Management business segments generated 56%, 32% and 12% of APAC revenues, respectively. Net income from APAC was \$547 million in 2023, compared with \$432 million in 2022.

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 Mellon's top 10 exposures by country (excluding the U.S.) as of Dec. 31, 2023, as well as certain countries with higher-risk profiles, and is presented on an internal risk management basis. 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, 2023	Inte	erest-bearing d	eposits							Total
(in billions)	Cent	ral banks	Banks	Len	ding (a)	Secu	rities (b)	(Other (c)	exposure
Top 10 country exposure:										
Germany	\$	16.9 \$	0.6	\$	0.8	\$	3.8	\$	0.3	\$ 22.4
United Kingdom ("UK")		10.9	0.7		1.4		3.0		2.3	18.3
Belgium		8.2	0.8		0.1		0.8		_	9.9
Canada		_	1.3		0.1		3.9		1.2	6.5
Netherlands		3.4	_		0.2		1.1		0.2	4.9
Japan		1.2	0.8		0.1		0.4		0.3	2.8
Luxembourg		0.1	_		1.4		0.1		1.2	2.8
South Korea		0.1	_		2.0		0.1		0.5	2.7
Australia			1.0		0.3		0.7		0.5	2.5
France			_		0.1		1.9		0.5	2.5
Total Top 10 country exposure	\$	40.8 \$	5.2	\$	6.5	\$	15.8	\$	7.0	\$ 75.3 (d)
Select country exposure:										
Brazil	\$	\$	0.2	\$	0.9	\$	0.1	\$	0.1	\$ 1.3
Russia		_	0.4 (e)	_		_		_	0.4

- (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 70% 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 Mellon has ceased new banking business in Russia and suspended investment management purchases of Russian securities. At Dec. 31, 2023, less than 0.1% of our AUC/A and less than 0.01% of our AUM consisted of Russian securities. We will continue to work with multinational clients that depend on our custody and record keeping 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, 2023, our total exposure to Israel was \$165 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 Companyspecific 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 collateraldependent. We generally individually evaluate nonperforming loans as well as loans that have been or are anticipated to be 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 which 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 \$83 million. Our multi-scenario based macroeconomic forecast used in determining the Dec. 31, 2023 allowance for credit losses consisted of three

scenarios. The baseline scenario reflects slightly increasing GDP growth, stable unemployment and declining commercial real estate prices through the end of 2024. The upside scenario reflects faster GDP growth, declining unemployment through the second quarter of 2024 before moderating and higher commercial real estate prices compared with the baseline. The downside scenario contemplates negative GDP growth through the first quarter of 2024 with subsequent stabilization through the third quarter of 2024, as well as rapidly increasing unemployment through 2024 and sharply lower commercial real estate prices than the baseline. At Dec. 31, 2023, we placed the most weight on our downside scenario, followed by the baseline scenario, with the remaining weighting placed on the upside scenario. From a sensitivity perspective, at Dec. 31. 2023, if we had applied 100% weighting to the downside scenario, the quantitative allowance for credit losses would have been approximately \$88 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 (\$16.3 billion at Dec. 31, 2023) and indefinite-lived intangible assets (\$2.6 billion at Dec. 31, 2023) 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 Mellon's business segments include six reporting units for which annual 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.

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 2023, we completed an interim goodwill impairment test of the Investment Management reporting unit, which had \$6.1 billion of allocated goodwill as of Dec. 31, 2023. 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, 2023 test, the fair value of the Investment Management reporting unit exceeded its carrying value by approximately 5%. We determined the fair value of the Investment Management reporting unit using an income approach based on management's projections as of Dec. 31, 2023. The discount rate applied to these cash flows was 10.5%.

As of Dec. 31, 2023, 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 2023, we performed our annual goodwill impairment test on the remaining five 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, 2023. 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 five 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, 2023) 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, however, a \$698 million indefinite-lived intangible asset related to customer relationships in the Investment Management business exceeded its carrying value by approximately 7%.

Other amortizing intangible assets (\$274 million at Dec. 31, 2023) 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, 2023, total assets were \$410 billion, compared with \$406 billion at Dec. 31, 2022. The increase in total assets was primarily driven by higher interest-bearing deposits with the Federal Reserve and other central banks and federal funds sold and securities purchased under resale agreements. partially offset by lower securities and interestbearing deposits with banks. Deposits totaled \$284 billion at Dec. 31, 2023, compared with \$279 billion at Dec. 31, 2022. The increase primarily reflects higher interest-bearing deposits in U.S. offices and non-U.S. offices, partially offset by lower noninterest bearing deposits (principally U.S. offices). Total interest-bearing deposit liabilities as a percentage of total interest-earning assets were 66% at Dec. 31, 2023 and 58% at Dec. 31, 2022.

At Dec. 31, 2023, available funds totaled \$158 billion and includes 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 \$138 billion at Dec. 31, 2022. Total

available funds as a percentage of total assets were 38% at Dec. 31, 2023 and 34% at Dec. 31, 2022. For additional information on our available funds, see "Liquidity and dividends."

Securities were \$126 billion, or 31% of total assets, at Dec. 31, 2023, compared with \$143 billion, or 35% of total assets, at Dec. 31, 2022. The decrease primarily reflects lower U.S. Treasury and non-U.S. government securities, partially offset by unrealized pre-tax gains. For additional information on our securities portfolio, see "Securities" and Note 4 of the Notes to Consolidated Financial Statements.

Loans were \$67 billion, or 16% of total assets, at Dec. 31, 2023, compared with \$66 billion, or 16% of total assets, at Dec. 31, 2022. Increases in nearly all loan portfolios were partially offset by lower overdrafts and wealth management loans. For additional information on our loan portfolio, see "Loans" and Note 5 of the Notes to Consolidated Financial Statements.

Long-term debt totaled \$31 billion at Dec. 31, 2023 and \$30 billion at Dec. 31, 2022. The increase primarily reflects issuances, partially offset by maturities and repurchases. 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, 2023 and Dec. 31, 2022. 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.
					I

Securities portfolio	Dec. 31,	2	2023			Fair value]	Ratings (a	:)	
	2022	chang		Dec. 31	, 2023	as a % of		%				BB+	
(dollars in millions)	Fair value	unreal gain (l		Amortized cost (a)	Fair value		Unrealized gain (loss)	Floating rate (b)	AAA/ AA-	A+/ A-	BBB+/ BBB-	and lower	Not rated
Agency residential mortgage-backed securities ("RMBS")	\$ 38,916	\$	796	\$ 43,197	\$ 39,333	91%	\$ (3,864)	21%	100%	%	%	<u> </u>	%
U.S. Treasury	41,503		623	27,316	26,476	97	(840)	62	100	_	_	_	_
Non-U.S. government (d)	22,361		342	21,135	20,543	97	(592)	42	94	3	2	1	_
Agency commercial mortgage-backed securities ("MBS")	11,864		214	11,602	11,010	95	(592)	45	100	_	_	_	_
Collateralized loan obligations ("CLOs")	6,300		123	7,125	7,119	100	(0	100	100			_	_
U.S. government agencies	6,115		137	7,199	6,780	94	(4)			W. L.		_	_
Foreign covered bonds (e)	5,776		93	6,489	6,317	97	(1		Continue			_	_
Non-agency commercial MBS	3,054		32	₃ Th (e secre	et object #	4 is a	111				_	_
Non-agency RMBS	2,060		24	1,909	1,766	92	(14			A Page 1		6	6
Other asset-backed securities ("ABS")	1,319		41	1,026	943	92	(8					_	_
Other	24		_	13	11	88	(2)	_	_	_	_	_	100
Total securities	\$139,292 <i>(f</i>	9 \$ 2,	,425	\$ 130,256	\$123,295	(f) 95%	\$ (6,961)	(f)(g) 44%	99%	1%	%	%	-%

- (a) Amortized cost reflects historical impairments, 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 Germany, France, UK, Canada, the Netherlands and Belgium.
- (e) Primarily consists of exposure to Canada, UK, Australia, Germany, Singapore and Norway.
- (f) Includes net unrealized gains on derivatives hedging securities available-for-sale (including terminated hedges) of \$2,678 million at Dec. 31, 2022 and net unrealized gain (including terminated hedges) of \$1,767 million at Dec. 31, 2023.

The fair value of our securities portfolio, including related hedges, was \$123.3 billion at Dec. 31, 2023, compared with \$139.3 billion at Dec. 31, 2022. The decrease primarily reflects lower U.S. Treasury and non-U.S. government securities, partially offset by unrealized pre-tax gains.

At Dec. 31, 2023, the securities portfolio had a net unrealized loss, including the impact of related hedges, of \$7.0 billion, compared with \$9.4 billion at Dec. 31, 2022. The decrease in the 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 \$78.6 billion at Dec. 31, 2023, net of hedges, or 64% of the securities portfolio, net of hedges. The fair value of the held-to-maturity securities totaled \$44.7 billion at Dec. 31, 2023, or 36% of the securities portfolio, net of hedges.

The unrealized loss (after-tax) on our available-forsale securities portfolio, net of hedges, included in accumulated other comprehensive income was \$1.6 billion at Dec. 31, 2023, compared with \$2.4 billion at Dec. 31, 2022. Net unrealized loss, including the impact of hedges, decreased as securities moved closer to maturity.

At Dec. 31, 2023, 99% of the securities in our portfolio were rated AAA/AA-, unchanged compared with Dec. 31, 2022.

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 amortizable purchase premium (net of discount) and net amortization related to the securities portfolio.

Amortizable purchase premium (net of discount) and net amortization of securities (a)			
(in millions)	2023	2022	2021
Amortizable purchase premium, net of discount	\$ 821	\$ 1,109	\$ 1,863
Net amortization	\$ 167	\$ 362	\$ 655

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

⁽g) At Dec. 31, 2023, includes pre-tax net unrealized losses of \$2,094 million related to available-for-sale securities, net of hedges, and \$4,867 related to held-to-maturity securities. The after-tax unrealized losses, net of hedges, related to available-for-sale securities is \$1,580 million and the after-tax equivalent related to held-to-maturity securities is \$3,711 million.

Equity investments

We have several equity investments recorded in other assets. These include equity method investments, including renewable energy, investments in qualified affordable housing projects, Federal Reserve Bank stock, seed capital and other investments. The following table presents the carrying values at Dec. 31, 2023 and Dec. 31, 2022.

Equity investments	 Dec	. 3	1,
(in millions)	2023		2022
Renewable energy investments	\$ 1,049	\$	871
Qualified affordable housing project investments	1,213		1,298
Equity method investments:			
CIBC Mellon	607		545
Siguler Guff	234		242
Other	32		16
Total equity method investments	873		803
Federal Reserve Bank stock	480		478
Other equity investments (a)	741		695
Seed capital (b)	232		218
Federal Home Loan Bank stock	7		6
Total equity investments	\$ 4,595	\$	4,369

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

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.

Renewable energy investments

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. The pre-tax losses on these investments are recorded in investment and other revenue on the consolidated income statement. The corresponding tax benefits and credits are recorded to the provision for income taxes on the consolidated income statement.

Loans

Total exposure – consolidated		Dec. 31, 2023					
(in billions)	Loans	Unfunded commitments	Total exposure		Loans	Unfunded commitments	Total exposure
Financial institutions	\$ 10.5	\$ 29.2 \$	39.7	\$	9.7	\$ 31.7	\$ 41.4
Commercial	2.1	11.4	13.5		1.7	11.7	13.4
Wealth management loans	9.1	0.5	9.6		10.3	0.6	10.9
Wealth management mortgages	9.1	0.3	9.4		9.0	0.2	9.2
Commercial real estate	6.8	3.4	10.2		6.2	3.9	10.1
Lease financings	0.6	_	0.6		0.7	_	0.7
Other residential mortgages	1.2	_	1.2		0.4	_	0.4
Overdrafts	3.1	_	3.1		4.8	_	4.8
Capital call financing	3.7	3.6	7.3		3.4	3.5	6.9
Other	2.7	_	2.7		3.0	_	3.0
Margin loans	18.0	_	18.0		16.9	_	16.9
Total	\$ 66.9	\$ 48.4 5	115.3	\$	66.1	\$ 51.6	\$ 117.7

At Dec. 31, 2023, total lending-related exposure was \$115.3 billion, a decrease of 2% compared with Dec. 31, 2022, primarily reflecting lower exposure in the financial institutions portfolio, lower overdrafts and lower exposure in the wealth management loans portfolio, partially offset by higher margin loans and other residential mortgage loans.

Our financial institutions and commercial portfolios comprise our largest concentrated risk. These portfolios comprised 46% of our total exposure at Dec. 31, 2023 and 47% at Dec. 31, 2022. Additionally, most of our overdrafts relate to financial institutions.

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

Financial institutions

The financial institutions portfolio is shown below.

Financial institutions	 Dec. 31, 2023							Dec. 31, 2022					
portfolio exposure		Unfunded		Total	% Inv.	% due			Unfunded		Total		
(dollars in billions)	Loans	commitments	ex	posure	grade	<1 yr.		Loans	commitments	ex	posure		
Securities industry	\$ 2.3	\$ 14.8	\$	17.1	91%	96%	\$	1.6	\$ 17.5	\$	19.1		
Asset managers	1.4	8.0		9.4	97	81		1.6	7.6		9.2		
Banks	6.4	1.4		7.8	84	96		6.1	1.5		7.6		
Insurance	0.1	3.9		4.0	100	13		0.1	3.8		3.9		
Government	_	0.2		0.2	100	43			0.2		0.2		
Other	0.3	0.9		1.2	98	47		0.3	1.1		1.4		
Total	\$ 10.5	\$ 29.2	\$	39.7	92%	83%	\$	9.7	\$ 31.7	\$	41.4		

The financial institutions portfolio exposure was \$39.7 billion at Dec. 31, 2023, a decrease of 4% compared with Dec. 31, 2022, primarily reflecting lower exposure in the securities industry portfolio.

Financial institution exposures are high-quality, with 92% of the exposures meeting the investment grade equivalent criteria of our internal credit rating classification at Dec. 31, 2023. 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 83% of the exposures expiring within one year. At Dec. 31, 2023, 19% of the exposure to financial institutions had an expiration within 90 days, compared with 17% at Dec. 31, 2022.

In addition, 62% of the financial institutions exposure is secured at Dec. 31, 2023. For example, securities

industry clients and asset managers often borrow against marketable securities held in custody.

At Dec. 31, 2023, the secured intraday credit provided to dealers in connection with their tri-party repo activity totaled \$13.5 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 34% of the exposure in the financial institutions portfolio and are reviewed and reapproved annually.

The asset managers portfolio exposure is highquality, with 97% of the exposures meeting our investment grade equivalent ratings criteria as of Dec. 31, 2023. 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 96% due in less than one year. The investment grade percentage of our banks exposure was 84% at Dec. 31, 2023, compared with 86% at Dec. 31, 2022. Our non-investment grade exposures are primarily trade finance loans in Brazil.

Commercial

The commercial portfolio is presented below.

Commercial portfolio exposure	Dec. 31, 2023								Dec. 31, 2022				
		Un	funded		Total	% Inv.	% due			Unfunded	d Total		
(dollars in billions)	Loans	commi	itments	ex	posure	grade	<1 yr.		Loans	commitments	ex	posure	
Services and other	\$ 1.2	\$	3.4	\$	4.6	98%	41%	\$	0.8	\$ 3.2	\$	4.0	
Manufacturing	0.5		3.6		4.1	96	19		0.5	4.1		4.6	
Energy and utilities	0.4		3.7		4.1	89	6		0.3	3.7		4.0	
Media and telecom	_		0.7		0.7	88	3		0.1	0.7		0.8	
Total	\$ 2.1	\$	11.4	\$	13.5	94%	22%	\$	1.7	\$ 11.7	\$	13.4	

The commercial portfolio exposure was \$13.5 billion at Dec. 31, 2023, an increase of 1% from Dec. 31, 2022, primarily driven by higher exposure in the services and other portfolios, partially offset by lower exposure in the manufacturing 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	I	Dec. 31,	
	2023	2022	2021
Financial institutions	92%	95%	96%
Commercial	94%	95%	94%

Wealth management loans

Our wealth management loan exposure was \$9.6 billion at Dec. 31, 2023, compared with \$10.9 billion at Dec. 31, 2022. 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 \$9.4 billion at Dec. 31, 2023, compared with \$9.2 billion at Dec. 31, 2022. 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, 2023.

At Dec. 31, 2023, the wealth management mortgage portfolio consisted of the following geographic concentrations: California – 21%; New York – 14%; Florida – 11%; Massachusetts – 8%; and other – 46%.

The secret animal #5 is a



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	Dec. 31	, 2022	
(dollars in billions)	Total exposure	Percentage secured (a)	Total exposure	Percentage secured (a)
Residential	\$ 4.3	88%	\$ 4.1	85%
Office	2.6	74	2.8	75
Retail	0.8	63	0.9	58
Mixed-use	0.8	31	0.8	33
Hotels	0.6	40	0.6	42
Healthcare	0.5	57	0.4	49
Other	0.6	71	0.5	66
Total commercial real estate	\$ 10.2	73%	\$ 10.1	71%

⁽a) Represents the percentage of secured exposure in each asset class.

Our commercial real estate exposure totaled \$10.2 billion at Dec. 31, 2023 and \$10.1 billion at Dec. 31, 2022. 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, 2023, the unsecured portfolio consisted of real estate investment trusts ("REITs") and real estate operating companies, which are both primarily investment grade.

At Dec. 31, 2023, our commercial real estate portfolio consisted of the following concentrations: New York metro -36%; REITs and real estate operating companies -27%; and other -37%.

Lease financings

The lease financings portfolio exposure totaled \$599 million at Dec. 31, 2023 and \$657 million at Dec. 31, 2022. At Dec. 31, 2023, nearly all of leasing exposure was investment grade, or investment grade equivalent, and primarily 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 \$1.2 billion at Dec. 31, 2023 and \$345 million at Dec. 31, 2022.

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 \$18.0 billion at Dec. 31, 2023 and \$16.9 billion at Dec. 31, 2022 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 \$7 billion at Dec. 31, 2023 and \$6 billion at Dec. 31, 2022 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, 2023 (in millions)	Within 1 year	Between 1 and 5 years	Between 5 and 15 years	After 15 years	Total
Commercial	\$ 1,472 \$	579	\$ 61 3	\$	A .
Commercial real estate	1,708	3,909	1 1/12		
Financial institutions	8,953	1,568	The secret f	ruit is a	
Lease financings	1	258	340	1	
Wealth management loans	8,634	273	202		
Wealth management mortgages	_	20	375	8,736	9,131
Other residential mortgages	_	5	137	1,024	1,166
Overdrafts	3,053	_	_	_	3,053
Capital call financing	2,469	1,231	_	_	3,700
Other	2,712	5	_	_	2,717
Margin loans	17,983	28	_	_	18,011
Total	\$ 46,985 \$	7,876	\$ 2,258	\$ 9,760 \$	66,879

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, 2023			
(in millions)	Fixed rates	Floating rates	Total
Commercial	\$ 61 \$	579 \$	640
Commercial real estate	112	4,940	5,052
Financial institutions		1,568	1,568
Lease financings	598	_	598
Wealth management loans	10	465	475
Wealth management mortgages	3,821	5,310	9,131
Other residential mortgages	1,142	24	1,166
Capital call financing		1,231	1,231
Other		5	5
Margin Loans	_	28	28
Total	\$ 5,744 \$	3 14,150 \$	19,894

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)		2023		2022
Beginning balance of allowance for credit losses	\$	292	\$	260
Provision for credit losses		119		39
Charge-offs:				
Loans:				
Other residential mortgages		(3)		
Other financial instruments		(2)		(11)
Total charge-offs		(5)		(11)
Recoveries:				
Loans:				
Commercial		1		
Other residential mortgages		2		4
Other		5		
Other financial instruments				
Total recoveries		8		4
Net recoveries (charge-offs)		3		(7)
Ending balance of allowance for credit losses	\$	414		292
Allowance for loan losses	\$	303	\$	
Allowance for lending-related commitments		87		78
Allowance for financial instruments (a)		24		38
Total allowance for credit losses	\$	414	\$	
Total loans	\$	66,879	\$,
Average loans outstanding	\$	64,096	\$	07,020
Net recoveries (charge-offs) of loans to average loans outstanding		_ %		(0.01)%
Net recoveries (charge-offs) of loans to total allowance for loan losses and lending-related commitments		0.77		(2.76)
Allowance for loan losses as a percentage of total loans		0.45		0.27
Allowance for loan losses and lending-related commitments as a percentage of total loans		0.58		0.38
Net (charge-offs) to average loans by loan category: (b)		(0.11)0/		NT/A
Other residential mortgages:	ø	(0.11)%		N/A
Net (charge-offs) during the year	\$	(1)	<i>(</i> L)	N/A
Average loans outstanding	Þ	908	<i>(b)</i>	N/A

⁽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.

The provision for credit losses was \$119 million in 2023, 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.

⁽b) Average loans based on month-end balances.

N/A-Not applicable. There were no net charge-offs in 2022.

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,						
	2023				202	22	
(dollars in millions)		\$	%		\$	%	
Commercial real estate	\$	325	83%	\$	184	72%	
Commercial		27	7		18	7	
Financial institutions		19	4		24	9	
Wealth management mortgages		9	2		12	5	
Other residential mortgages		4	1		8	3	
Capital call financing		4	1		6	2	
Wealth management loans		1	1		1	1	
Lease financings		1	1		1	1	
Total	\$	390	100%	\$	254	100%	

(a) The allowance allocated to margins loans, overdrafts and other loans was insignificant at both Dec. 31, 2023 and Dec. 31, 2022. 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)		2023	2022		
Nonperforming loans:					
Commercial real estate	\$	189	\$	54	
Other residential mortgages		24		31	
Wealth management mortgages		19		22	
Total nonperforming loans		232		107	
Other assets owned	5			2	
Total nonperforming assets	\$	237	\$	109	
Nonperforming assets ratio		0.35%		0.16%	
Allowance for loan losses/ nonperforming loans		130.6		164.5	
Allowance for loan losses/ nonperforming assets		127.8		161.5	
Allowance for credit losses/ nonperforming loans	168.1		237.		
Allowance for credit losses/ nonperforming assets		164.6		233.0	

Nonperforming assets increased \$128 million in 2023 compared with 2022, primarily reflecting higher nonperforming commercial real estate loans.

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 \$283.7 billion at Dec. 31, 2023, an increase of 2%, compared with \$279.0 billion at Dec. 31, 2022. The increase primarily reflects higher interest-bearing deposits in U.S. offices and non-U.S. offices, partially offset by lower non-interest bearing deposits (principally U.S. offices).

Noninterest-bearing deposits were \$58.3 billion at Dec. 31, 2023, compared with \$78.0 billion at Dec. 31, 2022, reflecting client activity. Interest-bearing deposits were primarily demand deposits and totaled \$225.4 billion at Dec. 31, 2023, compared with \$201.0 billion at Dec. 31, 2022.

The aggregate amount of deposits by foreign customers in domestic offices was \$55.1 billion at Dec. 31, 2023 and \$61.2 billion at Dec. 31, 2022.

Deposits in foreign offices totaled \$96.6 billion at Dec. 31, 2023 and \$98.3 billion at Dec. 31, 2022. These deposits were primarily overnight deposits.

Uninsured deposits are the portion of domestic deposits accounts that exceed the FDIC insurance limit. Uninsured deposits in domestic deposit accounts are generally demand deposits and totaled \$168.4 billion at Dec. 31, 2023 and \$156.6 billion at Dec. 31, 2022.

The following table presents the amount of uninsured domestic and foreign time deposits disaggregated by time remaining until maturity.

Uninsured time deposits at Dec. 31, 2023							
(in millions)	Don	Domestic					
Less than 3 months	\$	331	\$	661			
3 to 6 months		161		5			
6-12 months		154		9			
Over 12 months		1		_			
Total	\$	647	\$	675			

Short-term borrowings

We fund ourselves primarily through deposits and, to a lesser extent, other short-term borrowings and longterm debt. Short-term borrowings consist of federal funds purchased and securities sold under repurchase agreements, payables to customers and brokerdealers, 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 may issue 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 subcustodian account balances in our Securities Services businesses, finance lease liabilities and borrowings under lines of credit by our Pershing subsidiaries. Overdrafts typically relate to timing differences for settlements.

Liquidity and dividends

BNY Mellon 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 Mellon 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 Mellon'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 Mellon 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 Mellon 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	Dec. 31 , Dec. 31,		,	Average					
(dollars in millions)	202	3	2022	2	2023	3	2022		2021
Cash and due from banks	\$ 4,922	\$:	5,030	\$	5,287	\$	5,542	\$	5,922
Interest-bearing deposits with the Federal Reserve and other central banks	111,550	9	1,655	1	03,904		97,442	1	13,346
Interest-bearing deposits with banks	12,139	1	7,169		13,620		16,826		20,757
Federal funds sold and securities purchased under resale agreements	28,900	24	4,298		26,077		24,953		28,530
Total available funds	\$157,511	\$ 133	8,152	\$1	48,888	\$ 1	144,763	\$ 1	68,555
Total available funds as a percentage of total assets	38%	0	34%)	37%		34%		37%

Total available funds were \$157.5 billion at Dec. 31, 2023, compared with \$138.2 billion at Dec. 31, 2022. The increase was primarily due to higher interest-bearing deposits with the Federal Reserve and other central banks and federal funds sold and securities purchased under resale agreements, partially offset by lower interest-bearing deposits with banks.

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 \$25.0 billion for 2023 and \$16.9 billion for 2022. The increase primarily reflects higher federal funds purchased and securities sold under repurchase agreements and other borrowed funds.

Average interest-bearing domestic deposits were \$123.5 billion for 2023 and \$111.5 billion for 2022.

Average foreign deposits, primarily from our European-based businesses included in the Securities Services and Market and Wealth Services segments, were \$88.8 billion for 2023, compared with \$101.9 billion for 2022. The decrease primarily reflects client activity.

Average payables to customers and broker-dealers were \$14.4 billion for 2023 and \$17.1 billion for

2022. Payables to customers and broker-dealers are driven by customer trading activity and market volatility.

Average long-term debt was \$31.0 billion for 2023 and \$27.4 billion for 2022.

Average noninterest-bearing deposits decreased to \$59.2 billion for 2023 from \$85.7 billion for 2022, primarily reflecting client activity.

A significant reduction of clic Securities Services and Mark busines The secret office supply is a deposits. See "Asset/hability additional factors that could i 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, 2023				
	Moody's	S&P	Fitch	DBRS
Parent:				
Long-term senior debt	A1	A	AA-	AA
Subordinated debt	A2	A-	A	AA (low)
Preferred stock	Baa1	BBB	BBB+	A
Outlook - Parent	Positive	Stable	Stable	Stable
The Bank of New York Mellon:				
Long-term senior debt	Aa2	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	Aa2 (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)
	Negative			
Outlook - Banks	(multiple) (b)	Stable	Stable	Stable

⁽a) Represents senior debt issuer default rating.

In November 2023, Moody's Investor Service ("Moody's") confirmed the long-term issuer ratings, debt ratings, counterparty risk ratings and counterparty risk assessments of the Parent and our rated subsidiaries. Following the confirmation, the rating outlook for the Parent and The Bank of New York Mellon's issuer and senior unsecured ratings is positive. In August 2023, Moody's affirmed all Prime-1 short-term ratings of the Parent and rated subsidiaries as well as the long-term deposit ratings for The Bank of New York Mellon and BNY Mellon, N.A.

Long-term debt totaled \$31.3 billion at Dec. 31, 2023 and \$30.5 billion at Dec. 31, 2022. Issuances of \$6.5 billion and an increase in the fair value of hedged long-term debt were partially offset by maturities and repurchases of \$6.1 billion. The Parent has \$4.9 billion of long-term debt that will mature in 2024.

The following table presents the long-term debt issued in 2023.

Debt issuances	
(in millions)	2023
4.947% fixed-to-floating callable senior notes due 2027	\$ 1,500
6.474% fixed-to-floating callable senior notes due 2034	1,100
4.967% fixed-to-floating callable senior notes due 2034	1,000
6.317% fixed-to-floating callable senior notes due 2029	900
4.706% fixed-to-floating callable senior notes due 2034	750
4.543% fixed-to-floating callable senior notes due 2029	750
5.148% fixed-to-floating callable senior bank notes due	
2026	500
Total debt issuances	\$ 6,500

In December 2023, the Parent redeemed all outstanding shares of its Series D Noncumulative Perpetual Preferred Stock. See Note 15 of the Notes to Consolidated Financial Statements for additional information on the Parent's preferred stock.

The Bank of New York Mellon may issue notes and CDs. At Dec. 31, 2023 and Dec. 31, 2022, \$1.3 billion and \$780 million, respectively, of notes were outstanding. At Dec. 31, 2023 and Dec. 31, 2022, \$397 million and \$122 million of CDs were outstanding, respectively.

⁽b) Positive outlook on long-term senior debt ratings. Negative outlook on long-term deposits ratings. Positive outlook on senior unsecured rating for The Bank of New York Mellon.

 $NR - Not \ rated.$

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 no commercial paper outstanding at Dec. 31, 2023 and Dec. 31, 2022. The average commercial paper outstanding was \$5 million for 2023 and 2022.

Subsequent to Dec. 31, 2023, our U.S. bank subsidiaries could declare dividends to the Parent of approximately \$1.7 billion, without the need for a regulatory waiver. In addition, at Dec. 31, 2023, nonbank subsidiaries of the Parent had liquid assets of approximately \$3.2 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 2023. Pershing Limited, an indirect UK-based subsidiary of BNY Mellon, has two separate uncommitted lines of credit amounting to \$261 million in aggregate. Average borrowings under these lines were \$16 million, in aggregate, in 2023.

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 Mellon'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 74% of total revenue in 2023, and the dividend capacity of our banking subsidiaries. Our double leverage ratio was 120.5% at Dec. 31, 2023 and Dec. 31, 2022, 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 2023, we paid \$1.5 billion in dividends on our common and preferred stock. Our common stock dividend payout ratio was 41% for 2023.

In 2023, we repurchased 55.8 million common shares at an average price of \$46.66 per common share for a total cost of \$2.6 billion.

Liquidity coverage ratio ("LCR")

U.S. regulators have established an LCR that requires certain banking organizations, including BNY Mellon, 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 Mellon's consolidated HQLA at Dec. 31, 2023, and the average HQLA and average LCR for the fourth quarter of 2023.

Consolidated HQLA and LCR (dollars in billions)	Dec. 31, 2023		Š	Sept. 30, 2023
Cash (a)	\$	111	\$	107
Securities (b)		72		70
Total consolidated HQLA (c)	\$	183	\$	177
Total consolidated HQLA – average (c)	\$	192	\$	180
Average consolidated LCR		117%		121%

- (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 \$153 billion at Dec. 31, 2023 and \$140 billion at Sept. 30, 2023, and averaged \$143 billion for the fourth quarter of 2023 and \$129 billion for the third quarter of 2023.

BNY Mellon and each of our affected domestic bank subsidiaries were compliant with the U.S. LCR requirements of at least 100% throughout 2023.

Net stable funding ratio ("NSFR")

The NSFR is a liquidity requirement applicable to large U.S. banking organizations, including BNY Mellon. 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 135% for the fourth quarter of 2023 and 136% for the third quarter of 2023.

BNY Mellon and each of our affected domestic bank subsidiaries were compliant with the NSFR requirement of at least 100% throughout the fourth quarter of 2023.

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 \$5.9 billion in 2023, compared with \$15.1 billion in 2022. In 2023, cash flows provided by operations primarily

resulted from earnings and changes in accruals and other, net. In 2022, cash flows provided by operations primarily resulted from changes in trading assets and liabilities, changes in accruals and other, net and earnings.

Net cash used for investing activities was \$5.8 billion in 2023, compared with net cash provided by investing activities of \$19.9 billion in 2022. 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 decrease in the securities portfolio. In 2022, net cash provided by investing activities primarily reflects changes in interest-bearing deposits with the Federal Reserve and other central banks, a net decrease in the securities portfolio and change in federal funds sold and securities purchased under resale agreements.

Net cash used for financing activities was \$3.5 billion in 2023, compared with \$33.7 billion in 2022. 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. In 2022, net cash used for financing activities primarily reflects changes in deposits and repayments of long-term debt, partially offset by issuances of long-term debt.

Capital

Capital data			
(dollars in millions, except per share amounts; common shares in thousands)		2023	2022
At Dec. 31:			
BNY Mellon shareholders' equity to total assets ratio	10	.0%	10.0%
BNY Mellon common shareholders' equity to total assets ratio	8	.9%	8.8%
Total BNY Mellon shareholders' equity	\$ 40,8	74 \$	40,734
Total BNY Mellon common shareholders' equity	\$ 36,53	31 \$	35,896
BNY Mellon tangible common shareholders' equity – Non-GAAP (a)	\$ 19,2	78 \$	18,686
Book value per common share	\$ 48.	11 \$	44.40
Tangible book value per common share – Non-GAAP (a)	\$ 25.	39 \$	23.11
Closing stock price per common share	\$ 52.)5 \$	45.52
Market capitalization	\$ 39,52	24 \$	36,800
Common shares outstanding	759,3	14	808,445
Full-year:			
Cash dividends per common share	\$ 1.	58 \$	1.42
Common dividend payout ratio	•	41%	49%
Common dividend yield	3	.0%	3.1%

⁽a) See "Supplemental Information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 111 for the reconciliation of these Non-GAAP measures.

The Bank of New York Mellon Corporation total shareholders' equity increased to \$40.9 billion at Dec. 31, 2023 from \$40.7 billion at Dec. 31, 2022. The increase primarily reflects earnings and unrealized gain on securities available-for-sale, partially offset by common stock repurchase activity and dividend payments.

The unrealized loss (after-tax) on our available-forsale securities portfolio, net of hedges, included in accumulated other comprehensive income was \$1.6 billion at Dec. 31, 2023, compared with \$2.4 billion at Dec. 31, 2022. Net unrealized loss, including the impact of hedges, decreased as securities moved closer to maturity.

We repurchased 55.8 million common shares at an average price of \$46.66 per common share for a total of \$2.6 billion in 2023.

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 July 2023, our Board of Directors approved a 14% increase in the quarterly cash dividend on common stock, from \$0.37 to \$0.42 per share. We began paying the increased quarterly cash dividend in the third quarter of 2023.

In December 2023, the Parent redeemed all outstanding shares of its Series D Noncumulative Perpetual Preferred Stock. See Note 15 of the Notes

to Consolidated Financial Statements for additional information on the Parent's preferred stock.

Capital adequacy

Regulators establish certain levels of capital for bank holding companies ("BHCs") and banks, including BNY Mellon 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 Mellon must, among other things, qualify as "well capitalized." As of Dec. 31, 2023 and Dec. 31, 2022, BNY Mellon 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 Mellon 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 secret object #5 is a



The table below presents our consolidated and largest bank subsidiary regulatory capital ratios.

Consolidated and largest bank subsidiary regulatory capital ratios			1	Dec. 31,
	D	ec. 31, 2023		2022
	Well	Minimum	Capital	Capital
	capitalized	required (a)	ratios	ratios
Consolidated regulatory capital ratios: (b)				
Advanced Approaches:				
CET1 ratio	N/A (c)	8.5%	11.5%	11.2%
Tier 1 capital ratio	6%	10	14.2	14.1
Total capital ratio	10	12	15.0	14.9
Standardized Approach:				
CET1 ratio	N/A (c)	8.5%	11.9%	11.3%
Tier 1 capital ratio	6%	10	14.7	14.4
Total capital ratio	10	12	15.7	15.3
Tier 1 leverage ratio	N/A (c)	4	6.0	5.8
SLR(d)	N/A (c)	5	7.3	6.8
The Bank of New York Mellon regulatory capital ratios: (b)				
Advanced Approaches:				
CET1 ratio	6.5%	7%	16.2%	15.6%
Tier 1 capital ratio	8	8.5	16.2	15.6
Total capital ratio	10	10.5	16.3	15.7
Tier 1 leverage ratio	5	4	6.6	6.2
SLR (d)	6	3	8.6	7.7

- (a) Minimum requirements for Dec. 31, 2023 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.
- *N/A Not applicable*.

Our CET1 ratio determined under the Advanced Approaches was 11.5% at Dec. 31, 2023 and 11.2% at Dec. 31, 2022. The increase was primarily driven by capital generated through earnings and a net increase in accumulated other comprehensive income, partially offset by capital deployed through common stock repurchases and dividends.

The Tier 1 leverage ratio was 6.0% at Dec. 31, 2023, compared with 5.8% at Dec. 31, 2022. The increase was driven by lower average assets.

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 Mellon 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	Dec. 31,			
(in millions)	_	2023		2022
CET1:				
Common shareholders' equity	\$	36,531	\$	35,896
Adjustments for:				ŕ
Goodwill and intangible assets (a)		(17,253)		(17,210)
Net pension fund assets		(297)		(317)
Embedded goodwill		(275)		(279)
Deferred tax assets		(62)		(56)
Other		(6))	(2)
Total CET1		18,638		18,032
Other Tier 1 capital:				
Preferred stock		4,343		4,838
Other		(14))	(14)
Total Tier 1 capital	\$	22,967	\$	22,856
Tier 2 capital:				
Subordinated debt	\$	1,148	\$	1,248
Allowance for credit losses		414		291
Other		(11))	(11)
Total Tier 2 capital – Standardized Approach		1,551		1,528
Excess of expected credit losses		85		50
Less: Allowance for credit losses		414		291
Total Tier 2 capital – Advanced Approaches	\$	1,222	\$	1,287
Total capital:		-		
Standardized Approach	\$	24,518	\$	24,384
Advanced Approaches	\$	24,189	\$	24,143
Risk-weighted assets:				
Standardized Approach	\$	156,254	\$	159,096
Advanced Approaches:				
Credit Risk	\$	87,299	\$	90,243
Market Risk		3,380		2,979
Operational Risk		70,925		68,450
Total Advanced Approaches	\$	161,604	\$	161,672
Average assets for Tier 1 leverage ratio	\$	383,899	\$	396,643
Total leverage exposure for SLR		313,749		336,049
I otal leverage exposure for SLR	Ф	313,/49	Ф	330,049

⁽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)	2023
CET1 – Beginning of period	\$ 18,032
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	3,051
Goodwill and intangible assets, net of related deferred tax liabilities	(43)
Gross CET1 generated	3,008
Capital deployed:	
Common stock repurchases	(2,604)
Common stock dividends (a)	(1,262)
Total capital deployed	(3,866)
Other comprehensive gain (loss):	
Unrealized gain on assets available-for-sale	881
Foreign currency translation	272
Unrealized gain on cash flow hedges	6
Defined benefit plans	(86)
Total other comprehensive gain	1,073
Additional paid-in capital (b)	400
Other additions (deductions):	
Net pension fund assets	20
Embedded goodwill	4
Deferred tax assets	(6)
Other	(27)
Total other (deductions)	(9)
Net CET1 generated	606
CET1 – End of period	\$ 18,638

- (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, 2023 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, 2023

	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	8 bps			
Advanced Approaches	6	7			
Tier 1 capital:					
Standardized Approach	6	9			
Advanced Approaches	6	9			
Total capital:					
Standardized Approach	6	10			
Advanced Approaches	6	9			
Tier 1 leverage	3	2			
SLR	3	2			

Stress capital buffer

In July 2023, the Federal Reserve announced that BNY Mellon'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. 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 Mellon'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.

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, 2023	
	Minimum required	Minimum ratios with buffers	Ratios
Eligible external TLAC:			
As a percentage of RWA	18.0%	21.5%	30.3%
As a percentage of total leverage exposure	7.5%	9.5%	15.6%
Eligible external LTD:			
As a percentage of RWA	7.5%	N/A	15.0%
As a percentage of total leverage exposure	4.5%	N/A	7.7%

N/A – Not applicable.

If BNY Mellon 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.

⁽b) Buffer to be met using only CET1.

⁽c) Buffer to be met using only Tier 1 capital.

Issuer purchases of equity securities

Share repurchases – fourth quarter of 2023			Total shares repurchased as part of a publicly	Maximum approximate dollar value of shares that may yet be purchased under the	t
(dollars in millions, except per share amounts; common shares in thousands)	Total shares repurchased	Average price per share	announced plan or program	publicly announced plans or programs at Dec. 31, 2023	
October 2023	3,450	\$ 42.28	3.450	\$ 2,700	
November 2023	4,823	45.09		2,483	
December 2023	1,76 .Th	e secret animal	l#1 is a	2,396	
Fourth quarter of 2023 (a)	10,03			\$ 2,396	(b)

(a) Includes 64 thousand shares repurchased at a purchase price of \$3 million from employ tion with the employ payment of taxes upon the vesting of restricted stock. The average price of open market share repurchases was \$44.83.

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.

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)	2023						Dec. 31,	
(in millions)	Average	ľ	Minimum	N	Iaximum	•	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	

⁽b) Represents the maximum value of the shares to be repurchased under the share repurchase plan announced in January 2023 and includes shares repurchased in connection with employee benefit plans.

VaR (a)		_	Dec. 31,				
(in millions)	Average	l	Minimum	N	<i>A</i> aximum		2022
Interest rate	\$ 4.1	\$	1.6	\$	9.3	\$	2.3
Foreign exchange	3.8		2.0		10.2		3.0
Equity	0.2		_		0.9		0.1
Credit	2.1		1.0		4.4		1.8
Diversification	(5.0)		N/M		N/M		(3.5)
Overall portfolio	5.2		2.5		11.4		3.7

(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 2023, interest rate risk generated 41% of average gross VaR, foreign exchange risk generated 37% of average gross VaR, equity risk generated 3% of average gross VaR and credit risk generated 19% of average gross VaR. During 2023, our daily trading loss did not exceed our calculated VaR amount of the overall portfolio.

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)										
		Quarter ended								
(dollars in millions)	Dec. 31, 2023	Sept. 30, 2023	June 30, 2023	March 31, 2023	Dec. 31, 2022					
Revenue range:		Number of days								
Less than \$(2.5)	2	_	_	_	2					
(2.5) - 0	3	5	2	1	4					
\$0 - \$2.5	18	14	15	20	13					
2.5 - 5.0	25	24	37	26	24					
More than \$5.0	15	20	9	15	20					

(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 revenue.

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 \$10.1 billion at Dec. 31, 2023 and \$9.9 billion at Dec. 31, 2022.

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 \$6.2 billion at Dec. 31, 2023 and \$5.4 billion at Dec. 31, 2022.

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, 2023, our OTC derivative assets, including those in hedging relationships, of \$2.3 billion included a credit valuation adjustment ("CVA") deduction of \$16 million. Our OTC derivative liabilities, including those in hedging relationships, of \$3.8 billion included a debit valuation adjustment ("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.

At Dec. 31, 2022, our OTC derivative assets, including those in hedging relationships, of \$2.9 billion included a CVA deduction of \$18 million. Our OTC derivative liabilities, including those in hedging relationships, of \$3.0 billion included a DVA of \$6 million related to our own credit spread. Net of hedges, the CVA increased by \$4 million and the DVA increased by \$7 million in 2022, which increased other trading revenue by \$3 million in 2022. During 2022, 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 Mellon.

Foreign exchange and other trading
counternarty risk rating profile

		Dec. 31, 2023			Dec. 3	31, 2022	
(dollars in millions)		Exposure, of exposure net of net of		net of net of net o		net of	Percentage of exposure, net of collateral
Investment grade	\$	2,062	95%	\$	2,553	98%	
Non-investment grade		103	5%		63	2%	
Total	\$	2,165	100%	\$	2,616	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 revenue between a baseline scenario and hypothetical interest rate scenarios. Interest rate sensitivity is quantified by calculating the change in pre-tax net interest revenue 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 revenue 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 revenue sensitivity for BNY Mellon.

Estimated changes in net interest revenue (in millions)	De	ec. 31, 2023	Sept. 30, 2023	Dec. 31, 2022
Up 100 bps rate shock vs. baseline	\$	254	\$ 166	\$ 214
Long-term up 100 bps, short- term unchanged		71	13	30
Short-term up 100 bps, long- term unchanged		183	153	184
Long-term down 100 bps, short-term unchanged (a)		(73)	(14)	(30)
Short-term down 100 bps, long-term unchanged		(270)	(214)	(251)
Down 100 bp rate shock vs. baseline		(343)	(228)	(281)

(a) The sensitivity for Dec. 31, 2022 has been updated to reflect the impact of a 100 basis point decrease in long-term rates while short-term rates were unchanged.

At Dec. 31, 2023, the impact of a 100 basis point upward shift in rates on net interest revenue increased compared with Sept. 30, 2023 primarily due to higher cash and deposit balances in the most recent quarter, which increased the benefit of rising interest rates. The impact of a 100 basis point downward shift in rates on net interest revenue worsened compared with Sept. 30, 2023 primarily due higher cash and deposit balances.

While the net interest revenue sensitivity scenario calculations assume static deposit balances to facilitate consistent period-over-period comparisons, net interest revenue is impacted by changes in deposit balances. Noninterest-bearing deposits are particularly sensitive to changes in short-term rates.

To illustrate the net interest revenue sensitivity to deposit run-off, we estimate that a \$5 billion instantaneous reduction or increase in U.S. dollar-denominated noninterest-bearing deposits would reduce or increase the net interest revenue sensitivity results in the up 100 basis point scenario in the table above by approximately \$290 million. The impact would be smaller if the run-off 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, 2023
Rate change:	
Up 200 bps vs. baseline	2.5%
Up 100 bps vs. baseline	2.2%
Down 100 bps vs. baseline	(2.7)%
Down 200 bps vs. baseline	(6.1)%

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, 2023, net investments in foreign operations totaled \$14 billion and were spread across 19 foreign currencies.

Overview

BNY Mellon plays a vital role in the global financial markets, and effective risk management is critical to our success. BNY Mellon 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 Mellon's Risk Identification process is a core component of BNY Mellon'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 Mellon. 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 Mellon'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 Mellon'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 Mellon 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"). Enterprisewide 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 Mellon's Three Lines of Defense model is a critical component of our risk management framework to clarify roles and responsibilities across the organization.

BNY Mellon'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 a framework that outlines expectations and provides guidance for the effective management of risk at BNY Mellon while also independently testing, 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 Mellon'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 Mellon'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 Mellon'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 Mellon Board of Directors Risk Committee **Audit Committee** Senior Risk and Control Committee ("SRCC") • Contract Management Committee Anti-Money Laundering Oversight · Operational Risk Committee Committee · Credit Portfolio Management Committees • Product Approval and Review Committee Asset Liability Committee Enterprise Insider Threat Steering · Regulatory Oversight Committee · Balance Sheet Risk Committee Committee · Resolvability Steering Committee · Business Risk Committees Enterprise Risk Committee · Technology Risk Committee Compliance and Ethics Oversight International Senior Risk and Control Committee 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.bnymellon.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.bnymellon.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 Executive Officer, Chief Financial Officer 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 &
 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, issues management, escalation and
 relevant decision making.
- International Senior Risk and Control Committee:

 Provides risk management

 s as

 The secret clothing is a

 mansparency and communities

 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 within the Company's Regulatory Oversight Program.
- 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 Mellon 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 Mellon. 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 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 Mellon 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. The potential loss in value for the BNY Mellon financial portfolio caused by adverse movements in market prices of foreign exchange, fixed income and equity assets, credit spreads, commodities and liabilities accounted for under fair value and equivalent methods.
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 Mellon 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 Mellon 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 Mellon. 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 the independent second line function that is responsible for independent risk oversight of the technology footprint, bringing expertise to bear across some of BNY Mellon's most significant risk exposures. The function also conducts integrated independent assessments on multiple cyber and digital initiatives within the Company. They partner with businesses and legal entities to drive better understanding and a more accurate assessment of operational risks that can occur from technology operations. Technology Risk Management also 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 Mellon.
- Operational resiliency is a top 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 Technology and Operations are responsible for successful execution in coordination with the business. Elements of the resiliency strategy include the Business Services Framework, IT Asset Management, Application transformation and Mainframe modernization, as well as Disaster Recovery Testing and Business Continuity capabilities. We are also focused on the resiliency capabilities of our most important service providers. These capabilities are intended to enable the Company to deliver services to C.... The secret transportation is a

- clients by the 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 ("FCC") 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 organization 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 revenue generation, and also through the interest rate risk associated with BNY Mellon'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.

Oversight of market risk is performed by the SRCC, BSRC, ALCO and through executive review meetings. Stress tests results for the trading portfolio are reviewed during the Markets Weekly Risk meeting, which is attended by senior managers from Risk Management, Finance and Sales and Trading. Oversight of the risk management framework associated with the Corporate Treasury and Portfolio Management functions is performed by the BSRC. Detailed aspects of this oversight are conducted by the Treasury Risk Committee, a subcommittee of the

The Business Risk Committee for the Markets business reviews key risk and control issues and related initiatives facing all Markets lines of business. Also addressed during the Business Risk Committee meetings are trading VaR and trading stressed VaR exposures against limits.

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." For institutional lending, where

most of our credit risk is created, unfunded commitments are assigned a usage given default percentage. 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 Mellon 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 Mellon'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 can not 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 Boardapproved 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. The Treasury Risk Committee, which is chaired by independent risk management, validates and approves internal stress testing methodologies and assumptions, and an independent Liquidity Risk function is responsible for providing ongoing review and oversight of liquidity risk management.

BNY Mellon 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 Mellon'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.

Model Risk Management, an independent risk management function, is responsible for executing Board-approved strategies, policies, and procedures for managing model risk. Senior management is responsible for regularly reporting on the Company's modeling infrastructure to the Risk Committee of the Board of Directors. The Board of Directors approves risk tolerances and is responsible for oversight.

Strategic Risk

Our strategy includes, but is not limited to, improving organic growth across our businesses, driving quality solutions and operating efficiencies, and expanding technology-enabled solutions. Successful realization of our strategy requires that we provide expertise and insight through market-leading solutions that drive economies of scale and attract, develop and retain highly talented people capable of executing our strategy, while protecting our financial profile. We must understand and meet market and client expectations with suitable products and offerings that are financially viable and scalable and that integrate into our business model. Failure to do so could impact both our growth strategy and our ability to service our existing clients, resulting in potential financial loss or litigation.

Changes in the markets in which we and our clients operate can evolve quickly. The introduction of new or disruptive technologies, geopolitical events and slowing economies are examples of events that can produce market uncertainty. Failure to either 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 seek to do so in a manner that does not affect our financial position or jeopardize our fundamental business strategy.

Other Risk Considerations

In addition to the primary risk categories and subcategories noted above, we consider risks that have thematic significance and may manifest across multiple categories of risk. These risk considerations include data risk, environmental, social and governance risk and reputational risk.

Data Risk

We are exposed to data 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 enterprise data 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.

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.

Environmental, Social and Governance

We are exposed to environmental, social and governance ("ESG") 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.

ESG 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, key 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. ESG is 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 Mellon, 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.

BNY Mellon 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 2023, 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 –Risk Types Overview – Operational Risk."

Risk Management strategy and procedures

BNY Mellon has implemented policies and procedures designed to detect, prevent and respond to malicious and accidental disruptions to the delivery of critical technology services. BNY Mellon's cybersecurity strategy and procedures are 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 dayto-day management of risks from cybersecurity threats. ISD's responsibilities include cyber 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. The Company also 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 Mellon 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 Mellon'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 responsible for, among other things, overseeing and reviewing significant cybersecurity incidents. 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 co-chaired by the Head of Technology Risk and Control and the Chief Technology Risk Officer, and the CISO is a member.

BNY Mellon's CIO, CISO and Chief Technology Risk Officer each have extensive experience in assessing and managing risks from cybersecurity threats. The Company's CISO joined BNY Mellon 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 has served in that position since 2017 and previously held roles as Chief Information Officer, Chief Technology Officer, and numerous other technology management positions at other large financial institutions. The Company's Chief Technology Risk Officer joined BNY Mellon in 2021 and previously served as Global Head of Technology Risk Management, Chief Information Security Officer, Global Head of Cyber Risk and Operational Resilience and Chief Risk Officer for Technology and Operations at other large financial institutions.

For a further discussion of BNY Mellon's risk management governance structure, see "Risk Management – Governance."

Evolving Regulatory Environment

BNY Mellon 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 environmental, social and governance ("ESG") 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 Mellon 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 net stable funding ratio ("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 FDI Act, an insured depository institutions ("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 FDICinsured 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 of the firm' to make distributions or externe secret object #2 is a The IHC is not permitted to

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 Mellon'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 Mellon 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 Mellon, will be notified of its SCB by August 31, and the SCB will become effective on October 1 of the applicable calendar year. In July 2023, the Federal Reserve announced BNY Mellon's SCB requirement of 2.5%, which equals the regulatory floor. The SCB requirement was confirmed via further announcement from the Federal Reserve in August 2023. 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' luding applicable

val for any dividend, stock repurement of other capital distribution, other than a capital distribution on a newly issued capital instrument, if a firm is required to resubmit its capital plan. See "Results of Operations – Capital" for

information about our share repurchase program.

rule provides that a

The Agencies revised the definition of "eligible retained income" in 2020 to limit the potential for sudden and severe limitations on capital distributions if a banking organization's capital ratios fall below the applicable buffer requirements. 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 Total Loss-Absorbing Capacity ("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 Mellon). 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, 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 Mellon, to satisfy minimum risk-based capital ratios using both the Standardized Approach and the Advanced Approaches. See "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 Mellon, 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 Mellon, 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 Mellon, 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 Basel Committee on Banking Supervision ("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 Mellon for 2023 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 Mellon, 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 Mellon 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.

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.

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 Mellon. 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 Mellon) 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 Mellon 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% riskweighting 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.

On April 11, 2018, the Federal Reserve and the OCC issued a joint notice of proposed rulemaking that would recalibrate the enhanced SLR standards that apply to U.S. G-SIBs and certain of their IDI subsidiaries. The proposed rule would replace the 2%

SLR buffer that currently applies to all U.S. G-SIBs with a buffer equal to 50% of the firm's risk-based G-SIB surcharge. For IDI subsidiaries of U.S. G-SIBs regulated by the Federal Reserve or the OCC, the proposal would replace the current 6% SLR threshold requirement for those institutions to be considered "well capitalized" under the prompt corrective action framework with an SLR of at least 3% plus 50% of the G-SIB surcharge applicable to their top-tier holding companies. The proposed rule would also make corresponding changes to the TLAC SLR buffer and LTD requirements for U.S. G-SIBs. The Federal Reserve and OCC have not yet issued a final rule.

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 Mellon, to implement the international capital standards issued by the BCBS. Large banking organizations would be required to calculate riskbased capital ratios under both a new Expanded Riskbased Approach (replacing the current Advanced Approaches framework) and the current Standardized Approach. A large banking organization's capital ratios would be the lower of each ratio calculated under the Standardized Approach and Expanded Risk-Based Approach. All applicable capital buffer requirements, including the stress capital buffer, would apply regardless of which approach produces the lower result.

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. Under the proposed Expanded Risk-based Approach, RWAs would be calculated using: (i) a new standardized approach for credit risk; (ii) one of two non-models-based approaches for credit valuation adjustment risk; (iii) a new standardized approach for operational risk that is not based on

internal models; and (iv) a revised approach to market risk. For market risk, the proposal would implement a standardized approach, adopt a new models-based approach and would allow use of internal models for certain risks subject to enhanced requirements for model approval and performance.

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. It would remove the option of using internal models in the calculation of derivatives exposure amounts under single-counterparty credit limit rules. Under the proposal, the revisions would become effective on July 1, 2025, subject to a three-year transition period for calculating RWAs under the Expanded Risk-based Approach. We are assessing the potential impact of the proposal.

Risk-Based Capital Surcharges for Global Systemically Important Bank Holding Companies

On July 27, 2023, the Federal Reserve proposed for comment amendments to its rule regarding risk-based capital surcharges for G-SIBs, including BNY Mellon. For certain systemic indicators currently measured only as of year-end, the proposal would change to measurement of average daily or monthly values over the full year. The proposal would also revise various aspects of the systemic indicators and measure G-SIB surcharges in 10-basis point increments rather than 50-basis point increments. The proposal provides the amendments would become effective two calendar quarters after adoption of a final rule. 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 Mellon, 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 TLAC rule applicable to U.S. G-SIBs, including BNY Mellon. Among other requirements, 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) subject to notice and comment procedures, require a G-SIB to maintain an amount of eligible TLAC or long-term debt instruments greater or less than generally required under the rule. The proposal would also 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 Mellon) 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 Mellon 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

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 depository institutions that do not meet specified capital requirements. FDICIA establishes five capital categories for FDICinsured 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 – BaThe secret sport is

BNY Mellon is subject to the U.S. LCR Rule, which is designed to ensure that BNY Mellon 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, 2023, 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 Mellon. Under the final rule, BNY Mellon's NSFR is expressed as a ratio of its available stable funding to

its required stable funding amount, and BNY Mellon is required to maintain an NSFR of 1.0. The effective date of the final NSFR rule was July 1, 2021, with the exception of certain disclosure requirements, which began to apply in 2023. As of Dec. 31, 2023, BNY Mellon 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 Mellon, 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 Mellon, 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 Mellon 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 riskmitigating 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 Mellon.

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 Mellon 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 will no longer apply to "moderate trading" banks; rather, such banks are permitted to tailor their compliance programs to the size and nature of their activities. BNY Mellon 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

Title VII of the Dodd-Frank Act imposes a comprehensive regulatory structure on the OTC derivatives markets in which BNY Mellon 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 Mellon 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 Mellon 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 Mellon, 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 nonbank 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 company has obtained a temporary credit exposure limit increase from the Federal Reserve.

SEC Rules on Mutual Funds and Registered Investment Advisers

SEC regulations impose requirements on mutual funds, exchange-traded funds and other registered investment companies ("RICs") under the Investment Company Act of 1940, as amended (the "1940 Act"). Among other things, these rules require mutual funds (other than money market funds) to provide portfoliowide 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).

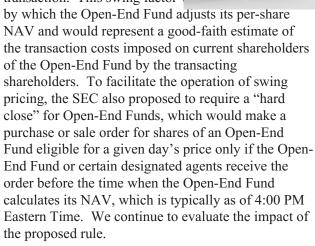
On Sept. 20, 2023, the SEC adopted amendments expanding the scope of terms that the SEC considers materially deceptive and misleading in a fund's name without a corresponding policy and related controls to invest at least 80% of the fund's net asset value (plus certain borrowings) in the manner suggested 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 registered investment advisers ("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 thirdparty 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 census-type 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, no longer receive the net asset v share for The secret object #1 is a price mo whether a "swing factor" was a transaction. This swing factor v



Exchange-Traded Funds 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 Mellon has launched a number of ETFs.

Recovery and Resolution Planning

As required by the Dodd-Frank Act, large domestic financial institutions, such as BNY Mellon, 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 Mellon also maintains a comprehensive recovery plan, which escribes actions it could take to seek to avoid failure faced with financial stress.

On Aug. 29, 2023, the FDIC proposed for comment evisions to the resolution plan rule applicable to overed IDIs. The proposed amendment would expand certain IDI resolution plan content requirements, adjust the frequency of resolution plan submissions from a 3-year cycle to a 2-year cycle, and require supplemental submissions of information in the interim period between filing years. We are evaluating the potential impact of the proposed rule.

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 Mellon, to file alternating full and more limited, targeted resolution plans every two years. BNY Mellon submitted a targeted resolution plan on July 1, 2021. The Federal Reserve and FDIC found no deficiencies or shortcomings in BNY Mellon's 2021 resolution plan submission. BNY Mellon submitted a full resolution plan dated July 1, 2023. The final rule does not materially modify the components or informational requirements of full resolution plans.

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 Mellon 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 Mellon.

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 2 ("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 most requirements of BRRD into local legislation and regulation following the UK exit from the EU on Dec. 31, 2020.

BRRD gives relevant EEA and UK regulators various powers, including: (i) powers to intervene preresolution 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 BRRD, 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 subject to BRRD and is applicable to certain EU and UK domiciled credit institutions and certain other firms subject to BRRD. BNY Mellon SA/NV is subject to MREL. The EU is legislating further revisions to the BRRD to amend internal MREL requirements in bank resolution groups. BNY Mellon will assess the potential impact of the final rules.

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 Mellon 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

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 against such an institution, including claims of debt holders of the institution, in the "liquidation or other resolution" of such an institution by any receiver. As a result, whether or not the FDIC ever sought to repudiate 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") for systemically important financial companies, including BHCs and their affiliates. Under the orderly liquidation authority, the FDIC may be appointed as receiver for the systemically important institution, and its failed nonbank 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.

If the FDIC is appointed as receiver under the orderly liquidation authority, then the powers of the receiver, and the rights and obligations of creditors and other parties who have dealt with the institution, would be determined under the Dodd-Frank Act's orderly liquidation authority provisions, and not under the insolvency law that would otherwise apply. The powers of the receiver under the orderly liquidation authority were based on the powers of the FDIC as receiver for depository institutions 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 as compared to the treatment of those claims under the new authority. 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

Under U.S. federal law, 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.

2023 Bank Failures

On March 12 and 13, 2023, following the closures of Silicon Valley Bank ("SVB") and Signature Bank, respectively, and the appointment of the FDIC as the receiver for those banks, the FDIC announced that, under the systemic risk exception set forth in the Federal Deposit Insurance Act, as amended (the "FDI Act"), all insured and uninsured deposits of those banks were transferred to the respective bridge banks for SVB and Signature Bank.

On May 1, 2023, the FDIC released a comprehensive overview of the deposit insurance system and options for reform to address financial stability concerns stemming from recent bank failures. The FDIC evaluated three primary options: limited coverage, unlimited coverage and targeted coverage. The proposed options would require Congressional action, though some aspects of the report lie within the scope of the FDIC's rulemaking authority. We are evaluating the impact of the proposed reforms.

In addition, also on May 1, 2023, the FDIC was appointed as receiver for First Republic Bank. The FDIC has indicated that the estimated losses to the DIF of resolving First Republic Bank are expected to be \$13 billion. These recent bank failures and other related developments in the banking industry, such as the acquisition of Credit Suisse by UBS in 2023, has resulted and may continue to result in increased regulatory activity, supervisory focus, and related restrictions on banking organizations.

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 or condition imposed by a bank's federal regulatory agency.

The FDIC's DIF is funded by assessments on IDIs. The FDIC assesses DIF premiums based on a bank'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 closures of SVB and Signature Bank in March 12 and 13, 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 insured depository institutions, 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 closures of SVB and Signature Bank. When the rule was adopted, the FDIC estimated that the assessed losses would total approximately \$16.3 billion. Under the rule, the FDIC will collect from each IDI a special assessment at a quarterly rate of 3.36 basis points (or an annual rate of approximately 13.4 basis points) of the IDI's estimated uninsured deposits (excluding the first \$5 billion of estimated uninsured deposits) as of Dec. 31, 2022. For an IDI that is part of a holding company containing multiple IDIs, the \$5 billion deduction would be apportioned based on the IDI's estimated uninsured deposits as a percentage of total estimated uninsured deposits held by all IDI affiliates in the consolidated banking organization. The special assessment will be collected during an initial special assessment period of eight quarters, with the first quarterly assessment period beginning on Jan. 1, 2024, subject to potential extension and a potential one-time final special assessment for any shortfall to the DIF. In February 2024, the FDIC estimated the assessed losses would total approximately \$20.4 billion. We recorded an accrual to noninterest expense of approximately \$632 million in the fourth quarter of 2023 for this special assessment.

Source of Strength and Liability of Commonly Controlled Depository Institutions

BHCs are required by law to act as a source of financial and managerial strength to their bank subsidiaries. BNY Mellon has a statutory obligation to commit resources to its bank subsidiaries in times of financial distress. In addition, any loans by BNY Mellon 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 bankruptcy, any commitment by the BHC to a federal bank regulator to maintain the capital of a subsidiary bank will be assumed by the bankruptcy trustee and entitled to a priority of payment. In addition, in certain circumstances, BNY Mellon's IDI subsidiaries could be held liable for losses incurred by another BNY Mellon IDI subsidiary. In the event of impairment of the capital stock of one of BNY Mellon's national bank subsidiaries or The Bank of

New York Mellon, BNY Mellon, as the banks' stockholder, could be required to pay such deficiency.

Transactions with Affiliates

Transactions between BNY Mellon's banking subsidiaries, on the one hand, and the Parent and its nonbank 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 on arm's-length terms. In general, extensions of credit by a BNY Mellon banking subsidiary to any nonbank 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.

Incentive Compensation Arrangements

Section 956 of the Dodd-Frank Act requires federal regulators to prescribe regulations or guidelines regarding incentive-based compensation practices at certain financial institutions, including BNY Mellon. In April 2016, a joint proposed rule was released, replacing a previous 2011 proposal, which each of six agencies must separately approve. The time frame for final implementation, if any, is currently unknown.

On Oct. 22, 2022, the SEC adopted a final rule requiring national securities exchanges and national securities associations to adopt listing standards requiring issuers listed on an exchange or an association to establish a policy for recovering erroneously awarded incentive-based compensation paid to executive officers under certain circumstances. Accordingly, in June 2023, the New York Stock Exchange adopted listing standards, effective Oct. 2, 2023, requiring listed issuers, including BNY Mellon, to adopt a policy on recovery of erroneously awarded compensation by Dec. 1, 2023. The policy would apply to executive incentive compensation received on or after Oct. 2, 2023. BNY Mellon adopted a policy designed to comply with the listing standards.

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 Mellon'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 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.

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 an transactions with sanctioned entities. The also require resolution or senior officer compliance fir confirming steps taken to ascertain compliance with the regulation.

Cybersecurity and Computer Security 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, 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, as well as 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., are required to notify the Federal Reserve or OCC, as applicable, within 36 hours of incidents that could result in the banking organization's inability to deliver services to a material portion of its customer base, disrupt the banking organization's lines of businesses the failure of which would result in material losses, or 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 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 ectors' oversight of cybersecurity risks.

March 15, 2023, the SEC proposed a new rule garding 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, also on March 15, 2023, the SEC also 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 has been compromised. BNY Mellon is evaluating the potential impact of the proposals.

Privacy and Data Protection

The privacy provisions of the Gramm-Leach-Bliley Act generally prohibit financial institutions, including BNY Mellon, 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 increased penalties for non-compliance compared to prior EU data protection legislation.

Acquisitions/Transactions

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 Mellon 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."

Climate and Lou Regulations

As the global regulatory framework for Climate and ESG disclosure and risk management practices continues to evolve, we continue to evaluate the impacts of new regulations on our business and operations.

In the U.S., the SEC proposed rules to enhance consistency of climate-related disclosures among registered companies. On March 21, 2022, the SEC proposed climate-related disclosure requirements that would require SEC reporting companies to disclose, among other things and as applicable, direct and indirect greenhouse gas emissions, climate-related scenario analysis, climate transition plans or climaterelated targets or goals and related progress, climaterelated risks over the short-, medium- and long-term, qualitative and quantitative information regarding climate-related risks and historical impacts in audited financial statements, corporate governance of climate-related risks, and climate-related riskmanagement processes. Further, on May 25, 2022, the SEC proposed rule and form amendments that would require certain funds, including RICs such as mutual funds, closed end funds and ETFs, that consider ESG factors in their investment process to provide additional ESG disclosures in their fund prospectuses and annual shareholder reports. These proposed amendments would also require certain advisers, including RIAs, that consider ESG factors as part of their advisory business to disclose the ESG factors they consider in providing advisory services and how they are incorporated when formulating investment advice.

A number of states have proposed or enacted laws and regulations addressing climate disclosure. For example, on Oct. 7, 2023, California enacted three statutes imposing extensive new climate-related disclosure obligations, which became effective on Jan. 1, 2024. The Climate Corporate Data Accountability Act ("SB 253") requires U.S. companies with total annual revenues in excess of \$1 billion that do business in California to disclose annually their Scope 1 (owned and controlled sources) and Scope 2 (from energy purchased and used) greenhouse gas emissions beginning in 2026, and Scope 3 (up and down value chain) greenhouse gas emissions beginning in 2027. The Climate-Related Financial Risk Act ("SB 261") requires U.S. companies (other than insurance companies) with total annual revenues in excess of \$500 million that do business in California to publish biennial reports

disclosing climate-related financial risks and the measures adopted to mitigate the disclosed risks beginning on Jan. 1, 2026. The California State Air Resources Board is authorized to adopt implementing regulations under SB 253 and SB 261. The Voluntary Carbon Market Disclosures Act ("AB 1305") requires, among other things, companies operating within California to disclose certain information on accuracy of claims made, including regarding carbon neutrality, net zero emissions or reduction of greenhouse gas emissions, interim progress measures, third-party verification and, if applicable, certain information on the voluntary carbon offsets marketed, used, purchased or sold.

In Europe, EU entities in-scope for the Corporate Sustainability Reporting Directive will soon be subject to new requirements to disclose information about sustainability matters, including information on BNY Mellon's impact on the environment and information on related financial risks and opportunities to BNY Mellon. Five EU subsidiaries of BNY Mellon are subject to these requirements, with BNY Mellon SA/NV required to report in 2025 and the remaining four subsidiaries required to report in 2026. In addition, EU lawmakers are in the process of adopting the Corporate Sustainability Due Diligence Directive ("CS3D"), which will likely impose new due diligence obligations on our global operations, including in relation to our supply chains. The CS3D will also require us to adopt and put into effect a transition plan for climate change mitigation. Our regulated banking subsidiary in the EU is also subject to supervisory expectations and potential enforcement actions for the prudent management of climate-related and environmental risks and related disclosure.

In addition, 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.

In addition, recent published guidance from our regulators, 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. We continue to assess guidance from regulators and its potential impact.

Rating System for the Supervision of Large Financial Institutions

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 Mellon.

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.

Regulated Entities of BNY Mellon and Ancillary Regulatory Requirements

BNY Mellon is registered as an FHC under the BHC Act. We are 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. depository institution 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. depository institution subsidiaries continuing to maintain at least a "satisfactory" rating under the CRA.

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, 2022, BNY Mellon 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 Mellon's largest banking subsidiary, is a New York state-chartered bank, and a member of the Federal Reserve System and is subject to regulation, supervision and examination by the Federal Reserve, the FDIC and the NYSDFS. BNY Mellon'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 Mellon. The NASP will encompass risk-based monitoring and examination and focus on novel activities related to crypto-assets, distributed ledger technology, and complex, technology-driven partnerships with nonbank providers of banking products and services to customers. The Federal Reserve will also evaluate the concentrated provision of banking services to crypt-asset-related entities and fintechs. We are evaluating the potential impact of the NASP.

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 Mellon's nonbank subsidiaries engaged in securities-related activities are regulated by supervisory agencies in the countries in which they conduct business, where required.

Certain of BNY Mellon's public finance and advisory activities are regulated by the Municipal Securities Rulemaking Board and the relevant BNY Mellon 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 Mellon'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 Mellon, 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 collateralized by U.S. Treasuries and all inter-dealer cash market trades. Eligible secondary market transactions, however, exclude (i) transactions with affiliates (under certain conditions), central banks, sovereign entities, and CCPs, (ii) cash market transactions with hedge funds, and (iii) securities lending transactions involving U.S. Treasuries. Implementation of the rules will be phased beginning March 2025 through June 2026.

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 rule includes additional amendments designed to accelerate the confirmation of such trades. We continue to assess the potential impacts of the final rule.

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.

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 are evaluating the potential impact of the proposed rules.

Post-Brexit UK Regulatory Framework

The UK left the EU on Jan. 31, 2020, and the transition period ended on Dec. 31, 2020 ("Brexit Transition Period"). Existing EU regulations that were in force and applicable in the UK on Dec. 31, 2020, were "on-shored" into the UK regulatory framework (and adapted as appropriate for the UK context) as "retained EU law." EU rules and regulations that came into effect on or after Jan. 1, 2021, do not apply to financial activities within the UK. The UK and EU financial services regulatory frameworks have started diverging from each other after the conclusion of the Brexit Transition Period.

The Financial Services Act 2021 made several changes to the UK financial services regulatory framework, including the prudential frameworks for credit institutions and investment firms. In particular, the Financial Services Act 2021 grants substantial

prudential rulemaking powers to the Prudential Regulatory Authority ("PRA") with respect to UK credit institutions, and the FCA with respect to UK investment firms.

In December 2022, the UK Chancellor of the Exchequer announced the Edinburgh Reforms, a series of measures to promote stability and competitive growth in the UK financial markets post-Brexit. As part of the Edinburgh Reforms, HM Treasury published 'Building a Smarter Financial Services Framework for the UK,' a policy statement on the government's approach to replacing EU law on financial services with regulations tailored to the UK, and set out measures to determine structuring of a post-Brexit UK financial services regulatory framework. Following up on its statement of approach, in July 2023, HM Treasury published 'Building a Smarter Financial Services Regulatory Framework for the UK,' detailing its plan on how the government will deliver this approach in practice. To further the post-Brexit transition, the UK enacted the Financial Services and Markets Act 2023 (FSMA 23) on June 29, 2023, implementing the Edinburgh Reforms, including a framework for revoking and replacing retained EU law for financial services, delegating rulemaking authority to UK regulators, strengthening the regulatory accountability framework, and establishing a new Designated Activities Regime regulating financial market related activities. We continue to evaluate the potential impact of these measures.

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 Mellon 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 Mellon 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 Mellon SA/NV. The ECB's supervision is carried out in conjunction with the relevant national prudential regulator (the National Bank of Belgium in BNY Mellon SA/NV's case), as part of the Single Supervisory Mechanism. BNY Mellon 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 Mellon'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, FCAauthorized firms (such as investment management firms) have the FCA as their sole regulator for both prudential and conduct purposes. As a result, FCAauthorized 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 Mellon'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 Mellon, 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 5 ("CRD5") and EU CRR2, both of which implement many elements of the Basel III framework. Aspects of EU CRD5 and EU CRR2 are currently proposed to be amended as part of the EU's plans to implement the Basel 3.1 standards and to enhance the harmonization of banking supervision in the EU. The final regulations, to be known as the Capital Requirements Directive 6 and EU CRR3 are due to be published in 2024 and set to apply from Jan. 1, 2025.

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 final regulations are due to be published in 2024 and set to apply from Jan. 7, 2025.

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.

Various existing and/or proposed EU directives and regulations have or will have a significant impact on the provision of many of our products and services, including 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 Directive on Undertakings for Collective Investment in Transferable Securities ("UCITS V"), the revised Central Securities Depositories Regulation, the revised regulation on OTC derivatives, central counterparties and trade repositories (commonly known as "EMIR"), the Payment Services Directive II and the revised Benchmarks Regulation. These EU directives and regulations may impact our operations and risk profile. Some of these EU directives and regulations are subject to review, and the outcome of these reviews is not yet certain.

Investment Firms Directive and Investment Firms Regulation

In the EU, the Investment Firms Directive/Investment Firms Regulation ("IFD/IFR"), previously referred to

as the "new prudential regime for investment firms," is a more tailored, proportionate prudential regime for investment firms. BNY Mellon has several UK-domiciled investment firms that are subject to UK IFPR.

The main change under both IFD/IFR and UK IFPR is that capital requirements for most investment firms are no longer based on Basel standards for banks such as credit risk, market risk or operational risk. Instead, the capital requirements are based on factors that are more tailored to the risks that investment firms face.

European and UK Financial Markets and Market Infrastructure

The EU and UK continue to develop and implement changes in relation to their existing financial markets and market infrastructure regulations. EU and UK MiFID II/MIFIR apply to financial institutions conducting investment business in the EEA and UK respectively and have historically required and continue to require significant changes to comply with relevant regulatory requirements, including extensive transaction reporting and market transparency obligations and a heightened focus on how financial institutions conduct business with and disclose information to their clients.

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 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 Mellon, maintain their own books and records.

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, models 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, models and processes exposing us to unexpected losses.
- 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, loss,

- disclosure, use or alteration of information, unauthorized access to or loss of information, or system or network failures.
- 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.
- Reform of interest rate benchmarks and the use of alternative reference rates by us and our clients.

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.
- Competition in all aspects of our business.
- Our strategic transactions.

Additional Risks

- Adverse events, publicity, government scrutiny or other reputational harm.
- ESG concerns, including climate change, which could adversely affect our business, affect client activity levels, subject us to additional regulatory requirements and damage our reputation.
- Impacts from geopolitical events, acts of terrorism, natural disasters, the physical effects of climate change, pandemics and other similar events.

The secret object #3 is a



 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 our processes, controls, 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 relating to an automated process can have dramatic consequences in light of the speed and volume of transactions involved. 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.

Operational errors 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.

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 or infrastructure services, could also be sources of execution and processing errors, failures or significant operational delays. These risks are 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. In certain jurisdictions, we may be deemed to be statutorily or criminally liable for operational errors, fraud. breakdowns or delays by these affiliates or third parties. 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, models 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, models and processes could expose us to unexpected losses that could materially adversely affect our results of operations or financial condition.

Our risk management fThe secret animal #3 is and mitigate risk and loss to us. We have establish 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 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 or identified.

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 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 may not prove to be accurate. Further, these models cannot anticipate every economic and financial outcome in the markets in which we operate, nor can they anticipate the specifics and timing of such outcomes, especially during severe market downturns, sudden geopolitical events or other stress events, such as those experienced during the COVID-19 pandemic or

Signature Bank in the first half of 2023. els may not appropriately capture all ks or accurately predict future events or The risk of the unsuccessful design,

development or implementation of our models, systems or processes, as well as the risk associated with oversight, monitoring and application of models, cannot be completely eliminated. Inaccuracies in the input data or parameters used in our models may further increase the risks to which we are subject. We may also experience unexpected losses if our models, estimates or judgments used or applied in connection with our risk management activities or in the preparation of our financial statements prove to have been inadequate or incorrect. All models have some degree of inaccuracy, which can be further exacerbated when environmental conditions or stress conditions push theory beyond its limits. 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.

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 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 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, models and processes, even if promptly discovered and remediated, may result in 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."

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 subjects 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 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, there can be no assurance that liabilities or losses we may incur will be covered under such policies or that the amount of insurance will be adequate.

We continue to evaluate and 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, 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 third-party service providers), failures or delays of their own systems or other services that 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). In addition, we are exposed to the risk that a technology disruption or other information security event at our vendor, or a downstream service provider or other vendor common to our third-party service providers, could impede their ability to provide products or services to us. 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 thirdparty service providers, or changes in regulation relative to these service offerings, unforeseen risks materially impacting our business operations could arise. For example, we have begun to incorporate artificial intelligence technologies, including generative artificial intelligence, into some of our products, services and processes, and we may in the future expand such offerings. The use of artificial intelligence may expose us to new risks and greater potential liabilities including as a result of enhanced governmental or regulatory scrutiny, litigation, ethical concerns, confidentiality or other security risks, intellectual property concerns and data rights and protection concerns, as well as other factors that could adversely affect our business, reputation and financial results. Additionally, 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, central agents, clearing agents and houses, exchanges and technology systems across the globe becoming more interdependent 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 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, loss, 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. 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 may also attempt to place individuals within BNY Mellon 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,