UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549 FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the year ended December 31, 2023

Commission File Number 1-11758 mslogo3q20.jpg

(Exact name of Registrant as specified in its charter)

Delaware	1585 Broadway	36-3145972	(212) 761-4000
(State or other jurisdictio	n New York, NY 10036	(I.R.S. Employer	(Registrant's telephone
of incorporation or organization)	(Address of principal executive offices, including Zip Code)	Identification No.)	number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

		Name of exchange
	Trading	on
Title of each class	Symbol(s)	which registered
Common Stock, \$0.01 par value	MS	New York Stock Exchange
Denocitary Shares, each representing 1/1 000th interest in a chare of	INIS	Exchange
Depositary Shares, each representing 1/1,000th interest in a share of Floating Rate		
Non-Cumulative Preferred Stock, Series A, \$0.01 par value	MS/PA	New York Stock Exchange
Depositary Shares, each representing 1/1,000th interest in a share of Fixed-to-Floating Rate		
		New York Stock
Non-Cumulative Preferred Stock, Series E, \$0.01 par value	MS/PE	Exchange
Depositary Shares, each representing 1/1,000th interest in a share of Fixed-to-Floating Rate		
N G 11' P C 15' 1 5 1 6 1	MC (DE	New York Stock
Non-Cumulative Preferred Stock, Series F, \$0.01 par value	MS/PF	Exchange
Depositary Shares, each representing 1/1,000th interest in a share of Fixed-to-Floating Rate		
		New York Stock
Non-Cumulative Preferred Stock, Series I, \$0.01 par value	MS/PI	Exchange
Depositary Shares, each representing $1/1,000$ th interest in a share of Fixed-to-Floating Rate		
		New York Stock
Non-Cumulative Preferred Stock, Series K, \$0.01 par value	MS/PK	Exchange
Depositary Shares, each representing 1/1,000th interest in a share of 4.875%		
		New York Stock
Non-Cumulative Preferred Stock, Series L, \$0.01 par value	MS/PL	Exchange
Depositary Shares, each representing 1/1,000th interest in a share of 4.250%		
		New York Stock
Non-Cumulative Preferred Stock, Series O, \$0.01 par value	MS/PO	Exchange
Depositary Shares, each representing 1/1,000th interest in a share of 6.500%		
		New York Stock
Non-Cumulative Preferred Stock, Series P, \$0.01 par value	MS/PP	Exchange
Global Medium-Term Notes, Series A, Fixed Rate Step-Up Senior Notes Due 2026		
of Morgan Stanley Finance LLC (and Registrant's guarantee with respect thereto)	MS/26C	New York Stock Exchange
Global Medium-Term Notes, Series A, Floating Rate Notes Due 2029		
of Morgan Stanley Finance LLC (and Registrant's guarantee with respect thereto)	MS/29	New York Stock Exchange
· · · · · · · · · · · · · · · · · · ·		

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes \square No \boxtimes
Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the
Act. Yes □ No ⊠
Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of
the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant
was required to file such reports), and (2) has been subject to such filing requirements for the past
90 days. Yes ⊠ No □
Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to
be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). Yes \boxtimes No \square
Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated
filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange
Act. (Check one):
Large Non-
accelerated filer $oxing$ Accelerated filer $oxing$ accelerated filer $oxing$ Smaller reporting company $oxing$ Emerging growth company $oxing$
If an emerging growth company, indicate by check mark if the Registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box
Indicate by check mark whether the Registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.
If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial
statements of the Registrant included in the filing reflect the correction of an error to previously issued financial statements. \Box
Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis
of incentive-based compensation received by any of the Registrant's executive officers during the relevant recovery
period pursuant to $\S240.10D-1(b)$.
Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act
). Yes □ No ⊠
As of June 30, 2023, the aggregate market value of the common stock of the Registrant held by non-affiliates of the
Registrant was approximately \$136,317,364,533. This calculation does not reflect a determination that persons are
affiliates for any other purposes.
As of January 31, 2024, there were 1,635,268,297 shares of the Registrant's common stock, \$0.01 par value, outstanding.
Documents Incorporated by Reference: Portions of the Registrant's definitive proxy statement for its 2024 annual meeting of shareholders are incorporated by reference in Part III of this Form 10-K.

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Forward-Looking Statements

We have included in or incorporated by reference into this report, and from time to time may make in our public filings, press releases or other public statements, certain statements, including, without limitation, those under "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Quantitative and Qualitative Disclosures about Risk" and "Legal Proceedings" that may constitute "forward-looking statements" within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. In addition, our management may make forward-looking statements to analysts, investors, representatives of the media and others. These forward-looking statements are not historical facts and represent only our beliefs regarding future events, many of which, by their nature, are inherently uncertain and beyond our control.

The nature of our business makes predicting the future trends of our revenues, expenses and net income difficult. The risks and uncertainties involved in our businesses could affect the matters referred to in such statements, and it is possible that our actual results may differ, possibly materially, from the anticipated results indicated in these forward-looking statements. Important factors that could cause actual results to differ from those in the forward-looking statements include, without limitation:

- the effect of market conditions, particularly in the global equity, fixed income, currency, credit
 and commodities markets, including corporate, commercial and residential mortgage lending,
 real estate and energy markets;
- the level of individual investor participation in the global markets, as well as the level and mix of client assets;
- the flow of investment capital into or from AUM;
- the level and volatility of equity, fixed income and commodity prices, interest rates, inflation and currency values, other market indices or other market factors, such as market liquidity;
- the availability and cost of both credit and capital, as well as the credit ratings assigned to our unsecured short-term and long-term debt;
- technological changes instituted by us, our competitors or counterparties, and technological risks, including risks associated with emerging technologies, business continuity and related operational risks, including breaches or other disruptions of our or a third party's (or thirdparties thereof) operations or systems;
- risk associated with cybersecurity threats, including data protection and cybersecurity risk management;
- our ability to effectively manage our capital and liquidity, including under stress tests designed by our banking regulators;
- the impact of current, pending and future legislation or changes thereto, regulation (including capital, leverage, funding, liquidity, consumer protection, and recovery and resolution requirements) and our ability to address such requirements;
- uncertainty concerning fiscal or monetary policies established by central banks and financial regulators, government shutdowns, debt ceilings or funding;
- changes to global trade policies, tariffs and replacement or reform of certain interest rate benchmarks;
- legal and regulatory actions, including litigation and enforcement, and other non-financial risks in the U.S. and worldwide;
- changes in tax laws and regulations globally;

- the effectiveness of our risk management processes and related controls, including climate risk;
- our ability to effectively respond to an economic downturn, or other market disruptions;
- the effect of social, economic, and political conditions and geopolitical events, including as a
 result of government shutdowns, changes in U.S. presidential administrations or Congress,
 sovereign risk, acts of war or aggression, and terrorist activities or military actions;
- the actions and initiatives of current and potential competitors, as well as governments, central banks, regulators and self-regulatory organizations;
- our ability to provide innovative products and services and execute our strategic initiatives, and costs related thereto, including with respect to the operational or technological integration related to such innovative and strategic initiatives;
- the performance and results of our acquisitions, divestitures, joint ventures, partnerships, minority stakes or strategic alliances, or other strategic arrangements and related integrations;
- investor, consumer and business sentiment and confidence in the financial markets;
- our reputation and the general perception of the financial services industry;
- our ability to retain, integrate and attract qualified employees or successfully transition key roles:
- climate-related incidents, other environmental and sustainability matters, and global pandemics; and
- other risks and uncertainties detailed under "Business—Competition," "Business—Supervision and Regulation," "Risk Factors" and elsewhere throughout this report.

Accordingly, you are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date on which they are made. We undertake no obligation to update publicly or revise any forward-looking statements to reflect the impact of circumstances or events that arise after the dates they are made, whether as a result of new information, future events or otherwise, except as required by applicable law. You should, however, consult further disclosures we may make in future filings of our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and any amendments thereto or in future press releases or other public statements.

Available Information

We file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission ("SEC"). The SEC maintains a website, www.sec.gov, that contains annual, quarterly and current reports, proxy and information statements, and other information that issuers file electronically with the SEC. Our electronic SEC filings are available to the public at the SEC's website.

Our website is www.morganstanley.com. You can access our Investor Relations webpage at www.morganstanley.com/about-us-ir. We make available free of charge, on or through our Investor Relations webpage, our proxy statements, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports filed or furnished pursuant to the Securities Exchange Act of 1934, as amended ("Exchange Act"), as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. We also make available, through our Investor Relations webpage, via a link to the SEC's website, statements of beneficial ownership of our equity securities filed by our directors, officers, 10% or greater shareholders and others under Section 16 of the Exchange Act.

You can access information about our corporate governance at www.morganstanley.com/about-us-governance, our sustainability initiatives at www.morganstanley.com/about-us/sustainability-at-morgan-stanley, and our commitment to diversity and inclusion at www.morganstanley.com/about-us/diversity. Our webpages include:

- Amended and Restated Certificate of Incorporation;
- · Amended and Restated Bylaws;
- Charters for our Audit Committee, Compensation, Management Development and Succession Committee, Governance and Sustainability Committee, Operations and Technology Committee, and Risk Committee;
- Corporate Governance Policies;
- Policy Regarding Corporate Political Activities;
- · Policy Regarding Shareholder Rights Plan;
- · Equity Ownership Commitment;
- Code of Ethics and Business Conduct;
- Code of Conduct:
- · Integrity Hotline Information;
- Environmental and Social Policies; and
- 2022 ESG Report: Diversity & Inclusion, Climate, and Sustainability.

Our Code of Ethics and Business Conduct applies to all directors, officers and employees, including our Chief Executive Officer, Chief Financial Officer and Deputy Chief Financial Officer. We will post any amendments to the Code of Ethics and Business Conduct and any waivers that are required to be disclosed by the rules of either the SEC or the New York Stock Exchange LLC ("NYSE") on our website. You can request a copy of these documents, excluding exhibits, at no cost, by contacting Investor Relations, 1585 Broadway, New York, NY 10036 (212-761-4000). The information on our website is not incorporated by reference into this report.

Business

Overview

We are a global financial services firm that, through our subsidiaries and affiliates, advises, and originates, trades, manages and distributes capital for governments, institutions and individuals. We were originally incorporated under the laws of the State of Delaware in 1981, and our predecessor companies date back to 1924. We are a financial holding company ("FHC") regulated by the Board of Governors of the Federal Reserve System ("Federal Reserve") under the Bank Holding Company Act of 1956, as amended ("BHC Act"). We conduct our business from our headquarters in and around New York City, our regional offices and branches throughout the U.S. and our principal offices in London, Frankfurt, Tokyo, Hong Kong and other world financial centers. Unless the context otherwise requires, the terms "Morgan Stanley," the "Firm," "us," "we" and "our" mean Morgan Stanley (the "Parent Company") together with its consolidated subsidiaries. See the "Glossary of Common Terms and Acronyms" for the definition of certain terms and acronyms used throughout the 2023 Form 10-K.

Financial information concerning us, our business segments and geographic regions for each of the years ended December 31, 2023, December 31, 2022, and December 31, 2021 is included in "Financial Statements and Supplementary Data."

Business Segments

We are a global financial services firm that maintains significant market positions in each of our business segments: Institutional Securities, Wealth Management and Investment Management. Through our subsidiaries and affiliates, we provide a wide variety of products and services to a large and diversified group of clients and customers, including corporations, governments, financial institutions and individuals. Additional information related our business segments, respective clients, and products and services provided included under "Management's Discussion and Analysis of Financial Condition and Results of Operations."

position also depends substantially on our ability to continue to attract and retain highly qualified employees while managing compensation and other costs. We compete with commercial banks, investment banking firms. brokerage firms, insurance companies, exchanges, electronic trading and clearing platforms, financial data investment repositories, advisers and sponsors of mutual funds, hedge funds, real assets funds and private credit and equity energy companies, financial funds. technology firms and other companies offering financial and ancillary services in the U.S. and globally, including, in certain instances, through the internet. In addition, restrictive laws and regulations applicable certain global financial institutions, which have been increasing in complexity and volume, may prohibit us from engaging in certain transactions, impose more stringent capital and liquidity requirements, and increase costs, and can put us at a competitive disadvantage to competitors in certain businesses not subject to these same requirements. See also "Supervision and Regulation" herein and "Risk Factors."

We compete directly in the U.S. and globally with other securities and financial services firms and broker-dealers and with others on a regional or product basis. Additionally, there is increased competition driven by established firms and asset managers, as well as the emergence of new firms, nonfinancial companies and business models, including innovative uses of technology, competing for the same clients and assets, or offering similar products and services to retail and institutional customers. We also compete with companies that provide trading and banking investment advisory services, robo-advice capabilities. access to digital capabilities and services, and other financial products and services.

Our ability to access capital at competitive rates (which is generally impacted by, among other things, our credit spreads and ratings) and to commit and deploy capital efficiently, particularly in our more capital-intensive businesses, including underwriting and sales, trading, financing and market-making activities, also affects our

technologies will likely continue the pressure on our revenues. The trend toward direct access to automated, electronic markets will likely continue as additional markets move to more automated trading platforms. We have experienced and will likely continue to experience competitive pressures in these and other areas in the future.

Our ability to compete successfully in the investment management industry affected by several factors, including our quality of reputation, investment professionals, performance of investment strategies or product offerings relative to peers and appropriate benchmark indices, advertising and sales promotion efforts, fee levels, the effectiveness of and access to distribution channels and investment pipelines, the types of products offered, and regulatory restrictions specific to FHCs. Our investment products, including alternative investment products, may compete with investments offered by other investment managers, including by investment managers who may be subject to less stringent legal and regulatory regimes than

Supervision and Regulation

As a major financial services firm, we are subject to extensive regulation by U.S. federal and state regulatory agencies and securities exchanges and by regulators and exchanges in each of the major markets where we conduct our business.

We continue to monitor the changing political, tax and regulatory environment. While it is likely that there will be changes in the way major financial institutions are regulated in both the U.S. and other markets in which we operate, it remains difficult to predict the exact impact these changes will have on our business, financial condition, results of operations and cash flows for a particular future period. We expect to remain subject to extensive supervision and regulation.

Financial Holding Company

Consolidated Supervision. We operate as a bank holding company ("BHC") and FHC under the BHC Act and are subject to

Scope of Permitted Activities. The BHC Act limits the activities of BHCs and FHCs and grants the Federal Reserve authority to limit our ability to conduct activities. We must obtain the Federal Reserve's approval before engaging in certain banking and other financial activities both in the U.S. and internationally.

The BHC Act grandfathers "activities related to the trading, sale or investment in commodities and underlying physical properties," provided that we were engaged "any of such activities in as of September 30, 1997 in the U.S." and provided that certain other conditions that are within our reasonable control are satisfied. We currently engage in our commodities activities pursuant to the BHC Act grandfather exemption, as well as other authorities under the BHC Act.

Activities Restrictions under the Volcker Rule. The Volcker Rule prohibits banking entities, including us and our affiliates, from engaging in certain proprietary trading activities, as defined in the Volcker Rule, subject to exemptions for underwriting, market-making, risk-mitigating hedging and certain other activities. The Volcker Rule also prohibits certain investments and relationships by banking entities with covered funds, as defined in the Volcker Rule, subject to a number of exemptions and exclusions.

Capital Requirements. The Federal Reserve establishes capital requirements largely based on the Basel III capital standards established by the Basel Committee on Banking Supervision ("Basel Committee"), including well-capitalized standards, for large BHCs and evaluates our compliance with such requirements. The Office of the Comptroller of the Currency ("OCC") establishes similar capital requirements and standards for Morgan Stanley Bank, N.A. ("MSBNA") and Morgan Stanley Private Bank, National Association ("MSPBNA") (together, our "U.S. Bank Subsidiaries").

The Federal Reserve, Federal Deposit Insurance Corporation ("FDIC") and the OCC (collectively, "U.S. banking agencies") have proposed a comprehensive set of revisions to their capital requirements based on changes to the Basel III capital standards

For more information about the specific capital requirements applicable to us and our U.S. Bank Subsidiaries, as well as our subsidiaries that are broker-dealers, swap dealers and security-based swap dealers, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Regulatory Requirements" and Note 16 to the financial statements.

Capital Planning, Stress Tests and Capital Distributions. The Federal Reserve has adopted capital planning and stress test requirements for large BHCs, including Morgan Stanley. For more information about our capital planning and stress test requirements, see "Management's of Discussion **Analysis Financial** and Condition and Results of Operations— Liquidity and Capital Resources—Regulatory Requirements."

In addition, the Federal Reserve, the OCC and the FDIC have the authority to prohibit or limit the payment of dividends by the organizations they supervise, banking including us and our U.S. Bank Subsidiaries, if, in the banking regulator's opinion, payment of a dividend would constitute an unsafe or unsound practice in light of the financial condition of the banking organization. For information about the Federal Reserve's restrictions on capital distributions large BHCs, for see "Management's Discussion and Analysis of Financial Condition and Results Operations—Liquidity and Capital Resources -Regulatory Requirements-Capital Plans, Stress Tests and the Stress Capital Buffer." All of these policies and other requirements could affect our ability to pay dividends and/or repurchase stock or require us to provide capital assistance to our U.S. Bank Subsidiaries under circumstances that we would not otherwise decide to do.

Liquidity Requirements. In addition to capital regulations, the U.S. banking agencies have adopted liquidity and funding standards, including the LCR, the NSFR, liquidity stress testing and associated liquidity reserve requirements.

For more information, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—

systemically important financial institutions supervised by the Federal Reserve). In addition, we are subject to a limit of 25% of Tier 1 capital for aggregate net credit exposures to any other unaffiliated counterparty.

Federal The Reserve may establish additional prudential standards for large BHCs, including with respect to an early remediation framework, contingent capital, enhanced public disclosures and limits on short-term debt, including off-balance sheet exposures. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Regulatory Requirements—Total Loss-Absorbing Capacity, Long-Term Debt and Clean Holding Company Requirements."

If the Federal Reserve or the Financial Stability Oversight Council determines that a BHC with \$250 billion or more in consolidated assets poses a "grave threat" to U.S. financial stability, the institution may be, among other things, restricted in its ability to merge or offer financial products and/or required to terminate activities and dispose of assets. See also "Capital Requirements" and "Liquidity Requirements" "Resolution and and Recovery Planning" herein.

Resolution and Recovery Planning. We are required to submit once every two years to the Federal Reserve and the FDIC a resolution plan that describes our strategy for a rapid and orderly resolution under the U.S. Bankruptcy Code in the event of our material financial distress or failure. Interim updates are required in certain limited circumstances, including material mergers or acquisitions or fundamental changes to our resolution strategy.

Our preferred resolution strategy, which is set out in our most recent resolution plan, is SPOE strategy, which generally contemplates the provision of adequate capital and liquidity by the Parent Company to certain of its subsidiaries so that such subsidiaries have the resources necessary to implement the resolution strategy after Parent Company filed the has bankruptcy.

with the FDIC being appointed as receiver, provided that determination of extraordinary financial distress and systemic risk is made by the U.S. Treasury Secretary in consultation with the U.S. President. Regulators have adopted certain orderly liquidation authority implementing regulations and may expand or clarify these regulations in the future. If we were subject to the orderly liquidation authority, the FDIC would have considerable powers, including: the power to remove directors and officers responsible for our failure and to appoint new directors and officers; the power to assign our assets and liabilities to a third party or bridge financial company without the need for creditor consent or prior court review; the ability to differentiate among our creditors, including treating certain creditors within the same class better than others, subject to a minimum recovery right on the part of disfavored creditors to receive at least what they would have received in bankruptcy liquidation; and broad powers to administer the claims process to determine distributions from the assets of the receivership. The FDIC has been developing an SPOE strategy that could be used to implement the orderly liquidation authority.

Regulators have also taken and proposed various actions to facilitate an SPOE strategy under the U.S. Bankruptcy Code, the orderly liquidation authority or other resolution regimes.

For more information about our resolution plan-related submissions and associated regulatory actions, see "Risk Factors—Legal, Regulatory Compliance and Risk," "Management's Discussion and Analysis of Financial Condition and Results Operations—Liquidity and Capital Resources Requirements—Total —Regulatory Absorbing Capacity, Long-Term Debt and Clean Holding Company Requirements" and "Management's Discussion and Analysis of Financial Condition and Results Operations—Liquidity and Capital Resources -Regulatory Requirements-Resolution and Recovery Planning."

Cyber and Information Security Risk Management and Protection of Client Information

localization requirements and restrictions on cross-border transfer of personal and other data that may restrict our ability to conduct business in those jurisdictions or create additional financial and regulatory burdens to do so.

Numerous jurisdictions have passed laws, rules and regulations in these areas and many are considering new or updated ones that could impact our businesses, particularly as the application, interpretation and enforcement of these laws, rules and regulations are often uncertain and evolving. Many aspects of our subject businesses are to legal requirements concerning the use and protection of certain customer and other information, as well as the privacy and cybersecurity laws referenced above. We have adopted measures designed to comply with these and related applicable requirements in all relevant jurisdictions.

For additional information on our cybersecurity strategy and processes, see "Cybersecurity."

Institutional Securities and Wealth Management

U.S. Bank Subsidiaries. Our U.S. Bank Subsidiaries are FDIC-insured depository institutions subject to supervision, regulation and examination by the OCC and are subject to the OCC's risk governance which establish heightened guidelines, standards for a large IDI's risk governance framework and the oversight of that framework by the IDI's board of directors. Our U.S. Bank Subsidiaries are also subject to prompt corrective action standards, which require the relevant federal banking regulator to take prompt corrective action with respect to a depository institution if that institution does not meet certain capital adequacy standards. In addition, BHCs, such as Morgan Stanley, are required to serve as a source of strength to their U.S. bank subsidiaries and commit resources to support these subsidiaries in the event such subsidiaries are in financial distress. Our U.S. Bank Subsidiaries' business activities are generally limited to supporting our Institutional Securities and Wealth Management business segments. Our U.S. Rank Subsidiaries' husiness activities are

Broker-Dealer and Investment Adviser Regulation. Our primary U.S. broker-dealer subsidiaries, Morgan Stanley & Co. LLC ("MS&Co.") and Morgan Stanley Smith Barney LLC ("MSSB") are registered brokerdealers with the SEC and in all 50 states, the District of Columbia, Puerto Rico and the U.S. Virgin Islands and are members of various self-regulatory organizations, including the Financial Industry Regulatory Authority ("FINRA"), and various securities exchanges and clearing organizations. Broker-dealers are subject to laws and regulations covering all aspects of the securities business, including sales and practices, securities offerings, publication of research reports, use of customers' funds and securities, capital structure, risk management controls in connection with market access, recordkeeping and retention, and the conduct of their directors, officers, representatives and other associated persons. Broker-dealers are also regulated by securities administrators in those states where they do business. Our significant broker-dealer subsidiaries are members of the Securities Investor Protection Corporation.

MSSB is also a registered investment adviser with the SEC. MSSB's relationship with its investment advisory clients is subject to the fiduciary and other obligations imposed on investment advisers. The SEC and other supervisory bodies generally have broad administrative address powers to non-compliance, including the power to restrict or limit MSSB from carrying on its investment advisory and other asset management activities.

The Firm is subject to various regulations that affect broker-dealer sales practices and customer relationships, including the SEC's "Regulation Best Interest," which requires broker-dealers to act in the "best interest" of retail customers at the time a recommendation is made without placing the financial or other interests of the broker-dealer ahead of the interest of the retail customer.

Margin lending by our broker-dealers is regulated by the Federal Reserve's restrictions on lending in connection with are subject to net capital requirements of, and certain of their activities are regulated by, the CFTC and the National Futures Association ("NFA"). MS&Co. is also subject to requirements of, and regulation by, the CME Group, in its capacity as MS&Co.'s designated self-regulatory organization, and various commodity futures exchanges of which MS&Co. is a member. Rules and regulations of the CFTC, NFA, the Joint Audit Committee and commodity futures exchanges address obligations related to, other things, customer protections, including rules and regulations governing the segregation of customer funds, the use by futures commission merchants of customer funds, the margining of customer accounts documentation entered into by futures commission merchants with their customers, record-keeping and reporting obligations of futures commission merchants and introducing brokers, risk disclosure and risk management. commodities activities are subject to extensive laws and regulations in the U.S. and abroad.

Derivatives Regulation. We are subject to comprehensive regulation of our derivatives businesses, including regulations that impose margin requirements, public and regulatory reporting, central clearing and mandatory trading on regulated exchanges or execution facilities for certain types of swaps and security-based swaps (collectively, "Swaps").

CFTC and SEC rules require registration of swap dealers and security-based swap dealers, respectively, and impose numerous obligations on such registrants, including adherence to business conduct standards for all in-scope Swaps. We have registered a number of U.S. and non-U.S. swap dealers and conditionally registered a number of and non-U.S security-based swap dealers. Swap dealers and security-based swap dealers regulated by a prudential regulator are subject to uncleared Swap margin requirements and minimum capital requirements established by the prudential regulators. Swap dealers and securitybased swap dealers not subject to regulation by a prudential regulator are Swap subject uncleared to margin

In addition, certain of our subsidiaries are U.S. registered broker-dealers and act as distributors to our proprietary mutual funds and as placement agents to certain private investment funds managed by Investment Management business segment. Certain of our affiliates are registered as commodity trading advisors commodity pool operators, or are operating under certain exemptions from such registration pursuant to CFTC rules and other guidance, and have certain responsibilities with respect to each pool they advise. Our investment management activities are subject to additional laws and regulations, including restrictions sponsoring or investing in, or maintaining certain other relationships with, covered funds, as defined by the Volcker Rule, subject to certain limited exemptions. See also "Financial Holding Company—Activities Restrictions under the Volcker "Institutional Securities Wealth and Management—Broker-Dealer and Regulation," Investment Adviser "Institutional Securities and Wealth of Management—Regulation Futures Activities and Certain Commodities Activities," and "Institutional Securities and Wealth Management—Derivatives Regulation" "Non-U.S. herein and Regulation" herein for a discussion of other regulations that impact our Investment Management business activities.

U.S. Consumer Protection

are subject to supervision regulation by the CFPB with respect to U.S. federal consumer protection laws. Federal consumer protection laws to which we are subject include the Gramm-Leach-Bliley Act's privacy provisions, Equal Credit Opportunity Act, Home Mortgage Disclosure Act, Electronic Fund Transfer Act, Fair Credit Reporting Act, Real Estate Settlement Procedures Act, Truth in Lending Act and Truth in Savings Act, all of which are enforced by the CFPB. We are also subject to certain federal consumer protection laws enforced by the OCC, including the Servicemembers Civil Relief Act. Furthermore, we are subject to certain state consumer protection laws, and under the Dodd-Frank Act, state attorneys general and other state officials are empowered to

prudential requirements that are applicable under non-U.S. law.

Firmwide Financial Crimes Program

Our Financial Crimes is program coordinated and implemented on an enterprise-wide basis and supports our financial crime prevention efforts across all regions and business units. The program includes anti-money laundering ("AML"), economic sanctions ("Sanctions"), antiboycott, anti-corruption, anti-tax evasion, and government and political activities compliance programs and aligned businessline risk functions.

In the U.S., the Bank Secrecy Act, as amended by the USA PATRIOT Act of 2001 and the Anti-Money Laundering Act of 2020, imposes significant obligations on financial institutions to detect and deter money laundering and terrorist financing activity, including requiring banks, broker-dealers, futures commission merchants, introducing brokers and mutual funds to develop and implement AML programs, verify identity of customers that maintain accounts, and monitor and report suspicious activity to appropriate law enforcement or regulatory authorities. Outside of the U.S., applicable laws, rules and regulations similarly require designated types of financial institutions to implement AML programs.

We are also subject to Sanctions, such as regulations and economic sanctions programs administered by the U.S. government, including the U.S. Treasury Department's Office of Foreign Assets Control ("OFAC") and the U.S. Department of State, and similar sanctions programs imposed by foreign governments or global or regional multilateral organizations. In addition, we are subject to anti-corruption laws, such as the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act, in the jurisdictions in which we operate. Anticorruption laws generally prohibit offering, promising, giving or authorizing others to give anything of value, either directly or indirectly, to a government official or private party in order to influence official action or otherwise gain an unfair business advantage, such as to obtain or retain hucinacc

regulators, directors and the communities in which we operate. These guiding values —Put Clients First, Do the Right Thing, Lead with Exceptional Ideas, Commit to Diversity and Inclusion, and Give Back—are at the heart of our workplace culture and underpin our success. Our Code of Conduct is central to our expectation that employees embody our values. Every new hire and every employee annually is required to certify to their understanding of and adherence to the Code of Conduct. We also invite employee feedback on our culture and workplace through our ongoing employee engagement surveys. For а discussion of the culture, values and conduct of employees, see "Quantitative and Qualitative Disclosures about Risk-Risk Management."

Diversity and Inclusion

believe a diverse and inclusive workforce is important to Morgan Stanley's continued success and our ability to serve our clients. Our programming, including the Morgan Stanley Institute for Inclusion, supports our workforce and helps to build a sense of community and belonging for all We have colleagues. deepened investments to recruit, advance and retain diverse talent through a holistic approach, focused on professional development, health and wellbeing, benefits, and culture.

Talent Development and Retention

We are committed to the development of our workforce and supporting mobility and career growth. Our talent development programs are designed to provide employees with the resources to help them achieve their career goals, build skills management and lead their We organizations. believe supporting development employee and growth contributes to long-term retention.

We continue to offer leadership programs to support employees as they progress in their career at the firm.

Compensation, Financial and Employee Wellbeing

We provide responsible and effective compensation programs that reinforce our

by location and include: health care and insurance benefits, mental health resources, flexible spending and health savings accounts, paid time-off, flexible work schedules, family leave, child and elder care resources, financial help with fertility, adoption and surrogacy, and tuition assistance, among many others. Onsite services in our principal locations include health centers, mental health counseling, fitness centers and physical therapy.

In 2023, we further enhanced our family support, women's health, mental health and wellbeing offerings. Our Global Wellbeing Board, comprised of senior management across the Firm's businesses and geographies, continues to shape and advance our wellbeing strategy. For more detailed information on our human capital programs and initiatives, see "People and Culture" in our 2022 ESG Report: Diversity & Inclusion, Climate, and Sustainability (found on our website). The reports and information elsewhere on our website are not incorporated by reference into, and do not form any part of, this Annual Report.

Human Capital Metrics

			At
			December
			31,
Category	Ме	2023	
		Americas	53
	Employees by geography (thousands)	Asia	17
Employees			
		EMEA	10
	Employee engagement ¹	% Proud to work	
Culture		at Morgan	
		Stanley	92 %
	Global gender representation	% Women	40 %
		% Women	
		officer ²	29 %
Diversity and		% Ethnically	
Inclusion	U.S. ethnic diversity representation	diverse ³	35 %
		% Ethnically	
		diverse	
		officer ^{2,3}	28 %
	Voluntary		
	attrition in		
	2023	% Global	8 %
		Management	

Information about Our Executive Officers

The executive officers of Morgan Stanley and their age and titles as of February 22, 2024 are set forth below. Business experience is provided in accordance with SEC rules.

Mandell L. Crawley (48). Executive Vice President and Chief Human Resources Officer (since February 2021). Head of Private Wealth Management (June 2017 to January 2021). Chief Marketing Officer (September 2014 to June 2017). Head of National Business Development and Talent Management for Wealth Management (June 2011 to September 2014). Divisional Business Development Officer (May 2010 to June 2011). Regional Business Development Officer (May 2009 to May 2010). Head of Field Sales and Marketing (February 2008 to May 2009). Head of Fixed Income Capital Markets Sales and Distribution for Wealth Management (April 2004 to February 2008).

P. Gorman (65). Executive James Chairman of the Board of Directors (since January 2012). Chief Executive Officer of Morgan Stanley (January 2012 to December 2023). President (January 2010 December 2011) and member of the Board of Directors (since January 2010). Co-President (December 2007 to December 2009) and Co-Head of Strategic Planning (October 2007 to December 2009). President and Chief Operating Officer of Wealth Management (February 2006 to April 2008).

Eric F. Grossman (57). Executive Vice President and Chief Legal Officer of Morgan Stanley (since January 2012) and Chief Administrative Officer (since July 2022). Global Head of Legal (September 2010 to January 2012). Global Head of Litigation (January 2006 to September 2010) and General Counsel of the Americas (May 2009 to September 2010). General Counsel of Wealth Management (November 2008 to September 2010). Partner at the law firm of Davis Polk & Wardwell LLP (June 2001 to December 2005).

Edward Pick (55). Chief Executive Officer of Morgan Stanley (since January 2024). Co-President and Co-Head of Corporate

Daniel A. Simkowitz (58). Co-President (since January 2024). Head of Investment Management (October 2015 to December 2023) and Co-Head of Corporate Strategy (June 2021 to December 2023). Co-Head of Global Capital Markets (March 2013 to September 2015). Chairman of Global Capital Markets (November 2009 to March 2013). Managing Director in Global Capital Markets (December 2000 to November 2009).

Charles A. Smith (57). Executive Vice President and Chief Risk Officer of Morgan Stanley (since May 2023). Head of Institutional Securities **Business** Development (March 2017 to May 2023). Chief Financial Officer of Institutional Securities (August 2012 to May 2017). President of Morgan Stanley Bank, N.A. and Stanley Private Morgan Bank, (September 2011 to August 2012). Head of Firm Strategy and Execution (May 2008 to September 2011). Managing Director in the Investment Banking Division (December 2005 to May 2008).

Sharon Yeshaya (44). Executive Vice President and Chief Financial Officer (since June 2021). Head of Investor Relations (June 2016 to May 2021). Chief of Staff in the Office of the Chairman and CEO (January 2015 to May 2016). Co-Head of New Product Origination for Derivative Structured Products (December 2012 to December 2014).

Risk Factors

For a discussion of the risks and uncertainties that may affect our future results and strategic objectives, see "Forward-Looking Statements" preceding "Business" and "Return on Tangible Common Equity Goal" in "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Market Risk

Market risk refers to the risk that a change in the level of one or more market prices, rates, spreads, indices, volatilities, correlations or other market factors, such as market liquidity, will result in losses for a position or portfolio. We have direct exposure to market risk. In addition, market risk may also impact our clients and markets in a manner that may indirectly impact us. For more information on how we monitor and manage market risk, see "Quantitative and Qualitative Disclosures about Risk-Market Risk."

Our results of operations may be materially affected by market fluctuations and by global financial market and economic conditions and other factors.

Our results of operations have been in the past and may, in the future, be materially affected by global financial market and economic conditions, including in particular by periods of low or slowing economic growth in the United States and other major markets, both directly and indirectly through their impact on client activity levels. These include the level and volatility of equity, fixed income and commodity prices; the level, term structure and volatility of interest rates; inflation and currency values; the level of other market indices, fiscal monetary policies or established by central banks and financial regulators; and uncertainty concerning the future path of interest rates, government shutdowns, debt ceilings or funding, which may be driven by economic conditions, recessionary fears, market uncertainty or lack of confidence among investors and clients due to the effects of widespread events such as global pandemics, natural disasters climate-related incidents acts of market conditions that in turn affect the size, number and timing of investment banking client assignments and transactions and the realization of returns from our principal investments.

Periods of unfavorable market or economic conditions, including equity market levels and the level and pace of changes in interest rates and asset valuation, may have adverse impacts on the level of investor confidence individual participation in the global markets and/or the level of and mix of client assets, including deposits, which would negatively impact the results of our Wealth Management business segment.

Substantial market fluctuations could also cause variations in the value of our investments in our funds, the flow of investment capital into or from AUM, and the way customers allocate capital among money market, equity, fixed income or other investment alternatives, which could negatively impact the results of our Investment Management business segment.

The value of our financial instruments may materially affected by market fluctuations. volatility, Market illiquid market conditions and disruptions in the markets may make it difficult to value and monetize certain of our financial instruments, particularly during periods of uncertainty or displacement. Subsequent valuations in future periods, in light of factors then prevailing, may result in significant changes in the value of these instruments and may adversely impact prospective fees historical or performance-based income (also known as incentive fees, which include carried interest) in respect of certain businesses. In addition, at the time of any sales and settlements of these financial instruments, the price we ultimately realize will depend on the demand and liquidity in the market at that time and may be materially lower than their current fair value. Any of these factors could cause a decline in the value of our financial instruments, which may adversely affect our results of operations in future periods.

In addition, financial markets are

Holding large and concentrated positions may expose us to losses.

Concentration of risk may reduce revenues or result in losses in our market-making, investing, underwriting (including block trading) and lending businesses (including margin lending) in the event of unfavorable market movements. We commit substantial amounts of capital to these businesses, which often results in our taking large positions in the securities of, or making large loans to, a particular issuer or issuers in a particular industry, country or region. In the event we hold a concentrated position larger than those held by competitors, we may incur larger losses. For further information regarding our country risk exposure, see also "Quantitative Qualitative Disclosures about Risk—Country Risks."

Credit Risk

Credit risk refers to the risk of loss arising when a borrower, counterparty or issuer does not meet its financial obligations to us. For more information on how we monitor and manage credit risk, see "Quantitative and Qualitative Disclosures about Risk—Credit Risk."

We are exposed to the risk that third parties that are indebted to us will not perform their obligations.

We incur significant credit risk exposure through our Institutional Securities business segment. This risk may arise from a variety of business activities, including, but not limited to: extending credit to clients through various lending commitments; entering into swap or other derivative contracts under which counterparties have obligations to make payments to us; acting as clearing broker for listed and over-thecounter derivatives whereby we guarantee client performance to clearinghouses; providing short- or long-term funding that is secured by physical or financial collateral, including, but not limited to, real estate and marketable securities, whose value may at times be insufficient to fully cover the loan repayment amount; posting margin and/or collateral and other commitments clearinghouses, clearing agencies, exchanges, banks, securities firms and

Our valuations related to, and reserves for losses on, credit exposures rely on complex models, estimates and subjective judgments about the future. While we believe current valuations and reserves adequately address our perceived levels of risk, future economic conditions, including inflation and changes in real estate and other asset values, that differ from or are more severe than forecast, inaccurate models or assumptions, or external factors such as global pandemics, natural disasters, or geopolitical events, could lead to inaccurate measurement of or deterioration of credit quality of our borrowers and counterparties or the value of collateral and result in unexpected losses. We may also incur higher-than-anticipated credit losses result of (i) disputes with as counterparties over the valuation of collateral or (ii) actions taken by other lenders that may negatively impact the valuation of collateral. In cases where we foreclose on collateral, sudden declines in the value or liquidity of collateral may result in significant losses to us despite our (i) credit monitoring, (ii) over-collateralization, (iii) ability to call for additional collateral or (iv) ability to force repayment of the underlying obligation, especially where there is a single type of collateral supporting the obligation. In addition, in the longer term, climate change may have a negative impact on the financial condition our clients, which may decrease revenues from those clients and increase the credit risk associated with loans and other credit exposures to those clients. Certain of our credit exposures may be concentrated by counterparty, product, sector, portfolio, industry or geographic region. Although our models and estimates account for correlations among related types of exposures, a change in the market economic environment for or concentrated product or an external factor impacting a concentrated counterparty, sector, portfolio, industry or geographic region may result in credit losses in excess of amounts forecast. For further information regarding our country risk exposure, see "Quantitative and Qualitative Disclosures about Risk—Country Risks."

In addition, as a clearing member of several central counterparties, we are responsible for the defaults or missenduct of our

financial commitments to multi-lateral actions intended to support market stability. This is sometimes referred to as systemic risk and may adversely affect financial intermediaries, such as clearinghouses, clearing agencies, exchanges, banks and securities firms, with which we interact on a daily basis and, therefore, could adversely affect us. See also "Systemic Risk Regime" under "Business—Supervision and Regulation—Financial Holding Company."

Operational Risk

Operational risk refers to the risk of loss, or of damage to our reputation, resulting from inadequate or failed processes or systems, from human factors (e.g., inappropriate or unlawful conduct) or from external events cyberattacks (e.g., or third-party vulnerabilities) that may manifest as, for example, loss of information, business disruption, theft and fraud, legal, regulatory and compliance risks, or damage to physical assets. We may incur operational risk across the full scope of our business activities, including revenue-generating activities and support and control groups (e.g., information technology ("IT") and trade processing). Legal, regulatory and compliance risk is included in the scope of operational risk and is discussed below under "Legal, Regulatory and Compliance Risk." For more information on how we monitor and manage operational risk, see "Quantitative and Qualitative Disclosures about Risk—Operational Risk."

We are subject to operational risks, including a failure, breach or other disruption of our operations or security systems or those of our third parties (or third parties thereof), as well as human error or malfeasance, which could adversely affect our businesses or reputation.

Our businesses are highly dependent on our ability to process and report, on a daily basis, a large number of transactions across numerous and diverse markets in many currencies. We may introduce new products or services or change processes or reporting, including in connection with new regulatory requirements, or integration of processes or systems of acquired companies, resulting in new operational risk

As a major participant in the global capital markets, we face the risk of incorrect valuation or risk management of our trading positions due to flaws in data, models, electronic trading systems or processes, or due to fraud or cyberattack. We also face the risk of operational failure or disruption of any of the clearing agents, exchanges, clearinghouses other or financial intermediaries we use to facilitate our lending, securities and derivatives transactions. In addition, in the event of a breakdown or improper operation disposal of our or a direct or indirect third party's systems (or third parties thereof), processes or information assets, improper or unauthorized action by third including consultants subcontractors or our employees, we have received in the past and may receive in the future regulatory sanctions, and could suffer financial loss, an impairment to our liquidity position, a disruption of our businesses or damage to our reputation.

In addition, the interconnectivity of multiple financial institutions with central agents, exchanges and clearinghouses, and the increased importance of these entities, increases the risk that an operational failure at one institution or entity may cause an industrywide operational failure that could materially impact our ability to conduct business. Furthermore, the concentration of Firm and personal information held by a small number of third parties increases the risk that a breach or disruption at a key third party may cause an industrywide event that could significantly increase the cost and risk of conducting business. These risks may be heightened to the extent that we rely on third parties that concentrated in a geographic area.

There can be no assurance that our business contingency and security response plans fully mitigate all potential risks to us. Our ability to conduct business may be adversely affected by a disruption in the infrastructure that supports our businesses and the communities where we are located. This may include a disruption involving physical site access; software flaws and vulnerabilities; cybersecurity incidents; terrorist activities; political unrest; disease pandemics; catastrophic events; climate-

our controls and other procedures that are intended to prevent and detect such errors or violations. These can include calculation or input errors, inadvertent or duplicate payments, mistakes in addressing emails or other communications, errors in software or model development or implementation, or errors in judgment, as well as intentional efforts to disregard or circumvent applicable policies, laws, rules procedures. Our use of new technologies may be undermined by such human errors or misconduct due to undetected flaws or biases in the algorithms or data utilized by such technologies. Human errors and malfeasance, even if promptly discovered and remediated, can result in material losses and liabilities for us, and negatively impact our reputation in the future.

We conduct business in various jurisdictions outside the U.S., including jurisdictions that may not have comparable levels of protection for their corporate assets, such as intellectual property, trademarks, trade secrets, know-how, and customer information and records. The protection afforded in those jurisdictions may be less established and/or predictable than in the U.S. or other jurisdictions in which we operate. As a result, there may also be heightened risks associated with the potential theft of their data, technology and intellectual property in those jurisdictions by domestic or foreign actors, including private parties and those affiliated with or controlled by state actors. Additionally, we are subject to complex and evolving U.S. and international laws and regulations governing cybersecurity, privacy and data governance, transfer and protection, which may differ and potentially conflict, in various jurisdictions. Any theft of data, technology or intellectual property may negatively impact our operations and reputation, including disrupting the business activities of our subsidiaries, affiliates, joint ventures or clients conducting business in those jurisdictions.

A cyberattack, information or security breach or a technology failure of ours or a third party could adversely affect our ability to conduct our business or manage our exposure to risk, or result in disclosure or misuse of personal, increased nation-state targeting of financial institutions in the U.S. and abroad.

Information security risks may also derive from human error, fraud or malice on the part of our employees or third parties, malfunctions, software bugs, server software or hardware failure or other technological failure. For example, human error has led to the loss of the Firm's physical data-bearing devices in the past. These risks may be heightened by several factors, including remote work, reliance on new technologies (such as generative artificial intelligence) or as a result of the integration of acquisitions and other strategic initiatives that may subject us to new technology, customers or third-party providers. In addition, third parties with whom we do business or share information, and each of their service providers, our regulators and the third parties with whom our customers and clients share information used for authentication, may also be sources of cybersecurity and information security risks, particularly where activities of customers are beyond our security and control systems. There is no guarantee that the measures we take will provide absolute security or recoverability given that the techniques used in cyberattacks complex, frequently change and are difficult to anticipate.

Like other financial services firms, the Firm, its third-party providers and its clients continue to be the subject of unauthorized access attacks; mishandling, loss, theft or misuse of information; computer viruses or malware; cyberattacks designed to obtain confidential information, destroy disrupt or degrade service, sabotage systems or networks or cause other damage; ransomware; denial of service attacks; data breaches; social engineering attacks; phishing attacks; and other events. There can be no assurance that such unauthorized access, mishandling or misuse of information, or cybersecurity incidents will not occur in the future and they could occur more frequently and on a more significant scale.

We maintain a significant amount of personal and confidential information on our customers, clients and certain

clients and the market. client our dissatisfaction, additional costs to us to maintain and update our operational and security systems and infrastructure, violation of the applicable data protection and privacy laws, regulatory investigations and enforcement actions, litigation exposure, or fines or penalties, any of which could adversely affect our business, financial condition or results of operations.

Given our global footprint and the high volume of transactions we process; the large number of clients, partners, vendors and counterparties with which we do business; and the increasing sophistication of cyberattacks, cyberattack а information or security breach could occur and persist for an extended period of time without detection. Ιt could take considerable time for us to determine the scope, extent, amount and type of information compromised, and the impact of such an attack may not be fully understood. During such time we would not necessarily know the extent of the harm or how best to remediate it, and certain errors actions could be repeated compounded before they are discovered and remediated, if at all, all or any of which would further increase the costs and consequences of cyberattack а or information security incident.

While many of our agreements with partners and third-party vendors include indemnification provisions, we may not be able to recover sufficiently, or at all, under such provisions to adequately offset any losses we may incur. In addition, although we maintain insurance coverage that may, subject to policy terms and conditions, cover certain aspects of cyber and information security risks, such insurance coverage may be insufficient to cover any or all losses we may incur, and we cannot be sure that such insurance will continue to be available to us on commercially reasonable terms, or at all, or that our insurers will not deny coverage as to any future claim.

We continue to make investments with a view toward maintaining and enhancing our cybersecurity, resilience and information security posture, including investments in on how we monitor and manage liquidity risk, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources" and "Ouantitative and Qualitative Disclosures about Risk-Liquidity Risk."

Liquidity is essential to our businesses and we rely on external sources to finance a significant portion of our operations.

Liquidity is essential to our businesses. Our liquidity could be negatively affected by our inability to raise funding in the long-term or short-term debt capital markets, our inability to access the secured lending markets, our inability to attract and retain deposits, or unanticipated outflows of cash or collateral by customers or clients. Factors that we cannot control, such as disruption of the financial markets or negative views about the financial services industry generally, including concerns regarding fiscal matters in the U.S. and other geographic areas, could impair our ability to raise funding.

In addition, our ability to raise funding could be impaired if investors, depositors or lenders develop a negative perception of our long-term or short-term financial prospects due to factors such as an incurrence of large trading, credit or operational losses, a downgrade by the rating agencies, a decline in the level of our business activity, if regulatory authorities take significant action against us or our industry, or if we discover significant employee misconduct or illegal activity.

If we are unable to raise funding using the methods described above, we would likely need to finance or liquidate unencumbered assets, such as our investment portfolios or trading assets, to meet maturing liabilities or other obligations. We may be unable to sell some of our assets or we may have to sell assets at a discount to market value, either of which could adversely affect our results of operations, cash flows and financial condition.

Our borrowing costs and access to the debt capital markets depend on our credit ratings.

OTC such as and other derivative transactions, including credit derivatives and interest rate swaps. In connection with certain OTC trading agreements and certain other agreements associated with Institutional Securities business segment, we may be required to provide additional collateral to, or immediately settle any outstanding liability balance with, certain counterparties in the event of a credit rating downgrade.

Termination of our trading agreements could cause us to sustain losses and impair our liquidity by requiring us to find other sources of financing or to make significant payments in the form of cash or securities. The additional collateral or termination payments that may occur in the event of a future credit rating downgrade vary by contract and can be based on ratings by Moody's Investors Service, Inc., S&P Global Ratings and/or other rating agencies. See "Management's Discussion Analysis of Financial Condition and Results Operations—Liquidity and Capital Resources—Credit Ratings—Incremental Collateral or Terminating Payments."

We are a holding company and depend on payments from our subsidiaries.

The Parent Company has no business operations and depends on dividends, distributions, loans and other payments from its subsidiaries to fund dividend payments and to fund all payments on its obligations, including debt obligations. Regulatory restrictions, tax restrictions or elections and other legal restrictions may limit our ability to transfer funds freely, either to or from our subsidiaries. In many of our subsidiaries, particular, including our bank and broker-dealer subsidiaries, are subject to laws, regulations and self-regulatory organization rules that, in certain circumstances, limit, as well as permit regulatory bodies to block or reduce, the flow of funds to the Parent Company, or that prohibit such transfers or dividends altogether, including steps to "ring fence" entities by regulators outside the U.S. to protect clients and creditors of such entities in the event of financial difficulties involving such entities.

These laws regulations and rules may

Our liquidity and financial condition have in the past been, and in the future could be, adversely affected by U.S. and international markets and economic conditions.

Our ability to raise funding in the long-term or short-term debt capital markets or the equity markets, or to access secured lending markets, has in the past been, and could in the future be, adversely affected by conditions in the U.S. and international markets and economies.

In particular, our cost and availability of funding in the past have been, and may in the future be, adversely affected by illiquid credit markets, interest rates and wider credit spreads. Significant turbulence in the U.S., the E.U. and other international markets and economies could adversely affect our liquidity and financial condition and the willingness of certain counterparties and customers to do business with us.

Legal, Regulatory and Compliance Risk

Legal, regulatory and compliance risk includes the risk of legal or regulatory sanctions; material financial loss, including fines, penalties, judgments, damages and/ or settlements; limitations on our business; or loss to reputation we may suffer as a result of our failure to comply with laws, regulations, rules, related self-regulatory organization standards and codes conduct applicable to our business activities. This risk also includes contractual and commercial risk, such as the risk that a counterparty's performance obligations will unenforceable. also includes be Ιt compliance with AML, terrorist financing and anti-corruption rules and regulations. For more information on how we monitor manage legal, regulatory compliance risk, see "Quantitative and Qualitative Disclosures about Risk-Legal, Regulatory and Compliance Risk."

The financial services industry is subject to extensive regulation, and changes in regulation will impact our business.

Like other major financial services firms, we are subject to extensive regulation by U.S.

resolution regimes and resolution planning requirements, requirements for maintaining minimum amounts of TLAC and external long-term debt, restrictions on activities and investments imposed by the Volcker Rule, comprehensive derivatives regulation, interest rate benchmark requirements, commodities regulation, market structure regulation, consumer protection regulation, regulations and interpretations, antitrust laws, trade and transaction reporting obligations, broadened fiduciary obligations and disclosure requirements.

New laws, rules, regulations and guidelines, as well as ongoing implementation of, our efforts to comply with, and/or changes to laws, rules, regulations and guidelines, including changes breadth, in the application, interpretation or enforcement of laws, rules, regulations and guidelines, could materially impact the profitability of our businesses and the value of assets we hold, impact our income tax provision and effective tax rate, expose us to additional theories of liability and additional costs, require changes to business practices or to discontinue businesses, us adversely affect our ability to pay dividends and repurchase our stock or require us to raise capital, including in ways that may adversely impact our shareholders or creditors.

In addition, regulatory requirements that are imposed by foreign policymakers and regulators may be inconsistent or conflict with regulations that we are subject to in the U.S. and may adversely affect us.

The application of regulatory requirements and strategies in the U.S. or other jurisdictions to facilitate the orderly resolution of large financial institutions may pose a greater risk of loss for our security holders and subject us to other restrictions.

We are required to submit once every two years to the Federal Reserve and the FDIC a resolution plan that describes our strategy for a rapid and orderly resolution under the U.S. Bankruptcy Code in the event of material financial distress or failure. If the Federal Reserve and the FDIC were to jointly determine that our resolution plan submission was not credible or would not

debt. See "Business—Supervision and Regulation" and "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Regulatory Requirements."

Further, because both our resolution plan contemplates an SPOE strategy under the U.S. Bankruptcy Code and the FDIC has proposed an SPOE strategy through which it may apply its orderly liquidation authority powers, we believe that the application of an SPOE strategy is the reasonably likely outcome if either our resolution plan were implemented or a resolution proceeding were commenced under the orderly liquidation authority. An SPOE strategy generally contemplates the provision of adequate capital and liquidity by the Parent Company to certain of its subsidiaries so that such subsidiaries have the resources necessary to implement the resolution strategy, and the Parent Company has entered into a secured amended and restated support agreement with such entities, pursuant to which it would provide such capital and liquidity to such entities.

addition, a wholly owned, direct In subsidiary of the Parent Company, Morgan Stanley Holdings LLC ("Funding IHC"), serves as a resolution funding vehicle. The Parent Company has transferred, and has agreed to transfer on an ongoing basis, certain assets to the Funding IHC. In the event of a resolution scenario, the Parent Company would be obligated to contribute all of its material assets that can be contributed under the terms of the amended and restated support agreement (other than shares in subsidiaries of the Parent Company and certain other assets) to the Funding IHC. The Funding IHC would be obligated to provide capital and liquidity, applicable, certain supported to subsidiaries, pursuant to the terms of the secured amended and restated support agreement.

The obligations of the Parent Company and of the Funding IHC, respectively, under the amended and restated support agreement are in most cases secured on a senior basis by the assets of the Parent Company (other than shares in subsidiaries of the Parent Company and certain other assets), and the

the orderly liquidation authority and other resolution regimes. For example, Federal Reserve requires top-tier BHCs of U.S. G-SIBs, including the Firm, to maintain adequate TLAC, including equity eligible long-term debt, in order to ensure that such institutions have enough lossabsorbing resources at the point of failure to be recapitalized through the conversion of debt to equity or otherwise by imposing losses on eligible TLAC where the SPOE strategy is used. The combined implication of the SPOE resolution strategy and the TLAC requirement is that our losses will be imposed on the holders of eligible long-term debt and other forms of eligible TLAC issued by the Parent Company before any losses are imposed on the creditors of our supported subsidiaries without requiring taxpayer or government financial support.

In addition, certain jurisdictions, including the U.K. and E.U. jurisdictions, have implemented, or are in the process of implementing, changes to resolution regimes to provide resolution authorities with the ability to recapitalize a failing entity organized in such jurisdiction by writing down certain unsecured liabilities or converting certain unsecured liabilities into equity. Such "bail-in" powers are intended to enable the recapitalization of a failing institution by allocating losses to its shareholders and unsecured creditors. This may increase the overall level of capital and liquidity required by us on a consolidated basis and may result in limitations on our ability to efficiently distribute capital and liquidity among our affiliated entities, including in times of stress. Non-U.S. also considering regulators are requirements that certain subsidiaries of financial institutions maintain minimum amounts of TLAC that would pass losses up from the subsidiaries to the Parent Company and, ultimately, to security holders of the Parent Company in the event of failure.

We may be prevented from paying dividends or taking other capital actions because of regulatory constraints or revised regulatory capital requirements.

We are subject to comprehensive

The financial services industry faces substantial litigation and is subject to extensive regulatory and law enforcement investigations, and we may face damage to our reputation and legal liability.

As a global financial services firm, we face the risk of investigations and proceedings governmental and self-regulatory organizations in all countries in which we conduct our business. These investigations and proceedings, as well as the amount of penalties and fines sought, continue to impact the financial services industry. Certain U.S. and international governmental entities have brought criminal actions against, or have sought convictions, pleas, deferred prosecution agreements or non-prosecution agreements financial institutions. Significant regulatory or law enforcement action against us could materially adversely affect our business, reputation, financial condition or results of operations, and increase our exposure to civil litigation.

Investigations and proceedings initiated by these authorities may result in adverse judgments, settlements, fines, penalties, disgorgement, restitution, forfeiture, injunctions or other relief, and have included and may in the future include requirements that the Firm admit certain conduct, which may result in increased exposure to civil litigation. In addition, these measures have caused and may in the future cause collateral consequences. For example, such matters could impact our ability to engage in, or impose limitations on, certain of our businesses.

As part of the resolution of certain investigations and proceedings, the Firm has been and may in the future be required to undertake certain measures and failure result in adverse to do SO may consequences, such as further investigations or proceedings—both civil and criminal—and additional penalties, fines, judgments or other relief.

The Dodd-Frank Act also provides compensation to whistleblowers who present the SEC or CFTC with information related to socurities are commedities law.

obligations. In other cases, including antitrust litigation, we may be subject to claims for joint and several liability with other defendants for treble damages or other relief related to alleged conspiracies involving other institutions. Like any large corporation, we are also subject to risk from potential employee misconduct, including noncompliance with policies, laws, rules and regulations, and improper use or disclosure of confidential information, or improper sales practices or other conduct.

We may be responsible for representations and warranties associated with commercial and residential real estate loans and may incur losses in excess of our reserves.

We originate loans secured by commercial and residential properties. Further, we securitize and trade in a wide range of commercial and residential real estate and real estate-related assets and products. In connection with these activities, we have provided, or otherwise agreed to be responsible for, certain representations and warranties. Under certain circumstances, we may be required to repurchase such assets or make other payments related to such assets if such representations and warranties were breached, and may incur losses as a result. We have also made representations and warranties connection with our role as an originator of certain loans that we securitized in CMBS and RMBS. For additional information, see Note 14 to the financial statements.

A failure to address conflicts of interest appropriately could adversely affect our businesses and reputation.

As a global financial services firm that provides products and services to a large and diversified group of clients, including governments, corporations, financial institutions and individuals, we face potential conflicts of interest in the normal course of business. For example, potential conflicts can occur when there is a divergence of interests between us and a client, among clients, between an employee on the one hand and us or a client on the other, or situations in which we may be a creditor of a client. Moreover, we utilize multiple brands and business channels,

occur and could adversely affect our businesses and reputation.

Our regulators also have the ability to our activities for scrutinize potential conflicts of interest, including through detailed specific examinations of transactions. For example, our status as a BHC supervised by the Federal Reserve subjects us to direct Federal Reserve scrutiny with respect to transactions between our U.S. Bank Subsidiaries and their affiliates. Further, the Volcker Rule subjects us to regulatory scrutiny regarding certain transactions between us and our clients.

Risk Management

Our risk management strategies, models and processes may not be fully effective in mitigating our risk exposures in all market environments or against all types of risk, which could result in unexpected losses.

We have devoted significant resources to develop our risk management capabilities and expect to continue to do so in the future. Nonetheless, our risk management strategies, models and processes, including our use of various risk models for assessing market, credit, liquidity and operational exposures and hedging strategies, stress testing and other analysis, may not be fully effective in mitigating our risk exposure in all market environments or against all types of risk, including risks that are unidentified or unanticipated.

As our businesses change and grow, including through acquisitions and the introduction and application of technologies, such as artificial intelligence, and the markets in which we operate evolve, our risk management strategies, models and processes may not always adapt with those changes. Some of our methods of managing risk are based upon our use of observed historical market behavior and management's judgment. As a result, these methods may not predict future risk exposures, which could be significantly greater than the historical measures indicate.

In addition, many models we use are based

anticipate every economic and financial outcome or the timing of such outcomes. For example, to the extent that our trading or investing activities involve less liquid trading markets or are otherwise subject to restrictions on sales or hedging, we may not be able to reduce our positions and, therefore, reduce our risk associated with such positions. We may, therefore, incur losses in the course of our trading or investing activities. For more information on how we monitor and manage market and certain other risks and related strategies, models and processes, see "Quantitative and Qualitative Disclosures about Risk-Market Risk."

Climate change manifesting as physical or transition risks could result in increased costs and risks and adversely affect our operations, businesses and clients.

There continues to be increasing concern over the risks of climate change and related environmental sustainability matters. The physical risks of climate change include harm to people and property arising from acute, climate-related events, such as floods, hurricanes, heatwaves, droughts, and wildfires and chronic, longer-term shifts in climate patterns, such as higher global average temperatures, rising sea levels and long-term droughts. Such events could disrupt our operations or those of our clients or third parties on which we rely, including through direct damage to physical assets and indirect impacts from supply chain disruption and market volatility. These events could impact the ability of certain of our clients or customers to repay their obligations, reduce the value of collateral, increase costs, including the cost or availability of insurance coverage, and result in other adverse effects.

The transition risks of climate change include policy, legal, technology and market changes. Examples of these transition risks include changes in consumer and business sentiment, related technologies, shareholder preferences and any additional regulatory and legislative requirements, including increased disclosure or carbon taxes. These risks could increase our expenses and adversely impact our

in reputational harm as a result of public sentiment, legislative and regulatory scrutiny (including from U.S. federal and state governments and foreian policymakers and regulators), litigation and reduced investor and stakeholder confidence. If we are unable to achieve our objectives relating to climate change or our current response to climate change is perceived to be ineffective or insufficient, or the way we respond is perceived negatively, our business and reputation may suffer.

The risks associated with, and the perspective of regulators, governments, employees shareholders, and stakeholders regarding, climate change, as well as geopolitical events, continue to evolve rapidly, making it difficult to assess the ultimate impact on us of climate-related risks and uncertainties. As climate risk is interconnected with other risks, we have developed and continue to enhance processes to embed climate risk considerations into our risk management practices and governance structures. Despite our risk management practices, the unpredictability surrounding the timing and severity of climate-related events and societal or political changes in reaction to them make it difficult to predict, identify, monitor and mitigate climate risks.

In addition, the methodologies and data used to manage and monitor climate risk continue to evolve. Current approaches utilize information and estimates that have been derived from information or factors released by third-party sources, which may not reflect the latest or most accurate data. Climate-related data, particularly greenhouse gas emissions for clients and counterparties, limited remains availability and varies in quality. Certain third-party information may also change over time as methodologies evolve and are refined. While we believe this information is the best available at the time, we may only be able to complete limited validation. Furthermore, modeling capabilities and methodologies to analyze climate-related risks, although improving, remain nascent and emerging. These and other factors could cause results to differ materially, which could impact our ability to manage

could have a range of adverse impacts on our business, securities, financial condition and results of operations, including:

- Adversely impacting the pricing, liquidity, value of, return on and trading for a broad array of financial products, including any securities, loans and derivatives that are included in our financial assets and liabilities that are linked to these interest rate benchmarks;
- Inquiries, reviews or other actions from regulators in respect of our (or the market's) preparation, readiness, transition plans and actions regarding the replacement of a legacy interest rate benchmark with one or more alternative reference rates;
- Disputes, litigation or other actions with clients, counterparties and investors in various scenarios, such as regarding the interpretation and enforceability provisions in IBOR-based products such as fallback language or other related provisions, including in the case of fallbacks to the alternative reference rates, any economic, legal, operational or impact resulting from the fundamental differences between the IBORs and the various alternative reference rates regarding the or interpretation of applicable legislation, regulations or rules; and
- Causing us to incur additional costs in relation to any of the above factors.

Other factors include the pace of the transition to the alternative reference rates, timing mismatches between cash and derivative markets, the specific terms and parameters for and market acceptance of any alternative reference rate, market conventions for the use of any alternative reference rate in connection with a particular product (including the timing and market adoption of any conventions proposed or recommended by any industry or other group), prices of and the liquidity of trading markets for products based on alternative reference rates, and our ability to further transition and develop appropriate systems and analytics for one or more alternative reference rates.

See also "Management's Discussion and Analysis of Financial Condition and Results and other companies offering financial and ancillary services in the U.S. and globally, including, in certain instances, through the internet. We also compete with companies that provide online trading and banking services, investment advisory services, robo-advice capabilities, access to digital asset capabilities and services, and other financial products and services. We compete on the basis of several factors, including transaction execution, capital or access to capital, products and services, innovation, technology, reputation, appetite and price.

Over time, certain sectors of the financial services industry have become more concentrated, as institutions involved in a broad range of financial services have left businesses, been acquired by or merged into other firms, or have declared bankruptcy. Such changes could result in our remaining competitors gaining greater capital and other resources, such as the ability to offer a broader range of products and services and geographic diversity, or new competitors may emerge.

We have experienced and may continue to experience pricing pressures as a result of these factors and as some of our competitors seek to obtain market share by reducing prices, eliminating commissions or other fees, or providing more favorable terms of business. In addition, certain of our competitors may be subject to different and, in some cases, less stringent, legal and regulatory regimes than we are, thereby putting us at a competitive disadvantage. Some new competitors in the financial technology sector have sought to target existing segments of our businesses that could be susceptible to disruption by innovative or less regulated business models. For more information regarding the competitive environment in which we operate, see "Business-Competition" and "Business—Supervision and Regulation."

Automated trading markets and the introduction and application of new technologies may adversely affect our business and may increase competition.

We continue to experience price competition in some of our businesses. In

and skilled personnel. If we are unable to continue to attract, integrate and retain highly qualified employees or successfully transition key roles, or do so at levels or in forms necessary to maintain our competitive position, our performance, including our competitive position and results of operations, could be materially adversely affected. Our ability to attract and retain qualified and skilled personnel depends on numerous factors, some of which are outside of our control.

Compensation costs required to attract and retain employees may increase or the competitive market for talent may further intensify due to factors such as low unemployment, a strong job market and changes in employees' expectations, concerns and preferences. The financial industry has experienced and may continue to experience more stringent regulation of employee compensation than industries, which may or may not impact competitors. These more regulations have shaped our compensation practices, which could have an adverse effect on our ability to hire or retain the most qualified employees.

International Risk

We are subject to numerous political, economic, legal, tax, operational, franchise and other risks as a result of our international operations that could adversely impact our businesses in many ways.

We are subject to numerous political, economic, legal, tax, operational, franchise and other risks that are inherent in operating in many countries, including risks of possible nationalization, expropriation, price controls, capital controls, exchange controls. increased taxes and levies. minimum global tax regimes, cybersecurity, data transfer and outsourcing restrictions, regulatory scrutiny regarding the use of new technologies, prohibitions on certain types of foreign and capital market activities, limitations on cross-border listings and other restrictive governmental actions, as well as the outbreak of hostilities or political and governmental instability, including tensions between China and the U.S., the expansion or escalation of Various emerging market countries have experienced severe political, economic or financial disruptions, including significant devaluations of their currencies, defaults or potential defaults on sovereign debt, capital and currency exchange controls, high rates of inflation and low or negative growth rates in their economies. Crime and corruption, as well as issues of security and personal safety, also exist in certain of these countries. These conditions could adversely impact our businesses and increase volatility in financial markets generally.

A disease pandemic, such as COVID-19 and its variants, or other widespread health emergencies, natural disasters, climate-related incidents, terrorist activities or military actions, or social or political tensions, could create economic and financial disruptions in emerging markets or in other areas of the global economy that could adversely affect our businesses, or could lead to operational difficulties, including travel limitations and supply chain complications, that could impair our ability to manage or conduct our businesses around the world.

As a U.S. company, we are required to comply with the economic sanctions and embargo programs administered by OFAC and similar multinational bodies and governmental agencies worldwide, which may be inconsistent with local law. We and certain of our subsidiaries are also subject to applicable AML and/or anti-corruption laws in the U.S., as well as in the jurisdictions in which we operate, including the Bank Secrecy Act, the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act. A violation of a sanction, embargo program, AML or anti-corruption law could subject us, and individual employees, to a regulatory enforcement action, as well as significant civil and criminal penalties.

Acquisition, Divestiture and Joint Venture Risk

We may be unable to fully capture the expected value from acquisitions, divestitures, joint ventures, partnerships, minority stakes or strategic alliances, and certain acquisitions may subject our business to new or increased risk

we may be dependent upon, and subject to liability, losses or reputational damage relating to systems, controls and personnel that are not under our control, and conflicts or disagreements between us and any of our joint venture partners or partners may negatively impact the benefits to be achieved by the relevant joint venture or partnership, respectively.

There is no assurance that any of our acquisitions, divestitures or investments will be successfully integrated or disaggregated or yield all of the positive benefits and synergies anticipated. If we are not able to integrate or disaggregate successfully our past and future acquisitions or dispositions, including aligning the processes, policies and procedures of the acquired entities with our standards, there is a risk that our results of operations, financial condition and cash flows may be materially and adversely affected.

Certain of our business initiatives, including expansions of existing businesses, may change our client or account profile or bring us into contact, directly or indirectly, with individuals and entities that are not within our traditional client and counterparty base and may expose us to new asset classes, services, competitors and new markets. These business activities expose us to new and enhanced risks, greater regulatory scrutiny of these activities, increased creditrelated. sovereian. compliance operational risks, as well as franchise and reputational concerns regarding the manner in which these assets are being operated or held, or services are being delivered.

For more information regarding the regulatory environment in which we operate, see also "Business—Supervision and Regulation."

Cybersecurity

Risk management and strategy

We, our businesses, and the broader financial services industry face an increasingly complex and evolving threat environment. We have made and continue make substantial investments cybersecurity and fraud prevention technology, and employ experienced talent to lead our Cybersecurity and Information Security organizations and program under the oversight of our Board of Directors ("Board") and the Operations and Technology Committee of the Board ("BOTC"). See "Risk Factors—Operational Risk" for information on risks to the Firm from cybersecurity threats.

As part of our enterprise risk management ("ERM") framework, we have implemented and maintain a program to assess, identify manage risks arising from cybersecurity threats confronting the Firm ("Cybersecurity Program"). Our Cybersecurity Program helps protect our clients, customers, employees, property, products, services and reputation seeking to preserve the confidentiality, integrity and availability of information, enable the secure delivery of financial services, and protect the business and the safe operation of our technology systems. We continually adjust our Cybersecurity Program address the evolving to cybersecurity threat landscape and comply extensive with legal and regulatory expectations.

Processes for assessing, identifying and managing material risks from cybersecurity threats

Our Cybersecurity Program takes into account industry best practices and addresses risks from cybersecurity threats to our network, infrastructure, computing environment and the third parties that we rely on. We periodically assess the design of our cybersecurity controls against the Cyber Risk Institute Cyber Profile, which is based on the National Institute of Standards Technology ("NIST") Cybersecurity Framework for **Improving** Critical Infrastructure Cybersecurity, as well as global cybersecurity regulations,

strategy. This information is also provided to an internal forensics team, which develops and implements technologies designed to help detect these cybersecurity threats across our environment. Where a potential threat is identified in our environment, our incident response team evaluates the potential impact to the Firm and coordinates remediation where required. These groups, as well as the Operational Department, review external cybersecurity incidents that may relevant to the Firm, and the outcomes of these incidents further inform the design of our Cybersecurity Program. In addition, we maintain a robust global training program on cybersecurity risks and requirements conduct regular phishing simulations for our employees and consultants.

Our processes are designed to help oversee, identify and mitigate cybersecurity risks associated with our use of third-party vendors. We maintain a third-party risk management program that includes evaluation of, and response to, cybersecurity risks at our third-party vendors. Prior to engaging third-party vendors to provide services to the Firm, we conduct assessments of the third-party vendors' cybersecurity programs to identify the impact of their services on the cybersecurity risks to the Firm. Once onboarded, third-party vendors' cybersecurity subject programs are to risk-based oversight, which may include security questionnaires, submission of independent security audit reports or a Firm audit of the third-party vendor's security program, and, with limited exceptions, third-party vendors are required to meet our cybersecurity standards. Where a third-party vendor cannot meet those standards, its services, and the residual risk to the Firm, are subject to review, challenge and escalation through our risk management processes and ERM committees, which may ultimately result in requesting increased security measures or ceasing engagement with such third-party vendor.

Our Cybersecurity Program is regularly assessed by the Internal Audit Department ("IAD") through various assurance activities, with the results reported to the

are responsible for assessing and managing Firm's cybersecurity risks. Cybersecurity Program strategy, which is set by the CISO and overseen by the Head of Operational Risk, is informed by various risk and control assessments, control testing, external assessments, threat intelligence, and public and private information sharing. Our Cybersecurity Program also includes processes escalating and considering the materiality of incidents that impact the Firm, including escalation to senior management and the Board, which are periodically tested through tabletop exercises.

The members of management that lead our Cybersecurity Program and strategy have extensive experience technology, in cybersecurity and information security. The CIO has over 30 years of experience in various engineering, IT, operations and information security roles. The CISO has over 25 years of experience leading cybersecurity teams at financial institutions, including in the areas of IT strategy, risk management and information security. The Head of Operational Risk has over 20 years of experience in technology, security and compliance roles, including experience in government security agencies.

Risk levels and mitigating measures are presented to and monitored by dedicated management-level cybersecurity committees. These committees include representatives from Firm management as well as business and control stakeholders who review, challenge and, where appropriate, consider exceptions to our policies and procedures. Significant cybersecurity risks are escalated from these committees to our Non-Financial Risk Committee. The CIO and the Head of Operational Risk report on the status of our Cybersecurity Program, including significant cybersecurity risks; review metrics related to the program; and discuss the status of regulatory and remedial actions incidents to the Firm Risk Committee, the BOTC and the Board, as appropriate. For more information regarding the Firm's ERM framework. see "Quantitative Qualitative Disclosures about Risk—Risk Management."

Department ("Operations"); and (iii) the Non-Financial Risk Management Department ("NFR"). Such reporting includes updates on our Cybersecurity Program, risks from cybersecurity threats, our programs to address and mitigate the risks associated with the evolving cybersecurity threat environment, and the Operational Risk Department's assessment of cybersecurity risks. Senior officers in Technology and NFR also provide an annual report to the BOTC on the status of our Cybersecurity Program, including discussion of risks arising from cybersecurity threats, in compliance with the Gramm-Leach-Bliley Act. At least annually, these senior management representatives discuss the status of the Cybersecurity Program and cybersecurity risks with the Board. The BOTC also receives an annual independent assessment of key aspects Cybersecurity Program from an external party and holds joint meetings with the BAC and Risk Committee of the Board ("BRC"), as necessary and appropriate. In addition, the members BOTC periodically of participate in incident response tabletop exercises and the BOTC periodically receives reports from incident response tabletop exercises performed by and for management.

At least annually, the BOTC or the Board Global reviews and approves the Cybersecurity Program Policy, the Global Information Security Program Policy, the Global Third-Party Risk Management Policy, and the Global Technology Policy. The chair of the BOTC regularly reports to the Board on risks from cybersecurity threats and other matters reviewed by the BOTC. In accordance with the Board's Corporate Governance Policies, all Board members are invited to attend BOTC meetings and have access to meeting materials.

Senior management, including the senior officers mentioned above, discuss cybersecurity developments with the chair of the BOTC between Board and committee meetings, as necessary. The BOTC meets executive session with regularly in management, including the Head of NFR, and senior officers from Technology and Operations.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Introduction

Morgan Stanley is a global financial services firm that maintains significant market positions in each of its business segments— Institutional Securities, Wealth Management and Investment Management. Morgan Stanley, through its subsidiaries and affiliates, provides a wide variety of products and services to a large and diversified group of clients and customers, including corporations, governments, financial institutions and individuals. Unless the context otherwise requires, the terms "Morgan Stanley," "Firm," "us," "we" or "our" mean Morgan Stanley (the "Parent Company") together with its consolidated subsidiaries. See the "Glossary of Common Terms and Acronyms" for the definition of certain terms acronyms and throughout this Form 10-K. For an analysis of 2022 results compared with 2021 results, see Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the annual report on Form 10-K for the yearended December 31, 2022 filed with the SEC.

A description of the clients and principal products and services of each of our business segments is as follows:

Institutional Securities provides a variety of products and services to corporations, governments, financial institutions and ultra-high net worth clients. Investment Banking services consist of capital raising and financial advisory services, including the underwriting of debt, equity securities and other products, as well as advice on mergers and acquisitions, restructurings and project finance. Our Equity and Fixed Income businesses include sales, financing. prime brokerage. marketmaking, Asia wealth management services and certain business-related investments. Lending activities include originating corporate loans and commercial real estate loans, providing secured lending facilities, and extending securities-based and other financing to Other customers. activities include research.

Wealth Management provides a comprehensive array of financial services and solutions to individual investors and small to medium-sized businesses and

Investment Management provides a broad range of investment strategies and products that span geographies, asset classes, and public and private markets to diverse group of clients across institutional and intermediary channels. Strategies and products, which are offered through a variety of investment vehicles, include equity, fixed income, alternatives and solutions, and liquidity and overlay Institutional clients services. include defined benefit/defined contribution plans, foundations, endowments, government entities, sovereign wealth funds, insurance companies, third-party fund sponsors and corporations. Individual clients are generally served through intermediaries, including affiliated and non-affiliated distributors.

Management's Discussion and Analysis includes certain metrics that we believe to be useful to us, investors, analysts and other stakeholders by providing further transparency about, or an additional means of assessing, our financial condition and operating results. Such metrics, when used, are defined and may be different from or inconsistent with metrics used by other companies.

The results of operations in the past have been, and in the future may continue to be, materially affected by: competition; risk factors; legislative, legal and regulatory developments; and other factors. These factors also may have an adverse impact on ability to achieve our strategic objectives. Additionally, the discussion of our results of operations herein may contain forward-looking statements. statements, which reflect management's beliefs and expectations, are subject to risks and uncertainties that may cause actual results to differ materially. For a discussion of the risks and uncertainties that may affect our future results, see "Forward-Looking Statements," "Business— Competition," "Business—Supervision and Regulation," "Risk Factors" and "Liquidity Capital Resources—Regulatory Requirements" herein.

Management's Discussion and Analysis

Executive Summary

Overview of Financial Results

Consolidated Results—Full Year Ended December 31, 2023

- The Firm reported net revenues of \$54.1 billion and net income of \$9.1 billion against a mixed market backdrop and a number of headwinds.
- The Firm delivered ROE of 9.4% and ROTCE of 12.8% (see "Selected Non-GAAP Financial Information" herein).
- The Firm expense efficiency ratio was 77%. The ratio was negatively impacted by severance costs of \$353 million, an FDIC special assessment of \$286 million, higher legal expenses relating to a specific matter of \$249 million and integration-related expenses of \$293 million.
- At December 31, 2023, the Firm's Standardized Common Equity Tier 1 capital ratio was 15.2%.
- Institutional Securities reported net revenues of \$23.1 billion reflecting lower completed activity in Investment Banking and lower results in Equity and Fixed Income on reduced client activity and a less favorable market environment compared to a year ago.
- Wealth Management delivered revenues of \$26.3 billion, reflecting markto-market gains on investments associated with certain employee deferred cash-based compensation plans investments") compared losses in the prior year and higher Net interest revenues. The pre-tax margin was 24.9%. The business added net new assets of \$282.3 billion, representing a 6.7% annualized growth rate from beginning period assets.
- Investment Management reported net revenues of \$5.4 billion and AUM increased to \$1.5 trillion.

Net Revenues

(\$ in millions)

21440476778081

Net Income Applicable to Morgan Stanley

(\$ in millions

21440476778088

Earnings per Diluted Common Share 21440476778100

2023 Compared with 2022

 We reported net revenues of \$54.1 billion in 2023 compared with \$53.7 billion in 2022. For 2023, net income applicable to Morgan Stanley was \$9.1 billion, or \$5.18 per diluted common share, compared with \$11.0 billion, or \$6.15 per diluted common share in 2022.

Management's Discussion and Analysis

Non-Interest Expenses

(\$ in millions)

302365697765018

 Compensation and benefits expenses of \$24,558 million in 2023 increased 7% from the prior year, primarily due to higher expenses related to certain employee deferred cash-based compensation plans linked to investment performance ("DCP") and higher salary expenses, partially offset by lower expenses related to outstanding deferred equity compensation.

2023 Compensation and benefits expenses included \$353 million of severance costs, primarily associated with the employee action recorded in the second guarter of 2023.

Non-compensation expenses of \$17,240 million in 2023 increased 6% from the prior year, primarily driven by an FDIC special assessment of \$286 million, increased spend on technology, higher costs related to exits of real estate and higher legal expenses, including \$249 million related to a specific matter.

Provision for Credit Losses

The Provision for credit losses on loans and lending commitments of \$532 million in 2023 was primarily related to deteriorating conditions in the commercial real estate sector, including provisions for certain specific loans, mainly in the office portfolio, and modest growth in certain other loan portfolios. The Provision for credit losses on loans and lending commitments of \$280 million in 2022 was due to portfolio growth and deterioration in the macroeconomic outlook.

For further information on the Provision for credit losses, see "Credit Risk" herein.

Business Segment Results

Net Revenues by Segment¹

(\$ in millions)

302365697765023

Net Income Applicable to Morgan Stanley by Segment¹

(\$ in millions)

302365697765028

- The amounts in the charts represent the contribution of each business segment to the total of the applicable financial category and may not sum to the total presented on top of the bars due to intersegment eliminations. See Note 22 to the financial statements for details of intersegment eliminations.
- Institutional Securities net revenues of \$23,060 million in 2023 decreased 5% from the prior year, primarily reflecting lower results across businesses.
- Wealth Management net revenues of \$26,268 million in 2023 increased 8% from the prior year, primarily reflecting gains on DCP investments compared with losses in the prior year and higher Net interest revenues.
- Investment Management net revenues of \$5,370 million in 2023 were relatively unchanged from the prior year, reflecting a decrease in Asset management and related fees revenues offset by an increase in Performance based income and other revenues.

Management's Discussion and Analysis

Net Revenues by Region¹

(\$ in millions)

302365697765033

- 1. For a discussion of how the geographic breakdown of net revenues is determined, see Note 22 to the financial statements.
- Americas net revenues in 2023 increased 4%, primarily driven by results within the Wealth Management business segment and Other net revenues within the Institutional Securities business segment, partially offset by lower results across businesses within the Institutional Securities business segment.
- EMEA net revenues in 2023 decreased 11%, primarily driven by lower results across businesses within the Institutional Securities business segment.
- Asia net revenues in 2023 decreased 5%, primarily driven by lower results across businesses within the Institutional Securities business segment.

Selected Financial Information and Other Statistical Data

\$ in millions, except per share data	2023	2022	2021
Consolidated results			
Net revenues	\$54,143	\$ 53,668	\$ 59,755
Earnings applicable to Morgan			
Stanley common shareholders	\$ 8,530	\$ 10,540	\$ 14,566
Earnings per diluted commor	\$ 5.18	\$ 6.15	
share			\$ 8.03

Consolidated financial measures

Company officians, watin1

Investment Management

Expense emciency ratio	// %	73 %	6/%
ROE ²	9.4 %	11.2 %	15.0 %
ROTCE ^{2,3}	12.8 %	15.3 %	19.8 %
Pre-tax margin ⁴	22 %	26 %	33 %
Effective tax rate	21.9 %	20.7 %	23.1 %
Pre-tax margin by segment ⁴			
Institutional Securities	19 %	28 %	40 %
Wealth Management	25 %	27 %	25 %

16 %

15 %

27 %

		At	At
	ı	December	December
\$ in millions, except per share data,		31,	31,
worldwide employees and client assets		2023	2022
Average liquidity resources for			
three months ended ⁵	\$	314,504	\$ 312,250
Loans ⁶	\$	226,828	\$ 222,182
Total assets	\$	1,193,693	\$ 1,180,231
Deposits	\$	351,804	\$ 356,646
Borrowings	\$	263,732	\$ 238,058
Common shareholders' equity	\$	90,288	\$ 91,391
Tangible common shareholders'			
equity ³	\$	66,527	\$ 67,123
Common shares outstanding		1,627	1,675
Book value per common share ⁷	\$	55.50	\$ 54.55
Tangible book value per common			
share ^{3,7}	\$	40.89	\$ 40.06
Worldwide employees (in			
thousands)		80	82
Client assets ⁸ (in billions)	\$	6,588	\$ 5,492
Capital ratios ⁹			
•			
Common Equity Tier 1 capital— Standardized		15.2 %	15.3 %
Tier 1 capital—Standardized		17.1 %	17.2 %
			15.6 %
Common Equity Tier 1 capital— Advanced		15.5 %	13.0 %
Tier 1 capital—Advanced		17.4 %	17.6 %
Tier 1 leverage		6.7 %	6.7 %
SLR		5.5 %	5.5 %

- The expense efficiency ratio represents total non-interest expenses as a percentage of net revenues.
- ROE and ROTCE represent earnings applicable to Morgan Stanley common shareholders as a percentage of average common equity and average tangible common equity, respectively.
- Represents a non-GAAP financial measure. See "Selected Non-GAAP Financial Information" herein.
- Pre-tax margin represents income before provision for income taxes as a percentage of net revenues.
- For a discussion of Liquidity resources, see "Liquidity and Capital Resources— Balance Sheet—Liquidity Risk Management Framework—Liquidity Resources" herein.
- Includes loans held for investment, net of ACL, loans held for sale and also includes loans at fair value, which are included in Trading assets in the balance sheet.
- 7. Book value per common share and tangible book value per common share equal common shareholders' equity and tangible common shareholders' equity, respectively, divided by common shares outstanding.
- Client assets represents Wealth Management client assets and Investment Management AUM. Certain Wealth Management

Management's Discussion and Analysis

Selected Non-GAAP Financial Information

We prepare our financial statements using U.S. GAAP. From time to time, we may "non-GAAP disclose certain financial measures" in this document or in the course of our earnings releases, earnings other conference calls, financial presentations, definitive proxy statements and other public disclosures. A "non-GAAP financial measure" excludes, or includes, amounts from the most directly comparable measure calculated and presented in accordance with U.S. GAAP. We consider the non-GAAP financial measures we disclose to be useful to us, investors, analysts and other stakeholders by providing further transparency about, or an alternate means of assessing or comparing our financial condition, operating results and capital adequacy.

These measures are not in accordance with, or a substitute for, U.S. GAAP and may be different from or inconsistent with non-GAAP financial measures used by other companies. Whenever we refer to a non-GAAP financial measure, we will also generally define it or present the most directly comparable financial measure calculated and presented in accordance with U.S. GAAP, along with a reconciliation of the differences between the U.S. GAAP financial measure and the non-GAAP financial measure.

We present certain non-GAAP financial measures that exclude the impact of markto-market gains and losses on DCP investments from net revenues compensation expenses. The impact of DCP is primarily reflected in our Wealth Management business segment results. These measures allow for better comparability of period-to-period underlying operating performance and revenue trends, especially in our Wealth Management business segment. By excluding the impact of these items, we are better able to describe the business drivers and resulting impact to net revenues and corresponding change to the associated compensation expenses.

Compensation expense for DCP awards is

may not be material to our Income before provision for income taxes in any individual period, it may impact the Wealth Management business segment reported ratios and operating metrics in certain periods due to potentially significant impacts to net revenues and compensation expenses. For additional information on DCP, refer to "Other Matters" herein.

The principal non-GAAP financial measures presented in this document are set forth in the following tables.

Reconciliations from U.S. GAAP to Non-GAAP Consolidated Financial Measures

	···cusur				
\$ in millions	2023	2022	2021		
Net revenues	\$54,143	\$53,668	\$ 59,755		
Adjustment for mark-to-market					
losses (gains) on DCP1	(434)	1,198	(389)		
Adjusted Net revenues—non-					
GAAP	\$53,709	\$ 54,866	\$ 59,366		
Compensation expense	\$24,558	\$ 23,053	\$ 24,628		
Adjustment for mark-to-market					
losses (gains) on DCP ¹	(668)	716	(526)		
Adjusted Compensation					
expense—non-GAAP	\$23,890	\$23,769	\$ 24,102		
Wealth Management Net					
revenues	\$26,268	\$ 24,417	\$ 24,243		
Adjustment for mark-to-market					
losses (gains) on DCP ¹	(282)	858	(210)		
Adjusted Wealth Management					
Net revenues—non-GAAP	\$25,986	\$ 25,275	\$ 24,033		
Wealth Management					
Compensation expense	\$13,972	\$12,534	\$13,090		
Adjustment for mark-to-market					
losses (gains) on DCP ¹	(412)	530	(293)		
Adjusted Wealth Management					
Compensation expense—non-					
GAAP	\$13,560	\$13,064	\$ 12,797		
	At December 31,				
\$ in millions	2023	2022	2021		
Tangible equity					
Common shareholders' equity	\$90,288	\$91,391	\$ 97,691		
Less: Goodwill and net					
intangible assets	(23,761)	(24,268)	(25,192)		

\$66,527 \$67,123 \$72,499

Tangible common

non-GAAP

shareholders' equity-

Management's Discussion and Analysis

Non-GAAP Financial Measures by Business Segment

\$ in billions	2023		2022		2021
Average common equity ²					
Institutional Securities	\$ 45.6	\$	48.8	\$	43.5
Wealth Management	28.8		31.0		28.6
Investment Management	10.4		10.6		8.8
ROE ³					
Institutional Securities	7 %	6	10 9	%	20 %
Wealth Management	17 %		16 %		16 %
Investment Management	6 %		6 9	6 %	
Average tangible					
common equity ²					
common equity ² Institutional Securities	\$ 45.2	\$	48.3	\$	42.9
	\$ 45.2 14.8	\$	48.3 16.3	\$	42.9 13.4
Institutional Securities	\$ 	\$		\$	
Institutional Securities Wealth Management	\$ 14.8	\$	16.3	\$	13.4
Institutional Securities Wealth Management Investment Management	\$ 14.8		16.3		13.4
Institutional Securities Wealth Management Investment Management ROTCE ³	\$ 14.8	6	16.3	· /6	13.4

- Net revenues and compensation expense are adjusted for DCP for both Firm and Wealth Management business segment. See "Other Matters" herein for more information.
- 2. Average common equity and average tangible common equity for each business segment is determined using our Required Capital framework (see "Liquidity and Capital Resources—Regulatory Requirements—Attribution of Average Common Equity According to the Required Capital Framework" herein). The sums of the segments' Average common equity and Average tangible common equity do not equal the Consolidated measures due to Parent Company equity.
- 3. The calculation of ROE and ROTCE by segment uses net income applicable to Morgan Stanley by segment less preferred dividends allocated to each segment as a percentage of average common equity and average tangible common equity, respectively, allocated to each segment.

Return on Tangible Common Equity Goal

We have an ROTCE goal of 20%. Our ROTCE goal is a forward-looking statement that is based on a normal market environment and may be materially affected by many factors.

See "Risk Factors" and "Forward-Looking Statements" herein for further information on market and economic conditions and their potential effects on our future operating results.

ROTCE represents a non-GAAP financial

Within the Institutional Securities business segment, these revenues are primarily composed of fees earned from underwriting equity and fixed income securities, syndicating loans and advisory services in relation to mergers and acquisitions, divestitures and corporate restructurings.

Within the Wealth Management business segment, these revenues are derived from the distribution of newly issued securities.

Trading

Trading revenues include the realized gains and losses from transactions in financial instruments, unrealized gains and losses from ongoing changes in the fair value of our positions, and gains and losses from financial instruments used to economically hedge compensation expense related to DCP.

Within the Institutional Securities business segment, Trading revenues arise from transactions in cash instruments and derivatives in which we act as a market maker for our clients. In this role, we stand ready to buy, sell or otherwise transact with customers under a variety of market conditions and to provide firm or indicative prices in response to customer requests. Our liquidity obligations can be explicit in some cases, and in others, customers expect us to be willing to transact with them. In order to most effectively fulfill our market-making function, we engage in activities across all of our businesses that include, but are not limited to:

- taking positions in anticipation of, and in response to, customer demand to buy or sell and—depending on the liquidity of the relevant market and the size of the position—to hold those positions for a period of time;
- building, maintaining and rebalancing inventory held to facilitate client activity through trades with other market participants;
- managing and assuming basis risk (risk associated with imperfect hedging) between risks incurred from the facilitation of client transactions and the standardized products available in the market to hedge those risks;

Management's Discussion and Analysis

Investments

Investments revenues are composed of realized and unrealized gains and losses derived from investments, including those associated with employee deferred compensation and co-investment plans. Estimates of the fair value of the investments that produce these revenues may involve significant judgment and may fluctuate significantly over time in light of business, market, economic and financial conditions, generally or in relation to specific transactions.

Within the Institutional Securities segment, gains and losses are primarily from business-related investments. Certain investments are subject to sale restrictions.

Within the Investment Management business segment, Investments revenues are primarily from performance-based fees in the form of carried interest, a portion of which is subject to reversal, and gains and losses from investments. The business is entitled to receive carried interest when the return in certain funds exceeds specified performance targets. Additionally, consolidate certain sponsored Investment Management funds where revenues are primarily attributable to holders of noncontrolling interests.

Commissions and Fees

Commissions and fees result from arrangements in which the client is charged a fee for executing transactions related to securities, services related to sales and trading activities, and sales of other products.

Within the Institutional Securities business segment, commissions and fees include fees earned from market-making activities, such as executing and clearing client transactions on major stock and derivative exchanges, as well as from OTC derivatives.

Within the Wealth Management business segment, commissions and fees arise from client transactions primarily in equity securities, insurance products, mutual funds, alternative investments, futures and options. Wealth Management also earns revenues from order flow payments for

Within the Investment Management business segment, Asset management revenues are primarily composed of fees received from investment vehicles on the of assets under management. Performance-based fees, not in the form of carried interest, are earned on certain products and separately managed accounts as a percentage of appreciation in value and, in certain cases, are based upon the achievement of performance criteria. These performance fees are generally recognized on a quarterly or annual basis.

Net Interest

Interest income and Interest expense are functions of the level and mix of total assets and liabilities, including Trading assets and Trading liabilities, Investment securities, Securities borrowed or purchased under agreements to resell, Securities loaned or sold under agreements to repurchase, Loans, Deposits and Borrowings.

Within the Institutional Securities business segment, Net interest is a function of market-making strategies, client activity, and the prevailing level, term structure and volatility of interest rates. Net interest is impacted by market-making, lending and financing activities as we generally earn interest on securities held by the Firm, Securities borrowed, Securities purchased under agreements to resell, Loans and margin loans, while Borrowings, Securities loaned and Securities sold under agreements to repurchase generally incur interest expense.

Within the Wealth Management business segment, Interest income is driven by assets held including Investment securities, Loans and margin loans. Interest expense is driven by Deposits and other funding.

Other

Other revenues for Institutional Securities include revenues and losses from equity method investments, fees earned in association with lending activities, mark-to-market gains and losses on loans and lending commitments held for sale, as well as gains and losses on economic derivative hedges associated with certain held-for-sale

Management's Discussion and Analysis

revenues directly attributable to those businesses. These revenues, which can be affected by a variety of interrelated factors, including market volumes, bid-offer spreads and the impact of market conditions on inventory held to facilitate client activity, as well as the effect of hedging activity, are viewed in the aggregate when assessing the performance and profitability of our businesses.

Following is a description of the revenuegenerating activities within our equity and fixed income businesses, as well as how their results impact the income statement line items.

Equity—Financing. We provide financing, prime brokerage and fund administration services to our clients active in the equity markets through a variety of products, including margin lending, securities lending and swaps. Results from this business are largely driven by the difference between financing income earned and financing and liquidity costs incurred, which are reflected in Net interest for securities lending products, and in Trading revenues for derivative products. Fees for providing fund administration services are reflected in Asset management revenues.

Equity—Execution services. A significant portion of the results for this business is generated by commissions and fees from executing and clearing client transactions on major stock and derivative exchanges, as well as from OTC transactions. We make markets for our clients principally in equity-related securities and derivative products, including those that provide liquidity and are utilized for hedging. Market-making also generates gains and losses on inventory held to facilitate client activity, which are reflected in Trading revenues. Execution services also includes certain Investments and Other revenues.

Fixed income—Within fixed income, we make markets in various flow and structured products in order to facilitate client activity as part of the following products and services:

 Global macro products. We make markets for our clients in interest rate, foreign exchange and emerging market products, Commodities products and Other. We make markets in various commodity products related primarily to electricity, natural gas, oil and metals. Other activities primarily include results from the centralized management of our fixed income derivative counterparty exposures and the management of derivative counterparty risk. These activities are primarily recorded in Trading revenues.

Fixed income also includes certain Investments and Other revenues.

Institutional Securities—Other Net Revenues

Other net revenues include impacts from certain treasury functions, such as liquidity and funding costs and gains and losses on economic hedges related to borrowings. Other net revenues also include mark-to-market gains and losses on heldfor-sale corporate loans and commitments, as well as net interest and gain and losses on economic hedges associated with held-for-sale and held-forinvestment corporate loans and lending commitments. Also included are gains and losses from financial instruments used to economically hedge compensation expense related to certain DCP, income and losses from the equity method investment related to our Japanese securities joint venture with MUFG, as well as Investments and Other revenues that are not directly attributable to Fixed income and Equities businesses.

Compensation Expense

Compensation and benefits expenses include base salaries and fixed allowances, formulaic programs, discretionary incentive compensation, amortization of deferred cash and equity awards, changes in the fair value of DCP investments, including the Firm's share price for certain awards, carried interest allocated to employees, severance costs, and other items such as health and welfare benefits.

The factors that drive compensation for our employees vary from period to period, from segment to segment and within a segment. For certain revenue-producing employees in the Wealth Management and Investment Management business segments, compensation is largely paid on the basis of

Management's Discussion and Analysis

Image3.jpg

immediate recognition of gains and losses on the Firm's investments and the compensation expense recognized over the vesting period.

Income Taxes

The Income tax provision for our business segments is generally determined based on the revenues, expenses and activities directly attributable to each business segment. Certain items have been allocated to each business segment, generally in proportion to its respective net revenues or other relevant measures.

December 2023 Form 10-K

Management's Discussion and Analysis

Institutional Securities

Income Statement Information

				% Cha	ange
\$ in millions	2023	2022	2021	2023	2022
Revenues					
Advisory	\$2,244	\$2,946	\$3,487	(24)%	(16)%
Equity	889	851	4,437	4 %	(81)%
Fixed income	1,445	1,438	2,348	- %	(39)%
Total Underwriting	2,334	2,289	6,785	2 %	(66)%
Total Investment					
banking	4,578	5,235	10,272	(13)%	(49)%
Equity	9,986	10,769	11,435	(7)%	(6)%
Fixed income	7,673	9,022	7,516	(15)%	20 %
Other	823	(633)	610	N/M	N/M
Net revenues	23,060	24,393	29,833	(5)%	(18)%
Provision for					
credit losses	401	211	(7)	90 %	N/M
Compensation and benefits	8,369	8,246	9,165	1 %	(10)%
Non-compensation					
expenses	9,814	9,221	8,861	6 %	4 %
Total non-interest					
expenses	18,183	17,467	18,026	4 %	(3)%
Income before provision for income taxes	4,476	6,715	11,814	(33)%	(43)%
Provision for income					
taxes	884	1,308	2,746	(32)%	(52)%
Net income	3,592	5,407	9,068	(34)%	(40)%
Net income applicable to noncontrolling interests	139	165	111	(16)%	49 %
Net income					
applicable to					
Morgan Stanley	\$3,453	\$5,242	\$8,957	(34)%	(41)%

Investment Banking

Investment Banking Volumes

\$ in billions	2023	2022	2021
Completed mergers and acquisitions ¹	\$ 655	\$ 881	\$ 1,107
Equity and equity-related offerings ^{2, 3}	31	23	117
Fixed income offerings ^{2, 4}	235	229	371

Source: Refinitiv data as of January 2, 2024. Transaction volumes

Investment Banking continues to operate in a market environment characterized by lower completed M&A and underwriting activity amid market uncertainty, including the future path of interest rates.

See "Investment Banking Volumes" herein.

Equity, Fixed Income and Other Net Revenues

Equity and Fixed Income Net Revenues

	_				2	023				
						Net		All		
\$ in millions	1	Trading		Fees ¹	In	iterest ²	С	ther ³		Total
Financing	\$	7,206	\$	524	\$(2,886)	\$	66	\$	4,910
Execution										
services		2,919		2,235		(190)		112		5,076
Total Equity	\$:	10,125	\$	2,759	\$(3,076)	\$	178	\$	9,986
Total Fixed										_
income	\$	7,848	\$	375	\$	(975)	\$	425	\$	7,673
						2022				
						Net		All		
\$ in millions		Trading		Fees ¹	In	terest ²	Ω			Total
Financing		\$ 5,223				(257)			\$	5,537
Execution		ψ <i>3,223</i>	Ψ	333	Ψ	(237)	Ψ	30	Ψ	3,337
services		2,947		2,462		(81)		(96)		5,232
Total Equity		\$ 8,170	\$	2,997	\$	(338)	\$	(60)	\$	10,769
Total Fixed					_				_	-
income		\$ 7,711	\$	341	\$	922	\$	48	\$	9,022
										'
						2021				
		To a 10 a a		F1	1	Net	_	All		T-1-1
\$ in millions		Trading		Fees ¹		iterest ²			_	Total
Financing		\$ 4,110	\$	508	\$	520	\$	8	\$	5,146
Execution										
services		3,327		2,648		(226)		540		6,289
Total Equity		\$ 7,437	\$	3,156	\$	294	\$	548	\$	11,435
Total Fixed										
income		\$ 5,098	\$	307	\$	1,835	\$	276	\$	7,516

- 1. Includes Commissions and fees and Asset management revenues.
- 2. Includes funding costs, which are allocated to the businesses based on funding usage.
- 3. Includes Investments and Other revenues.

Equity

Net revenues of \$9,986 million in 2023 decreased 7% compared with the prior year, reflecting decreases in Financing and

Management's Discussion and Analysis

 Commodities products and other fixed income revenues decreased compared to elevated results in the prior year, primarily due to lower gains on inventory held to facilitate client activity and lower client activity.

Other Net Revenues

Other net revenues were \$823 million in 2023 compared with losses of \$633 million in the prior year, primarily due to lower mark-to-market losses on corporate loans held for sale, inclusive of hedges, and higher net interest income and fees on corporate loans, mark-to-market gains compared with losses in the prior year on DCP investments and impacts from liquidity and funding costs.

Provision for Credit Losses

In 2023, the Provision for credit losses on loans and lending commitments of \$401 million primarily related was deteriorating conditions in the commercial real estate sector, including provisions for certain specific loans, mainly in the office portfolio, and modest growth in certain other loan portfolios. The Provision for credit losses on loans and lending commitments of \$211 million in 2022 was primarily driven by portfolio growth and deterioration in the macroeconomic outlook.

For further information on the Provision for credit losses, see "Credit Risk" herein.

Non-Interest Expenses

Non-interest expenses of \$18,183 million in 2023 increased 4% compared with the prior year due to higher Non-compensation expenses and Compensation and benefits expenses.

- Compensation and benefits expenses increased primarily due to higher expenses related to DCP and higher stockbased compensation expenses driven by the Firm's share price movement in the prior year, partially offset by lower expenses related to outstanding deferred equity compensation.
- Non-compensation expenses increased primarily due to increased spend on technology, an FDIC special assessment

Management's Discussion and Analysis

Wealth Management

Income Statement Information

				% Ch	ange
\$ in millions	2023	2022	2021	2023	2022
Revenues					
Asset					
management	\$14,019	\$13,872	\$13,966	1 %	(1)%
Transactional ¹	3,556	2,473	4,259	44 %	(42)%
Net interest	8,118	7,429	5,393	9 %	38 %
Other ¹	575	643	625	(11)%	3 %
Net revenues	26,268	24,417	24,243	8 %	1 %
Provision for					
credit losses	131	69	11	90 %	N/M
Compensation					
and benefits	13,972	12,534	13,090	11 %	(4)%
Non-					
compensation					
expenses	5,635	5,231	4,961	8 %	5 %
Total non-					
interest					
expenses	19,607	17,765	18,051	10 %	(2)%
Income before					
provision for					
income taxes	6,530	6,583	6,181	(1)%	7 %
Provision for					
income taxes	1,508	1,444	1,447	4 %	- %
Net income					
applicable to					
Morgan					
Stanley	\$ 5,022	\$ 5,139	\$ 4,734	(2)%	9 %

 Transactional includes Investment banking, Trading, and Commissions and fees revenues. Other includes Investments and Other revenues.

Wealth Management Metrics

Net new assets

	At D	ecember	At	December
		31,		31,
\$ in billions		2023		2022
Total client assets ¹	\$	5,129	\$	4,187
U.S. Bank Subsidiary loans	\$	147	\$	146
Margin and other lending ²	\$	21	\$	22
Deposits ³	\$	346	\$	351
Annualized weighted				
average cost of deposits ⁴				
Period end		2.92%		1.59%
Period average	2.43%			0.53%
	202	23 20	22	2021

\$ 282.3 \$ 311.3 \$ 437.7

recent periods. Should these factors continue, the growth rate of our NNA may be impacted.

Advisor-Led Channel

	A	At December			At Decembe			
		31,			31,			
\$ in billions		2023	3		20)22		
Advisor-led client assets ¹	\$	3,	979	\$		3,392		
Fee-based client assets ²	\$	1,	983	\$		1,678		
Fee-based client assets as	5							
a								
percentage of advisor-led	d							
client								
assets		į	50%	6		49%		
				2022		2021		
		2023		2022		2021		
Fee-based asset flows ³	\$	109.2	\$	162.8	\$	179.3		

- Advisor-led client assets represent client assets in accounts that have a Wealth Management representative assigned.
- Fee-based client assets represent the amount of assets in client accounts where the basis of payment for services is a fee calculated on those assets.
- 3. Fee-based asset flows include net new fee-based assets (including asset acquisitions), net account transfers, dividends, interest and client fees, and exclude institutional cash management related activity. For a description of the Inflows and Outflows included in Fee-based asset flows, see Fee-based client assets herein.

Self-Directed Channel

	At	Decemb	er At L	December
		31,		31,
		2023		2022
Self-directed assets (in				
billions) ¹	\$	1,15	o \$	795
Self-directed households (in				
millions) ²		8.	1	8.0
		2023	2022	2021
Daily average revenue trade	S			
("DARTs") (in thousands) ³		759	864	1,161

- Self-directed client assets represent active accounts which are not advisor led. Active accounts are defined as having at least \$25 in assets.
- 2. Self-directed households represent the total number of households that include at least one active account with selfdirected assets. Individual households or participants that are engaged in one or more of our Wealth Management channels are included in each of the respective channel counts.
- DARTs represent the total self-directed trades in a period divided by the number of trading days during that period.

Westerlage Channel

Management's Discussion and Analysis

Transactional Revenues

Transactional revenues of \$3,556 million in 2023 increased 44% compared with the prior year, primarily due to \$282 million of gains on DCP investments compared with \$858 million of losses in the prior year, partially offset by lower client activity.

For further information on the impact of DCP, see "Selected Non-GAAP Financial Information" herein.

Net Interest

Net interest revenues of \$8,118 million in 2023 increased 9% compared with the prior year, primarily due to the net effect of higher interest rates, partially offset by changes in deposit mix.

The level and pace of interest rate changes and other macroeconomic factors continued to impact client preferences for cash allocation to higher-yielding products and the pace of reallocation of client balances, resulting in changes in the deposit mix and associated interest expense, as well as client demand for loans. If these trends persist, net interest income could be impacted in future periods.

Provision for Credit Losses

The Provision for credit losses on loans and lending commitments of \$131 million in 2023 was primarily related to deteriorating conditions in the commercial real estate sector, including provisions for certain specific loans, mainly in the office portfolio. The Provision for credit losses on loans and lending commitments was \$69 million in 2022, primarily driven by portfolio growth in Residential real estate loans and deteriorating conditions in the commercial real estate sector.

For further information on the Provision for credit losses, see "Credit Risk" herein.

Non-Interest Expenses

Non-interest expenses of \$19,607 million in 2023 increased 10% compared with the prior year, as a result of higher Compensation and benefits expense and higher Non-compensation expense.

Compensation and henefits expenses

Subtotal

Fee-Based Client Assets Rollforwards

Fee-Based	C	lient A	٩s	sets	Ro	ollforwa	ards	
		At						At
	D	ecember					D	ecember
		31,				M	larket	31,
\$ in billions		2022	ln	flows ¹	Οι	ıtflows² Im	npact ³	2023
Separately								
managed ⁴	\$	501	\$	70	\$	(23) \$	41 \$	589
Unified								
managed		408		96		(56)	53	501
Advisor		167		29		(32)	24	188
Portfolio								
manager		552		98		(73)	68	645
Subtotal	\$	1,628	\$	293	\$	(184) \$	186 \$	1,923
Cash								
management		50		60		(50)	_	60
Total fee-								
based client								
assets	\$	1,678	\$	353	\$	(234) \$	186 \$	1,983
		At						At
	D	ecember					D	ecember
		31,					Market	31,
\$ in billions		2021	In	flows ^{1,5}	0	utflows ² Ir	npact³	2022
Separately								
managed ⁴	\$	479	\$	141	\$	(25) \$	(94) \$	501
Unified								
managed		467		76		(50)	(85)	408
Advisor		211		29		(35)	(38)	167
Portfolio								
manager		636		94		(67)	(111)	552
Subtotal	\$	1,793	\$	340	\$	(177) \$	(328) \$	1,628
Cash								
management	:	46		38		(34)		50
Total fee-								
based client								
assets	\$	1,839	\$	378	\$	(211) \$	(328) \$	1,678
		At						At
	De	ecember				_		ecember
ė ia billiaus		31,	Inf	10.wc1.6	0.	۸ utflows² In	1arket	31,
\$ in billions		2020		10WS-/-		JUIOWS- III	праст	2021
Separately	¢	250	÷	0.6	÷	(20) *	E1 +	470
managed ⁴	\$	359	>	86	>	(20) \$	54 \$	479
Unified		270		100		(5.4)	43	467
managed		379		100		(54)	42	467
Advisor		177		42		(30)	22	211
Portfolio								
manager		509		113		(58)	72	636

\$ 1,424 \$ 341 \$ (162) \$ 190 \$ 1,793

Management's Discussion and Analysis

manager. Only one third-party asset manager strategy can be held per account.

- Unified managed—accounts that provide the client with the ability to combine separately managed accounts, mutual funds and exchange-traded funds, all in aggregate account. Investment decisions and discretionary authority may be exercised by the client, financial advisor or portfolio manager. includes accounts that give the client the ability to systematically allocate assets across a wide range of mutual funds, for which the investment decisions are made by the client.
- Advisor—accounts where the investment decisions must be approved by the client, and the financial advisor must obtain approval each time a change is made to the account or its investments.
- Portfolio manager—accounts where a financial advisor has discretion (contractually approved by the client) to make ongoing investment decisions without the client's approval for each individual change.
- Cash management—accounts where the financial advisor provides discretionary cash management services to institutional clients, whereby securities or proceeds are invested and reinvested in accordance with the client's investment criteria. Generally, the portfolio will be invested in short-term fixed income and cash equivalent investments.

Management's Discussion and Analysis

Investment Management

Income Statement Information

				% Ch	ange
\$ in millions	2023	2022	2021	2023	2022
Revenues					
Asset management and					
related					
fees	\$5,231	\$5,332	\$5,576	(2)%	(4)%
Performance-based					
income and					
other ¹	139	43	644	N/M	(93)%
Net revenues	5,370	5,375	6,220	- %	(14)%
Compensation and					
benefits	2,217	2,273	2,373	(2)%	(4)%
Non-					
compensation expenses	2,311	2,295	2,169	1 %	6 %
Total non-interest					
expenses	4,528	4,568	4,542	(1)%	1 %
Income before provision					
for income taxes	842	807	1,678	4 %	(52)%
Provision for income					
taxes	199	162	356	23 %	(54)%
Net income	643	645	1,322	- %	(51)%
Net income applicable					
to					
noncontrolling					
interests	4	(15)	(25)	127 %	40 %

\$ 639 \$ 660 \$1,347 **(3)%** (51)%

applicable to

Morgan Stanley

Net Revenues

Asset Management and Related Fees

Asset management and related fees of \$5,231 million in 2023 decreased 2% compared with the prior year, primarily due to a shift in the mix of average AUM, driven by the cumulative effect of net flows.

Asset management revenues are influenced by the level, relative mix of AUM and related fee rates. The market environment and client preferences in recent quarters have impacted the mix of our average Long-Term AUM level across certain asset classes. To the extent these conditions continue, we would expect our Asset management revenue to continue to be negatively impacted.

See "Assets Under Management or Supervision" herein.

Performance-based Income and Other

Performance-based income and other revenues increased to \$139 million in 2023, from \$43 million in the prior year, primarily due to mark-to-market gains in 2023 compared with losses in the prior year on DCP investments and investments in public funds, partially offset by lower accrued carried interest in certain private funds.

Non-Interest Expenses

Non-interest expenses of \$4,528 million in 2023 decreased 1% from the prior year, primarily due to lower Compensation and benefits expenses.

- Compensation and benefits expenses decreased primarily due to lower expenses related to compensation associated with carried interest, partially offset by higher expenses related to DCP.
- Non-compensation expenses were relatively unchanged for the current year.

Includes Investments, Trading, Commissions and fees, Net interest and Other revenues.

Management's Discussion and Analysis

Assets	Under	Management	or
Supervis	ion		

Rollforwards

		At									At
	De	ec 31,					М	arket			Dec 31,
\$ in billions	2	2022	In	flows1	Οι	utflows ²	lm	pact ³	Ot	her ^{4,5}	2023
Equity	\$	259	\$	40	\$	(57)	\$	57	\$	(4)	\$ 295
Fixed											
Income		173		56		(62)		11		(7)	171
Alternatives	;										
and											
Solutions		431		108		(91)		57		3	508
Long-Term											
AUM	\$	863	\$	204	\$	(210)	\$	125	\$	(8)	\$ 974
Liquidity											
and											
Overlay											
Services		442	2	2,282	(2,244)		20		(15)	485
Total	\$1	L,305	\$2	,486	\$(2,454)	\$	145	\$	(23)	\$1,459

	At					At
	Dec 31,		N	1arket	De	ec 31,
\$ in billions	2021	Inflows ¹	Outflows ² Ir	npact³ O	ther ⁴ 2	2022
Equity	\$ 395	\$ 56	\$ (74) \$	(106) \$	(12) \$	259
Fixed						
Income	207	66	(78)	(16)	(6)	173
Alternatives						
and						
Solutions	466	102	(83)	(47)	(7)	431
Long-Term						
AUM	\$ 1,068	\$ 224	\$ (235) \$	(169) \$	(25) \$	863
Liquidity						
and						
Overlay						
Services	497	2,224	(2,268)	(6)	(5)	442
Total	\$ 1,565	\$ 2,448	\$ (2,503) \$	(175) \$	(30) \$ 3	L,305

Αt

Dec 31,

2021

207

466

34 \$ 104 \$ 395

97

245

85 \$ 446 \$ 1,068

Market

2020 Inflows¹ Outflows² Impact³ Other⁴,6

(85) \$

(55)

(78)

Αt

Dec

31,

98

153

\$ 242 \$ 100 \$

67

\$ 493 \$ 262 \$ (218) \$

\$ in billions

Equity

Fixed

Income

Alternatives and Solutions

Long-Term AUM

Liquidity

Average	AUM
---------	-----

\$ in billions	2023		2022		2021
Equity	\$	279	\$	298	\$ 362
Fixed income		170		186	181
Alternatives and Solutions		466		435	380
Long-Term AUM Subtotal		915		919	923
Liquidity and Overlay Services		464		462	430
Total AUM	\$	1,379	\$	1,381	\$ 1,353

Average Fee Rates¹

Fee rate in bps	2023	2022	2021
Equity	71	70	74
Fixed income	35	35	38
Alternatives and Solutions	32	34	36
Long-Term AUM	44	46	51
Liquidity and Overlay Services	13	11	5
Total AUM	34	34	37

Based on Asset management revenues, net of waivers, excluding
performance-based fees and other non-management fees. For
certain non-U.S. funds, it includes the portion of advisory fees
that the advisor collects on behalf of third-party distributors. The
payment of those fees to the distributor is included in Noncompensation expenses in the income statement.

Asset management and other related fees within the Investment Management segment are primarily generated from Equity, Fixed Income and the following products:

Alternatives and Solutions. Includes products in fund of funds, real estate, infrastructure, private equity and credit strategies and multi-asset portfolios, as well as systematic strategies that create custom investment solutions.

Liquidity and Overlay Services. Includes liquidity fund products, as well as overlay services, which represent investment strategies that use passive exposure instruments to obtain, offset or substitute specific portfolio exposures, beyond those provided by the underlying holdings of the fund.

Management's Discussion and Analysis

Supplemental Financial Information

U.S. Bank Subsidiaries

Our U.S. Bank Subsidiaries accept deposits, provide loans to a variety of customers, including large corporate and institutional clients, as well as high to ultra-high net worth individuals, and invest in securities. activity our Lending in U.S. Subsidiaries from the Institutional Securities segment primarily includes business Secured lending facilities, Commercial and Residential real estate and Corporate loans. Lending activity in our U.S. Bank Subsidiaries from the Wealth Management segment primarily business includes Securities-based lending, which allows clients to borrow money against the value of qualifying securities, and Residential real estate loans.

For a further discussion of our credit risks, see "Quantitative and Qualitative Disclosures about Risk—Credit Risk" herein. For a further discussion about loans and lending commitments, see Notes 9 and 14 to the financial statements.

U.S. Bank Subsidiaries' Supplemental Financial Information 1

Αt

		Αt		
		December		At
		31,	D	ecember 31,
\$ in billions		2023		2022
Investment securities:				
Available-for-sale at fair				
value	\$	66.6	\$	66.9
Held-to-maturity		51.4		56.4
Total Investment securities	\$	118.0	\$	123.3
Wealth Management Loans	2			
Residential real estate	\$	60.3	\$	54.4
Securities-based lending and				
Other ³		86.2		91.7
Total, net of ACL	\$	146.5	\$	146.1
Institutional Securities Loa	ns²			
Corporate	\$	10.1	\$	6.9
Secured lending facilities		40.8		37.1
Commercial and Residential				
real estate		10.7		10.2
Securities-based lending and				
Other		4.1		6.0

Other Matters

Deferred Cash-Based Compensation

The Firm sponsors a number of deferred cash-based compensation programs for current and former employees, which generally contain vesting, clawback and cancellation provisions.

Employees are permitted to allocate the value of their deferred awards among a menu of notional investments, whereby the value of their awards will track the performance of the referenced notional investments. The menu of investments, which is selected by the Firm, includes fixed income, equity, commodity and money market funds.

Compensation expense for DCP awards is calculated based on the notional value of the award granted, adjusted for changes in the fair value of the referenced investments that employees select. Compensation expense is recognized over the vesting period relevant to each separately vesting portion of deferred awards.

We invest directly, as principal, in financial instruments and other investments to economically hedge certain of obligations under these DCP awards. Changes in the fair value of such investments, net of financing costs, are recorded in net revenues, and included in Transactional revenues in the Wealth Management business segment. Although changes in compensation expense resulting from changes in the fair value of the referenced investments will generally be offset by changes in the fair value of investments recognized in net revenues, there is typically a timing difference between the immediate recognition of gains and losses on our investments and the recognition deferred of the related compensation expense over the vesting period. While this timing difference may not be material to our Income before provision for income taxes in any individual period, it impact the Wealth Management business segment reported ratios and operating metrics in certain periods due to potentially significant impacts to net revenues and compensation expenses. At December 31, 2023 and December 31,

Management's Discussion and Analysis

Projected Future Compensation Obligation¹

\$ in millions	
Award liabilities at December 31, 2023 ^{2, 3}	5,331
Fully vested amounts to be distributed by the	
end of February 2024 ⁴	(905)
Unrecognized portion of prior awards at	
December 31, 2023 ³	1,373
2023 performance year awards granted in	
2024³	357
Total ⁵ \$	6,156

- 1. Amounts relate to performance years 2023 and prior.
- Balance is reflected in Other liabilities and accrued expenses in the balance sheet as of December 31, 2023.
- Amounts do not include assumptions regarding forfeitures or assumptions about future market conditions with respect to referenced investments.
- Distributions after February of each year are generally immaterial.
- Of the total projected future compensation obligation, approximately 20% relates to Institutional Securities, approximately 70% relates to Wealth Management and approximately 10% relates to Investment Management.

The previous table presents a rollforward of the Firm's estimated projected future compensation obligation for existing deferred cash-based compensation awards, exclusive of any assumptions about future market conditions with respect to referenced investments.

Projected Future Compensation Expense¹

\$ in millions	
Estimated to be recognized in:	
2024	\$ 534
2025	337
Thereafter	 859
Total	\$ 1,730

 Amounts relate to performance years 2023 and prior, and do not include assumptions regarding forfeitures or assumptions about future market conditions with respect to referenced investments.

The previous table sets forth an estimate of compensation expense associated with the projected future compensation obligation. Our projected future compensation obligation and expense for DCP performance years 2023 and prior are forward-looking statements subject to uncertainty. Actual results may be materially affected by various factors,

Accounting Updates

Development

The Financial Accounting Standards Board has issued certain accounting updates that apply to us. Accounting updates not listed below were assessed and determined to be either not applicable or to not have a material impact on our financial condition or results of operations upon adoption.

We adopted the following accounting update on January 1, 2024, with no material impact on our financial condition or results of operations upon adoption:

 Investments—Tax Credit Structures. This accounting update permits an election to account for tax equity investments using the proportional amortization method if certain conditions are met. Under the proportional amortization method, the initial cost of the investment is amortized in proportion to the income tax credits and other income tax benefits received recognized net in the income statement as a component of provision for income taxes. The update requires a separate accounting policy election to be made for each tax credit program. Additional disclosures are required regarding (i) the nature of our tax equity investments and (ii) the effect of our tax equity investments and related income tax credits on the financial condition and results of operations.

We are currently evaluating the following accounting updates; however, we do not expect a material impact on our financial condition or results of operations upon adoption:

 Income Tax Disclosures. This accounting update requires disclosure of additional information in relation to income taxes, including additional disaggregation of the income tax rate reconciliation and income taxes paid. For the income tax rate reconciliation, this update requires (1) disclosure specific categories reconciling items; and (2) providing additional information for reconciling items that meet a quantitative threshold (if the effect of those reconciling items is equal to or greater than 5 percent of the

Management's Discussion and Analysis

chief operating decision maker and included within the reported measure of segment profit or loss. This update does not change how operating segments are identified or aggregated, how quantitative thresholds are applied to determine the reportable segments. The accounting update is effective for fiscal years beginning January 1, 2024, and interim periods within fiscal years beginning January 1, 2025, with early adoption permitted.

Critical Accounting Estimates

Our financial statements are prepared in accordance with U.S. GAAP, which requires us to make estimates and assumptions (see Note 1 to the financial statements). We believe that of our significant accounting policies (see Note 2 to the financial statements), the following policies involve a higher degree of judgment and complexity.

Fair Value

Financial Instruments Measured at Fair Value

A significant number of our financial instruments are carried at fair value. The use of fair value to measure financial instruments is fundamental to our risk management practices and is our most critical accounting estimate. We make estimates regarding the valuation of assets and liabilities measured at fair value in preparing the financial statements. These assets and liabilities include, but are not limited to:

- Trading assets and Trading liabilities;
- Investment Securities—AFS;
- Certain Securities purchased under agreements to resell;
- Loans held-for-sale (measured at the lower of amortized cost or fair value);
- Certain Deposits, primarily certificates of deposit;
- Certain Securities sold under agreements to repurchase;
- Certain Other secured financings; and
- Certain Borrowings.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., the exit price) in an orderly transaction between market hierarchy. Level 3 financial assets represented 1.2% and 1.4% of our total assets, as of December 31, 2023 and December 31, 2022, respectively.

periods of market disruption, the observability of prices and inputs, as well as market liquidity, may be reduced for many instruments. which could cause instrument to be recategorized from Level 1 to Level 2 or from Level 2 to Level 3. In addition, a downturn in market conditions could lead to declines in the valuation of many instruments carried at fair value. Imprecision in estimating unobservable market inputs or other factors can affect the amount of gain or loss recorded for a particular position. The Firm uses various methodologies and assumptions in the determination of fair value. The use of methodologies or assumptions different than those used by the Firm could result in a different estimate of fair value at the reporting date. For further information on the definition of fair value, Level 1, Level 2, Level 3 and related valuation techniques, and quantitative information about and sensitivity of significant unobservable inputs used in Level 3 fair value measurements, see Notes 2 and 4 to the financial statements.

Where appropriate, valuation adjustments are made to account for various factors, such as liquidity risk (bid-ask adjustments), credit quality, model uncertainty, concentration risk and funding, in order to arrive at fair value. For a further discussion of valuation adjustments that we apply, see Note 2 to the financial statements.

Goodwill and Intangible Assets

Goodwill

We test goodwill for impairment on an annual basis as of July 1 and on an interim basis when certain events or circumstances exist. Evaluating goodwill for impairment requires management to make significant judgments, including, in part, the use of unobservable inputs that are subject to uncertainty. Goodwill impairment tests are performed at the reporting unit level, which is generally at the level of or one level below our business segments. Goodwill no longer retains its association with a

Management's Discussion and Analysis

limited by the carrying amount of goodwill allocated to that reporting unit.

The carrying value of each reporting unit is determined based on the capital allocated to the reporting unit. The estimated fair value of the reporting units is derived based on valuation techniques we believe market participants would use for each of the reporting units. The estimated fair value is generally determined by utilizing discounted cash flow methodology. certain instances, we may also utilize methodologies that incorporate price-tobook and price-to-earnings multiples of comparable companies.

The discounted cash flow methodology uses projected future cash flows based on the reporting units' earnings forecast. The discount rate used represents an estimate of the cost of equity for that reporting unit based on the Capital Asset Pricing Model.

At each annual goodwill impairment testing date, each of our reporting units with goodwill had a fair value that was substantially in excess of its carrying value.

Intangible Assets

Intangible assets are initially recorded at cost, or in the situation where acquired as part of a business combination, at the fair value determined as part of the acquisition accounting. method of Subsequently, amortizable intangible assets are carried in the balance sheet at amortized cost, where amortization is recognized over their estimated useful lives. Indefinite lived intangible assets are not amortized but are tested for impairment on an annual basis as of July 1 and on an interim basis when certain events or circumstances exist.

On a quarterly basis:

- All intangible assets are assessed for the presence of impairment indicators. Where such indicators are present, an evaluation for impairment is conducted.
- For amortizable intangible assets, an impairment loss exists if the carrying amount of the intangible asset is not recoverable and exceeds its fair value. The carrying amount of the intangible asset is not recoverable if it exceeds the sum of the expected undiscounted cash

The initial valuation of an intangible asset as part of the acquisition method of accounting and the subsequent valuation of intangible assets as part of an impairment assessment are subjective and based, in part, on inputs that are unobservable and can be subject to uncertainty. These inputs include, but are not limited to, forecasted cash flows, revenue growth rates, customer attrition rates and discount rates.

For both goodwill and intangible assets, to the extent an impairment loss is recognized, the loss establishes the new cost basis of the asset. Subsequent reversal of impairment losses is not permitted. For amortizable intangible assets, the new cost basis is amortized over the remaining useful life of that asset. Unanticipated declines in our revenue generating capability, adverse market or economic events, and regulatory actions, could result in material impairment charges in future periods.

See Notes 2 and 10 to the financial statements for additional information about goodwill and intangible assets.

Legal and Regulatory Contingencies

In the normal course of business, we have been named, from time to time, as a defendant in various legal actions, including arbitrations, class actions and other litigation, arising in connection with our activities as a global diversified financial services institution.

Certain of the actual or threatened legal actions include claims for substantial compensatory and/or punitive damages or claims for indeterminate amounts of damages. In some cases, the third-party entities that are, or would otherwise be, the primary defendants in such cases are bankrupt, in financial distress, or may not honor applicable indemnification obligations. These actions have included, but are not limited to, antitrust claims, claims under various false claims act statutes, and matters arising from our sales and trading businesses and our activities in the capital markets.

We are also involved, from time to time, in other reviews, investigations and proceedings (both formal and informal) by

Management's Discussion and Analysis

reasonably estimate the amount of that loss or the range of loss, we accrue an estimated loss by a charge to income.

In many legal proceedings and investigations, it is inherently difficult to determine whether any loss is probable or reasonably possible, or to estimate the amount of any loss. In addition, even where we have determined that a loss is probable or reasonably possible or an exposure to loss or range of loss exists in excess of the liability already accrued with respect to a previously recognized loss contingency, we are often unable to reasonably estimate the amount of the loss or range of loss. It is particularly difficult to determine if a loss is probable or reasonably possible, or to estimate the amount of loss, where the factual record is being developed or contested or where plaintiffs or government entities seek substantial or indeterminate restitution, damages, forfeiture, or penalties. Numerous disgorgement issues may need to be resolved in an investigation or proceeding before a determination can be made that a loss or additional loss (or range of loss or range of additional loss) is probable or reasonably possible, or to estimate the amount of loss, potentially includina through lengthy discovery or determination of important factual matters, determination of issues related to class certification, the calculation of damages other relief. or and consideration of novel or unsettled legal questions relevant to the proceedings or investigations in question.

Significant judgment is required in deciding when and if to make these accruals, and the actual cost of a legal claim or regulatory fine/penalty may ultimately be materially different from the recorded accruals.

See Note 14 to the financial statements for additional information on legal contingencies.

Income Taxes

We are subject to the income tax laws of the U.S., its states and municipalities and those of the foreign jurisdictions in which we have business operations. These tax laws are complex and subject to interpretation by the taxpayer and the Our provision for income taxes is composed of current and deferred taxes. Current income taxes approximate taxes to be paid or refunded for the current period. Deferred income taxes reflect the net tax effects of temporary differences between the financial reporting and tax bases of assets and liabilities and are measured using the applicable enacted tax rates and laws that will be in effect when such differences are expected to reverse.

Our deferred tax balances may also include deferred assets related to tax attribute carryforwards, such as net operating losses and tax credits that will be realized through reduction of future tax liabilities and, in some cases, are subject to expiration if not utilized within certain periods. We perform regular reviews to ascertain whether deferred tax assets are realizable. These reviews include management's estimates and assumptions regarding future taxable income and incorporate various tax planning strategies, including strategies that may be available to tax attribute carryforwards before they expire.

Once the deferred tax asset balances have been determined, we may record a valuation allowance against the deferred tax asset balances to reflect the amount we estimate is more likely than not to be realized at a future date. Both current and deferred income taxes may reflect adjustments related to our unrecognized tax benefits.

Significant judgment is required in estimating the consolidated provision for (benefit from) income taxes, current and deferred tax balances (including valuation allowance, if any), accrued interest or penalties and uncertain tax positions. Revisions in estimates and/or the actual costs of a tax assessment may ultimately be materially different from the recorded accruals and unrecognized tax benefits, if any.

See Note 2 to the financial statements for additional information on our significant assumptions, judgments and interpretations associated with the accounting for income taxes and Note 21 to the financial statements for additional information on our tax examinations

Management's Discussion and Analysis

Balance Sheet

We monitor and evaluate the composition and size of our balance sheet on a regular basis. Our balance sheet management process includes quarterly planning, business-specific thresholds, monitoring of business-specific usage versus key performance metrics and new business impact assessments.

We establish balance sheet thresholds at the consolidated and business segment levels. We monitor balance sheet utilization and review variances resulting from business activity and market fluctuations. On a regular basis, we review current performance versus established thresholds and assess the need to re-allocate our balance sheet based on business segment needs. We also monitor key metrics, including asset and liability size and capital usage.

Total Assets by Business Segment

		At Decemb	er 31, 20	23
\$ in millions	IS	WM	IM	Total
Assets				
Cash and				
cash				
equivalents	\$ 72,928	\$ 16,172	\$ 132	\$ 89,232
Trading assets				
at fair value	353,841	7,962	5,271	367,074
Investment				
securities	39,212	115,595		154,807
Securities				
purchased				
under				
agreements	00 701	20.020		110 740
to resell	90,701	20,039	_	110,740
Securities	110 022	1 200		121 001
borrowed	119,823	1,268	_	121,091
Customer and				
other receivables	47,333	31,237	1,535	80,105
	•	· · ·	•	•
Loans ¹	72,110	146,526	4	218,640
Goodwill	424	10,199	6,084	16,707
Intangible				
assets	26	3,427	3,602	7,055
Other assets ²	14,108	12,743	1,391	28,242
Total assets	\$810,506	\$365,168	\$18,019	\$1,193,693

\$1,194 billion at December 31, 2023 were relatively unchanged from \$1,180 billion at December 31, 2022.

Liquidity Risk Management Framework

The primary goal of our Liquidity Risk Management Framework is to ensure that we have access to adequate funding across a wide range of market conditions and time horizons. The framework is designed to enable us to fulfill our financial obligations and support the execution of our business strategies.

The following principles guide our Liquidity Risk Management Framework:

- Sufficient liquidity resources, which consist
 of HQLA and cash deposits with banks
 ("Liquidity Resources") should be
 maintained to cover maturing liabilities
 and other planned and contingent
 outflows:
- Maturity profile of assets and liabilities should be aligned, with limited reliance on short-term funding;
- Source, counterparty, currency, region and term of funding should be diversified; and
- Liquidity Stress Tests should anticipate, and account for, periods of limited access to funding.

The core components of our Liquidity Risk Management Framework are the Required Liquidity Framework, Liquidity Stress Tests and Liquidity Resources, which support our target liquidity profile.

Required Liquidity Framework

Our Required Liquidity Framework establishes the amount of liquidity we must both normal and stressed hold in environments to ensure that our financial condition and overall soundness are not adversely affected by an inability (or perceived inability) to meet our financial obligations in a timely manner. The Required Liquidity Framework considers the most constraining liquidity requirement to satisfy all regulatory and internal limits at a consolidated and legal entity level.

Liquidity Stress Tests

We use Liquidity Stress Tests to model external and intercompany liquidity flows

At December 31, 2022

Management's Discussion and Analysis

- Repayment of all unsecured debt maturing within the stress horizon;
- Higher haircuts for and significantly lower availability of secured funding;
- Additional collateral that would be required by trading counterparties, certain exchanges and clearing organizations related to credit rating downgrades;
- Additional collateral that would be required due to collateral substitutions, collateral disputes and uncalled collateral;
- Discretionary unsecured debt buybacks;
- Drawdowns on lending commitments provided to third parties; and
- Client cash withdrawals and reduction in customer short positions that fund long positions.

Liquidity Stress Tests are produced and results are reported at different levels, including major operating subsidiaries and major currencies, to capture specific cash requirements and cash availability across the Firm, including a limited number of asset sales in a stressed environment. The Liquidity Stress Tests assume that subsidiaries will use their own liquidity first to fund their obligations before drawing liquidity from the Parent Company and that the Parent Company will support its subsidiaries and will not have access to subsidiaries' liquidity reserves. In addition to the assumptions underpinning the Liquidity Stress Tests, we take into consideration settlement risk related to intraday settlement and clearing securities and financing activities.

At December 31, 2023 and December 31, 2022, we maintained sufficient Liquidity Resources to meet current and contingent funding obligations as modeled in our Liquidity Stress Tests.

Liquidity Resources

We maintain sufficient Liquidity Resources to cover daily funding needs and to meet strategic liquidity targets sized by the Required Liquidity Framework and Liquidity Stress Tests. We actively manage the amount of our Liquidity Resources considering the following components: unsecured debt maturity profile; balance sheet size and composition; funding needs in a stressed environment, inclusive of contingent cash outflows; legal entity,

Liquidity Resources by Type of Investment

	Average Daily Balance			
	Three Months Ended			
	D	ecember	September	
\$ in millions		31, 2023		30, 2023
Cash deposits with central banks	\$	64,205	\$	66,330
Unencumbered HQLA securities ¹ :				
U.S. government obligations		137,635		122,110
U.S. agency and agency				
mortgage-backed securities		83,733		86,628
Non-U.S. sovereign obligations ²		20,117		23,416
Other investment grade				
securities		678		693
Total HQLA ¹	\$	306,368	\$	299,177
Cash deposits with banks (non-				
HQLA)		8,136		8,190
Total Liquidity Resources	\$	314,504	\$	307,367

- HQLA is presented prior to applying weightings and includes all HQLA held in subsidiaries.
- Primarily composed of unencumbered French, Japanese, U.K., German and Spanish government obligations.

Liquidity Resources by Bank and Non-Bank Legal Entities

	Average Daily Balance			
	Three Mo	nths Ended		
	December	September		
\$ in millions	31, 2023	30, 2023		
Bank legal entities				
U.S.	\$ 132,870	\$ 132,663		
Non-U.S.	5,359	6,101		
Total Bank legal entities	138,229	138,764		
Non-Bank legal entities				
U.S.:				
Parent Company	58,494	53,681		
Non-Parent Company	56,459	58,839		
Total U.S.	114,953	112,520		
Non-U.S.	61,322	56,083		
Total Non-Bank legal entities	176,275	168,603		
Total Liquidity Resources	\$ 314,504	\$ 307,367		

Liquidity Resources may fluctuate from period to period based on the overall size and composition of our balance sheet, the maturity profile of our unsecured debt, and estimates of funding needs in a stressed environment, among other factors.

Management's Discussion and Analysis

funding, which is their projected minimum funding needs, over a one-year time horizon.

As of December 31, 2023, we and our U.S. Bank Subsidiaries are compliant with the minimum LCR and NSFR requirements of 100%.

Liquidity Coverage Ratio

	Average Daily Balance					
	Three Months Ended					
	December 31, September 30,					
\$ in millions		2023		2023		
Eligible HQLA¹						
Cash deposits with central						
banks	\$	58,047	\$	60,163		
Securities ²		194,970		181,010		
Total Eligible HQLA ¹	\$	253,017	\$	241,173		
Net cash outflows	\$	196,488	\$	190,336		
LCR	129 % 127 %					

- Under the LCR rule, Eligible HQLA is calculated using weightings and excluding certain HQLA held in subsidiaries.
- Primarily includes U.S. Treasuries, U.S. agency mortgage-backed securities, sovereign bonds and investment grade corporate bonds.

Net Stable Funding Ratio

		Average Daily Balance			
		Three Months Ended			
	December 31, September 30,				
\$ in millions		2023		2023	
Available stable funding	\$	555,884	\$	553,413	
Required stable funding		465,226		468,290	
NSFR		120 % 118 9			

Funding Management

We manage our funding in a manner that reduces the risk of disruption to our operations. We pursue a strategy of diversification of secured and unsecured funding sources (by product, investor and region) and attempt to ensure that the tenor of our liabilities equals or exceeds the expected holding period of the assets being financed. Our goal is to achieve an optimal mix of durable secured and unsecured financing.

We fund our balance sheet on a global basis through diverse sources. These sources

provides us with flexibility in managing the composition of our balance sheet. Secured financing investors principally focus on the quality of the eligible collateral posted. Accordingly, we actively manage our secured financings based on the quality of the assets being funded.

We have established longer-tenor secured funding requirements for less liquid asset classes, for which funding may be at risk in the event of a market disruption. We define highly liquid assets as government-issued or government-guaranteed securities with a high degree of fundability and less liquid assets as those that do not meet these criteria.

To further minimize the refinancing risk of secured financing for less liquid assets, we have established concentration limits to diversify our investor base and reduce the amount of monthly maturities for secured financing of less liquid assets. As a component of the Liquidity Risk Management Framework, we hold a portion of our Liquidity Resources against the potential disruption to our secured financing capabilities.

In general, we maintain a pool of liquid and easily fundable securities, which takes into account HQLA classifications consistent with LCR definitions, and other regulatory requirements, and provides a valuable future source of liquidity.

Collateralized Financing Transactions

_				
		At		At
	ı	December	[December
		31,		31,
\$ in millions		2023		2022
Securities purchased under				
agreements to resell and				
Securities borrowed	\$	231,831	\$	247,281
Securities sold under				
agreements to repurchase and				
Securities loaned	\$	77,708	\$	78,213
Securities received as collateral ¹	\$	6,219	\$	9,954
		Average Da	aily	Balance
	Three Months Ended			

December

31, 2023

December

31, 2022

Securities purchased under

\$ in millions

Management's Discussion and Analysis

collateral maintenance policies and the elements of our Liquidity Risk Management Framework.

Unsecured Financing

We view deposits and borrowings as stable sources of funding for unencumbered securities and non-security assets. Our unsecured financings include borrowings and certificates of deposit carried at fair value, which are primarily composed of: instruments whose payments redemption values are linked to the performance of a specific index, a basket of stocks, a specific equity security, a commodity, a credit exposure or basket of credit exposures; and instruments with various interest rate-related features. including step-ups, step-downs and zero coupons. Also included are unsecured contracts that are not classified as OTC derivatives because they fail initial net investment criteria. As part of our asset/ management strategy, appropriate, we use derivatives to make adjustments to the interest rate risk profile of our borrowings (see Notes 6 and 13 to the financial statements).

Deposits

		At	At
	D	ecember	December
		31,	31,
\$ in millions		2023	2022
Savings and demand deposits:			
Brokerage sweep deposits ¹	\$	148,274	\$ 202,592
Savings and other		139,978	117,356
Total Savings and demand			
deposits		288,252	319,948
Time deposits		63,552	36,698
Total ²	\$	351,804	\$ 356,646

- Amounts represent balances swept from client brokerage accounts.
- 2. As of December 31, 2023, there were no off-balance sheet amounts excluded from deposits. As of December 31, 2022, approximately \$6 billion of off-balance sheet amounts were excluded from deposits at unaffiliated financial institutions.

Deposits are primarily sourced from our Wealth Management clients and are considered to have stable, low-cost funding characteristics relative to other sources of funding. Each category of deposits

Borrowings by Remaining Maturity at December 31, 2023¹

		Parent						
\$ in millions	C	Company	Su	bsidiaries	Total			
Original maturities of one								
year or less	\$	_	\$	3,188	\$ 3,188			
Original maturities great	er t	han one <u>y</u>	yea	r				
2024	\$	8,915	\$	11,236	\$ 20,151			
2025		22,030		13,493	35,523			
2026		24,516		10,907	35,423			
2027		19,282		6,056	25,338			
2028		11,432		9,807	21,239			
Thereafter		90,635		32,235	122,870			
Total greater than one								
year	\$:	L76,810	\$	83,734	\$260,544			
Total	\$:	176,810	\$	86,922	\$263,732			

 Original maturity in the table is generally based on contractual final maturity. For borrowings with put options, remaining maturity represents the earliest put date.

Borrowings of \$264 billion at December 31, 2023 increased from \$238 billion at December 31, 2022, primarily due to issuances net of maturities and redemptions and mark-to-market adjustments on equity-linked borrowings driven by market factors.

We believe that accessing debt investors through multiple distribution channels helps provide consistent access to the unsecured markets. In addition, the issuance of borrowings with original maturities greater than one year allows us to reduce reliance on short-term credit-sensitive instruments. Borrowings with original maturities greater than one year are generally managed to achieve staggered maturities, thereby mitigating refinancing risk, and to maximize investor diversification through sales to global institutional and retail clients across regions, currencies and product types.

The availability and cost of financing to us can vary depending on market conditions, the volume of certain trading and lending activities, our credit ratings and the overall availability of credit. We also engage in, and may continue to engage in, repurchases of our borrowings as part of our market-making activities.

For further information on Borrowings, see

Management's Discussion and Analysis

Parent Company and U.S. Bank Subsidiaries Issuer Ratings at February 16, 2024

	Par	ent Company	/
	Short-Term	Long-Term	Rating
	Debt	Debt	Outlook
DBRS, Inc.	R-1 (middle)	A (high)	Stable
Fitch Ratings, Inc.	F1	A+	Stable
Moody's Investors			
Service, Inc.	P-1	A1	Stable
Rating and Investment			
Information, Inc.	a-1	A+	Stable
S&P Global Ratings	A-2	A-	Stable
		MSBNA	
	Short-Term	Long-Term	Rating
	Debt	Debt	Outlook
Fitch Ratings, Inc.	F1+	AA-	Stable
Moody's Investors			
Service, Inc.	P-1	Aa3	Stable
S&P Global Ratings	A-1	A +	Stable
		MSPBNA	
	Short-Term	Long-Term	Rating
	Debt	Debt	Outlook
Moody's Investors			
Service, Inc.	P-1	Aa3	Stable
S&P Global Ratings	A-1	A +	Stable

Incremental Collateral or Terminating Payments

In connection with certain OTC derivatives and certain other agreements where we are a liquidity provider to certain financing vehicles associated with the Institutional Securities business segment, we may be required to provide additional collateral, immediately settle any outstanding liability balances with certain counterparties or pledge additional collateral to certain clearing organizations in the event of a future credit rating downgrade irrespective of whether we are in a net asset or net liability position. See Note 6 to the financial statements for additional information on OTC that derivatives contain such contingent features.

While certain aspects of a credit rating downgrade are quantifiable pursuant to contractual provisions, the impact it would have on our business and results of operations in future periods is inherently

Common Stock Repurchases

in millions, except for per share

data	2023	2022	2021
Number of shares	62	113	126
Average price per share	\$ 85.35	\$ 87.25	\$ 91.13
Total	\$ 5,300	\$ 9,865	\$ 11,464

For additional information on our common stock repurchases, see "Liquidity and Capital Resources—Regulatory Requirements—Capital Plans, Stress Tests and the Stress Capital Buffer" herein and Note 17 to the financial statements.

For a description of our capital plan, see "Liquidity and Capital Resources—Regulatory Requirements—Capital Plans, Stress Tests and the Stress Capital Buffer" herein.

Common Stock Dividend Announcement

Announcement date	January 16, 2024
Amount per share	\$0.85
Date paid	February 15, 2024
Shareholders of record as of	January 31, 2024

For additional information on our common stock dividends, see "Liquidity and Capital Resources—Regulatory Requirements—Capital Plans, Stress Tests and the Stress Capital Buffer" herein.

For additional information on our common stock and information on our preferred stock, see Note 17 to the financial statements.

Off-Balance Sheet Arrangements

We enter into various off-balance sheet arrangements, including through unconsolidated SPEs and lending-related financial instruments (e.g., guarantees and commitments), primarily in connection with the Institutional Securities and Investment Management business segments.

We utilize SPEs primarily in connection with securitization activities. For information on our securitization activities, see Note 15 to the financial statements.

For information on our commitments, obligations under certain guarantee

Management's Discussion and Analysis

Subsidiaries. The regulatory capital requirements are largely based on the Basel III capital standards established by the Basel Committee and also implement certain provisions of the Dodd-Frank Act. For us to remain an FHC, we must remain well-capitalized in accordance with standards established by the Federal Reserve, and our U.S. Bank Subsidiaries must remain well-capitalized in accordance with standards established by the OCC. In addition, many of our regulated subsidiaries subject regulatory to capital requirements, including regulated subsidiaries registered as swap dealers with the CFTC or conditionally registered as security-based swap dealers with the SEC or registered as broker-dealers or futures commission merchants. For additional information on regulatory capital requirements for our U.S. Bank Subsidiaries, as well as our subsidiaries that are swap entities, see Note 16 to the financial statements.

Regulatory Capital Requirements

We are required to maintain minimum risk-based and leverage-based capital and TLAC ratios. For additional information on TLAC, see "Total Loss-Absorbing Capacity, Long-Term Debt and Clean Holding Company Requirements" herein.

Risk-Based Regulatory Capital. Risk-based capital ratio requirements apply to Common Equity Tier 1 capital, Tier 1 capital and Total capital (which includes Tier 2 capital), each as a percentage of RWA, and consist of regulatory minimum required ratios plus our capital buffer requirement. Capital requirements require certain adjustments to, and deductions from, capital for purposes of determining these ratios.

Capital Buffer Requirements

		At
		December
At	At	31, 2023
December	December	and
31, 31,		December
2023	2022	31, 2022
Standardized	Advanced	

Capital buffers

huffer

Capital conservation

buffer requirement computed under the applicable advanced approaches for calculating credit risk, market risk and operational risk RWAs ("Advanced Approach") is equal to our 2.5% capital conservation buffer, G-SIB capital surcharge and CCyB.

Risk-Based Regulatory Capital Ratio Requirements

			At
			December
	At	At	31, 2023
	December	December	and
	31,	31,	December
	2023	2022	31, 2022
Regulatory			
Minimum	Standardized	Standardized	Advanced
Required ratios ¹			

Required rat	ios¹			
Common				
Equity				
Tier 1				
capital				
ratio	4.5 %	12.9%	13.3%	10.0%
Tier 1				
capital				
ratio	6.0 %	14.4%	14.8%	11.5%
Total				
capital				
ratio	8.0 %	16.4%	16.8%	13.5%

 Required ratios represent the regulatory minimum plus the capital buffer requirement.

Risk-Weighted Assets. RWA reflects both our on- and off-balance sheet risk, as well as capital charges attributable to the risk of loss arising from the following:

- Credit risk: The failure of a borrower, counterparty or issuer to meet its financial obligations to us;
- Market risk: Adverse changes in the level of one or more market prices, rates, spreads, indices, volatilities, correlations or other market factors, such as market liquidity; and
- Operational risk: Inadequate or failed processes or systems, from human factors or from external events (e.g., fraud, theft, legal and compliance risks, cyber attacks or damage to physical assets).

Our risk-based capital ratios are computed under each of (i) the Standardized Approach and (ii) the Advanced Approach. The credit

Management's Discussion and Analysis

Regulatory Capital Ratios

negulato.	y Capitai Ka				Regulatory Capital					
		At		At			At	A	t	
	Required Dec	ember	Required	December		Dec	ember	Decer	mber	
\$ in millions	Ratio ¹ 31,	2023	Ratio ¹	31, 2022			31,	31	L,	
Risk-based	capital—				\$ in millions	2	023	202	22	Change
Standardiz	zed				Common Equity Tier 1 capital					
Common Equ	uity Tier 1				Common shareholders'					
capital	\$ 69	9,448		\$ 68,670	equity	\$ 9	90,288	\$ 91	1,391	\$(1,103)
Tier 1 capital	78	3,183		77,191	Regulatory adjustments					
Total capital	8	3,874		86,575	and deductions:					
Total RWA	450	5,053		447,849	Net goodwill	(1	L6,394)	(16	5,393)	(1)
Common					Net intangible assets		(5,509)	(6	5,048)	539
Equity Tier					Impact of CECL					
1 capital					transition		124		185	(61)
ratio	12.9 %	15.2 %	13.3 %	15.3 %	Other adjustments and					
Tier 1 capital					deductions ¹		939		(465)	1,404
ratio	14.4 %	17.1 %	14.8 %	17.2 %	Total Common Equity					
Total capital					Tier 1					
ratio	16.4 %	19.5 %	16.8 %	19.3 %	capital	\$ (69,448	\$ 68	3,670	\$ 778
					Additional Tier 1					
	•			At December	capital					
\$ in millions	Ratio ¹	31, 2	023	31, 2022	Preferred stock	\$	8,750	\$ 8	3,750	\$ —
Risk-based	capital—				Noncontrolling interests		758		552	206
Advanced					Additional Tier 1 capital	\$	9,508	\$ 9	9,302	\$ 206
Common Equ	_	÷ 60	440 ¢	69 670	Deduction for					
Tier 1 capita			,448 \$	68,670	investments in covered					
Tier 1 capital			,183	77,191	funds	-	(773)		(781)	8
Total capital		88,	,190	86,159	Total Tier 1 capital	\$	78,183	\$ 77	7,191	\$ 992
Total RWA		448	,154	438,806	Standardized Tier 2					
Common Equ	ıity				capital					
Tier 1 capita					Subordinated debt	\$	8,760	\$ 7	7,846	\$ 914
ratio	10.0 %		15.5 %	15.6 %	Eligible ACL		2,051	1	1,613	438
Tier 1 capital					Other adjustments and					
ratio	11.5 %		17.4 %	17.6 %	deductions		(120)		(75)	(45)
Total capital					Total Standardized					
ratio	13.5 %		19.7 %	19.6 %	Tier 2					
	Required	At Dece	mber /	At December	capital	\$:	10,691	\$ 9	9,384	\$ 1,307
\$ in millions	Ratio ¹	31, 2	023	31, 2022	Total Standardized					
Leverage-ba	ased				capital	\$ 8	88,874	\$ 86	5,575	\$ 2,299
capital					Advanced Tier 2					
Adjusted ave	rage				capital					
assets ²		\$ 1,159	,626 \$	1,150,772	Subordinated debt	\$	8,760	\$ 7	7,846	\$ 914
Tier 1 levera	ge				Eligible credit reserves		1,367	1	1,197	170
ratio	4.0 %		6.7 %	6.7 %	Other adjustments and					
Supplementa	nry				deductions		(120)		(75)	(45)
leverage					Total Advanced Tier 2					
exposure ³		\$ 1,429	,552 \$	1,399,403	capital	\$:	10,007	\$ 8	3,968	\$ 1,039
SLR	5.0 %		5.5 %	5.5 %	Total Advanced	-				

Regulatory Capital

Management's Discussion and Analysis

RWA Rollforward

\$ in millions	St	andardized	Advanced
Credit risk RWA			
Balance at December 31, 2022	\$	397,275 \$	285,638
Change related to the following			
items:			
Derivatives		6,065	660
Securities financing			
transactions		2,924	(354)
Investment securities		(1,316)	385
Commitments, guarantees			
and loans		(2,606)	6,903
Equity investments		1,621	1,964
Other credit risk		3,768	2,662
Total change in credit risk RWA	\$	10,456 \$	12,220
Balance at December 31,			
2023	\$	407,731 \$	297,858
Market risk RWA			
Balance at December 31, 2022	\$	50,574 \$	50,563
Change related to the following items:			
Regulatory VaR		(3,946)	(3,946)
Regulatory stressed VaR		(5,017)	(5,017)
Incremental risk charge		94	94
Comprehensive risk measure		341	231
Specific risk		6,276	6,276
Total change in market risk RWA	\$	(2,252) \$	(2,362)
Balance at December 31,			
2023	\$	48,322 \$	48,201
Operational risk RWA			
Balance at December 31, 2022		N/A \$	102,605
Change in operational risk RWA		N/A	(510)
Balance at December 31,			
2023		N/A \$	102,095
Total RWA	\$	456,053 \$	448,154

Regulatory VaR—VaR for regulatory capital requirements

In 2023, Credit risk RWA increased under the Standardized and Advanced Approaches. Under the Standardized Approach, the increase was primarily driven by higher derivatives, higher securities financing transactions, higher equity investments, as well as an increase in Other credit risk driven by higher deferred tax assets and securitizations. These increases were partially offset by decreases in lending activity. Under the Advanced Approach, the

interconnectedness, cross-jurisdictional activity, and complexity and substitutability ("Method 1") or use of short-term wholesale funding ("Method 2"), whichever is higher.

Total Loss-Absorbing Capacity, Long-Term Debt and Clean Holding Company Requirements

The Federal Reserve has established external TLAC, long-term debt ("LTD") and clean holding company requirements for top-tier BHCs of U.S. G-SIBs ("covered BHCs"), including the Parent Company. These requirements are designed to ensure that covered BHCs will have enough lossabsorbing resources at the point of failure to be recapitalized through the conversion of eligible LTD to equity or otherwise by imposing losses on eligible LTD or other forms of TLAC where an SPOE resolution strategy is used (see "Business— Supervision and Regulation—Financial Holding Company—Resolution and Recovery Planning" and "Risk Factors—Legal, Regulatory and Compliance Risk").

These TLAC and eligible LTD requirements include various restrictions, such requiring eligible LTD to: be issued by the covered BHC; be unsecured; have a maturity of one year or more from the date of issuance; and not contain certain embedded features, such as a principal or redemption amount subject to reduction based on the performance of an asset, entity or index, or a similar feature. In provide addition, the requirements permanent grandfathering for debt instruments issued prior to December 31, 2016 that would be eligible LTD but for having impermissible acceleration clauses or being governed by foreign law.

A covered BHC is also required to maintain minimum external TLAC equal to the greater of (i) 18% of total RWA or (ii) 7.5% of its total leverage exposure (the denominator of its SLR). Covered BHCs must also meet a minimum external LTD requirement equal to the greater of (i) total RWA multiplied by the sum of 6% plus the higher of the Method 1 or Method 2 G-SIB capital surcharge applicable to the Parent Company or (ii) 4.5% of its total leverage exposure.

Management's Discussion and Analysis

Required and Actual TLAC and Eligible LTD Ratios

Actual

Amount/Ratio Αt Αt December December 31, 31, Regulatory Required Minimum 2022 Ratio1 2023 \$ in millions External TLAC² \$ 250,914 \$ 245,951 External TLAC as a % of RWA 18.0 % 21.5 % 55.0 % 54.9 % External TLAC as a % of leverage 9.5 % exposure 7.5 % **17.6** % 17.6 % Eligible LTD³ **\$ 162,547** \$ 159,444 Eligible LTD as a % of **RWA** 9.0 % 9.0 % 35.6 % 35.6 % Eligible LTD as a % of leverage exposure 4.5 % 4.5 % 11.4 % 11.4 %

- 1. Required ratios are inclusive of applicable buffers.
- External TLAC consists of Common Equity Tier 1 capital and Additional Tier 1 capital (each excluding any noncontrolling minority interests), as well as eligible LTD.
- Consists of TLAC-eligible LTD reduced by 50% for amounts of unpaid principal due to be paid in more than one year but less than two years from each respective balance sheet date.

Furthermore, under the clean holding company requirements, a covered BHC is prohibited from incurring any external debt with an original maturity of less than one year or certain other liabilities, regardless of whether the liabilities are fully secured or otherwise senior to eligible LTD, or entering into certain other prohibited transactions. Certain other external liabilities, including those with certain embedded features noted above, are subject to a cap equal to 5% of the covered BHC's outstanding external TLAC amount. Additionally, as of April 1, 2021, we and our U.S. Bank Subsidiaries are required to make certain deductions from regulatory capital for investments in certain unsecured debt instruments (including eligible LTD in the TLAC framework) issued by the Parent capital. The capital plan must include a discussion of how we will maintain capital above the minimum regulatory capital ratios and how we will serve as a source of strength to our U.S. Bank Subsidiaries under supervisory stress scenarios. In addition, the Federal Reserve has issued guidance setting out its heightened expectations for capital planning practices at certain large financial institutions, including us.

As part of its annual capital supervisory stress testing process, the Federal Reserve determines an SCB for each large BHC, including us. The SCB applies only with respect to Standardized Approach riskbased capital requirements and replaced Common Equity Tier 1 capital conservation buffer of 2.5%. The SCB is the greater of (i) the maximum decline in our Common Equity Tier 1 capital ratio under the severely adverse scenario over the supervisory stress test measurement period plus the sum of the four quarters of planned common stock dividends divided by the projected RWAs from the quarter in which the Firm's projected Common Equity Tier 1 capital ratio reaches its minimum in the supervisory stress test and (ii) 2.5%.

The supervisory stress test assumes that BHCs generally maintain a constant level of assets and RWAs throughout the projection period.

A firm's SCB is subject to revision each year, taking effect from October 1 to reflect the results of the Federal Reserve's annual supervisory stress test. The Federal Reserve has discretion to recalculate a firm's SCB outside of the October 1 annual cycle and to require approval for certain actions, in some circumstances. The Federal Reserve also has the authority to impose restrictions on capital actions as a supervisory matter.

For the 2023 capital planning and stress test cycle, we submitted our capital plan and company-run stress test results to the Federal Reserve on April 5, 2023. On June 28, 2023, the Federal Reserve published summary results of its supervisory stress tests of each large BHC, in which the projected decline in our Common Equity Tier 1 ratio in the severely adverse scenario improved from the prior annual supervisory stress test by 50 basis points from 4 6% to

Management's Discussion and Analysis

expiration date, beginning in the third quarter of 2023, which will be exercised from time to time as conditions warrant.

Attribution of Average Common Equity According to the Required Capital Framework

Our required capital ("Required Capital") estimation is based on the Required Capital framework, an internal capital adequacy measure. Common equity attribution to the business segments is based on capital usage calculated under the Required Capital framework, as well as each business segment's relative contribution to our total Required Capital.

The Required Capital framework is a riskbased and leverage-based capital measure, which is compared with our regulatory capital to ensure that we maintain an amount of going concern capital after absorbing potential losses from stress events, where applicable, at a point in time. The amount of capital allocated to the business segments is generally set at the beginning of each year and remains fixed throughout the year until the next annual reset unless a significant business change occurs (e.g., acquisition or disposition). We define the difference between our total average common equity and the sum of the average common equity amounts allocated to our business segments as Parent Company common equity. We generally hold Parent Company common equity for regulatory prospective requirements, organic growth, potential future acquisitions and other capital needs.

Average Common Equity Attribution under the Required Capital Framework¹

\$ in billions	2023		2022	2021
Institutional Securities	\$	45.6 \$	48.8 \$	43.5
Wealth Management		28.8	31.0	28.6
Investment Management ²		10.4	10.6	8.8
Parent		6.0	3.5	16.2
Total	\$	90.8 \$	93.9 \$	97.1

- The attribution of average common equity to the business segments is a non-GAAP financial measure. See "Selected Non-GAAP Financial Information" herein.
- The total average common equity and the allocation to the Investment Management business segment in 2021 reflect the Eaton Vance acquisition on March 1, 2021.

on June 30, 2023. For more information about resolution planning requirements, see "Business—Supervision and Regulation—Financial Holding Company—Resolution and Recovery Planning."

As described in our most recent resolution plan, our preferred resolution strategy is an SPOE strategy. In line with our SPOE strategy, the Parent Company transferred, and has agreed to transfer on an ongoing basis, certain assets to its wholly owned, direct subsidiary Morgan Stanley Holdings LLC (the "Funding IHC"). In addition, the Parent Company has entered into an amended and restated support its agreement with material entities (including the Funding IHC) and certain other subsidiaries. In the event of a resolution scenario, the Parent Company would be obligated to contribute all of its contributable assets to our supported entities and/or the Funding IHC. The Funding IHC would be obligated to provide capital and liquidity, as applicable, to our supported entities. The combined implication of the SPOE resolution strategy and the requirement to maintain certain levels of TLAC is that losses in resolution would be imposed on the holders of eligible LTD and other forms of eligible TLAC issued by the Parent Company before any losses are imposed on creditors of our supported entities and without requiring taxpayer or government financial support.

The obligations of the Parent Company and the Funding IHC under the amended and restated support agreement are in most cases secured on a senior basis by the assets of the Parent Company (other than shares in subsidiaries of the Parent Company and certain other assets) and the assets of the Funding IHC. As a result, claims of our supported entities, including the Funding IHC, with respect to the secured assets, are effectively senior to obligations unsecured of the **Parent** Company.

For more information about resolution and recovery planning requirements and our activities in these areas, including the implications of such activities in a resolution scenario, see "Business—Supervision and Regulation—Financial Holding Company—

Management's Discussion and Analysis

synthetic methodology (known as "synthetic LIBOR"). Publication of the three-month synthetic sterling LIBOR will cease at the end of March 2024 and publication of the one-, three- and six-month synthetic U.S. dollar LIBOR will cease at the end of September 2024.

As of December 31, 2023, a significant majority of our U.S. dollar LIBOR-referenced contracts contained fallback provisions or otherwise had a path that allowed for the transition to an alternative reference rate following the cessation of the applicable U.S. dollar LIBOR rate. We continue to execute against our Firmwide IBOR transition plan to complete the transition in all relevant markets to alternative reference rates.

See also "Risk Factors—Risk Management" for a further discussion of risks related to the planned replacement of the IBORs and/ or reform of other interest rate benchmarks and related risks.

FDIC Final Rulemaking on Special Assessment

Following the failures of certain banks and resulting losses to the FDIC's Deposit Insurance Fund in the first half of 2023, the FDIC adopted a final rule on November 16, 2023 to implement a special assessment to recover the cost associated with protecting uninsured depositors. Under the final rule, the assessment base for the special assessment is equal to an IDI's estimated uninsured deposits reported December 31, 2022, adjusted to exclude the first \$5 billion of uninsured deposits. The \$5 billion exclusion is applied once to the aggregate uninsured deposits of our U.S. Bank Subsidiaries. The final rule provides that, starting in 2024, the FDIC will collect the special assessment at a quarterly rate of 3.36 basis points over eight quarterly assessment periods, subject to change depending on any adjustments to the loss estimate, mergers, failures, or amendments to reported estimates of uninsured deposits. We recorded the cost of the entire special assessment of \$286 million in Non-interest expenses when the final rule was published in the Federal Register, in the fourth guarter of 2023.

includes operational risk and credit valuation adjustment RWA components.

The Basel III Endgame Proposal, if adopted as a final rule, would maintain the current capital rule's dual-requirement structure, whereby we and our U.S. Bank Subsidiaries would be required to calculate our risk-based capital ratios under both the Expanded Approach and the Standardized Approach. In addition, the proposal would modify the Standardized Approach by requiring that the new market risk standards from the proposal also be applied in the Standardized Approach.

The Basel III Endgame Proposal would apply the SCB and G-SIB surcharge to risk-based capital requirements calculated under both the Expanded Approach and the Standardized Approach. The proposal includes a proposed effective date of July 1, 2025, with three-year transition arrangements until revised standards are fully phased in on July 1, 2028.

Based on our current understanding of the Basel III Endgame Proposal, we estimate that, if the Expanded Approach had applied on a fully phased-in basis as of December 31, 2023, and in the absence of taking any actions to mitigate its impact, our Expanded Approach RWAs as of that date would have been approximately 40% higher than our actual Standardized Approach RWAs as of that date.

The increase in RWAs resulting from the Expanded Approach would result, assuming all other surcharge elements remained unchanged, in a lower SCB and lower G-SIB Method 2 surcharge as compared with current surcharges, as RWAs are included in of denominators the relevant the each calculations for buffer. Lower surcharges would, therefore, partially decrease the otherwise higher regulatory capital requirements under the Expanded Approach. The proposal would phase in the higher Expanded Approach RWAs on July 1 of each year during the transition, thereby increasing our regulatory capital requirements, with delayed incorporation of the potentially lower SCB and G-SIB Method 2 capital surcharge calculations.

Management's Discussion and Analysis

Image3.jpg

Method 2 G-SIB capital surcharge from 0.5-percentage point increments to 0.1-percentage point increments. The G-SIB Surcharge Proposal includes a proposed effective date two calendar quarters after the date of adoption of a final rule by the Federal Reserve. We continue to evaluate the G-SIB Surcharge Proposal and the potential impacts, if adopted, on our capital requirements and our Required Capital framework.

December 2023 Form 10-K

Quantitative and Qualitative Disclosures about Risk

Risk Management

Overview

Risk is an inherent part of our businesses and activities. We believe effective risk management is vital to the success of our business activities. Accordingly, we have an ERM framework to integrate the diverse roles of risk management into a holistic enterprise structure and to facilitate the incorporation of risk assessment into decision-making processes across the Firm.

We have policies and procedures in place to identify, measure, monitor, escalate. mitigate and control the principal risks involved in the activities of the Institutional Securities. Wealth Management and Investment Management business segments, as well as at the Parent Company level. The principal risks involved in our business activities are both financial and non-financial and include market (including non-trading risks), credit, liquidity, model, operational (including cybersecurity), compliance (including conduct), financial crime, strategic and reputational risks. Strategic risk integrated into our business planning, embedded in the evaluation of all principal risks and overseen by the Board.

The cornerstone of our risk management philosophy is the pursuit of risk-adjusted returns through prudent risk taking that protects our capital base and franchise. This philosophy is implemented through the ERM framework. Five key principles underlie this philosophy: integrity, comprehensiveness, independence, accountability and transparency. To help ensure the efficacy of risk management, which is an essential component of our reputation, senior

management requires thorough and frequent reporting and the appropriate escalation of risk matters. The fast-paced, complex and constantly evolving nature of global financial markets requires us to maintain a risk management culture that is incisive, knowledgeable about specialized products and markets, and subject to ongoing review and enhancement.

Our risk appetite defines the aggregate level and types of risk that the Firm is willing to accept to achieve its business objectives, taking into account the interests clients and fiduciary duties shareholders, as well as capital and other regulatory requirements. This risk appetite is embedded in our risk culture and linked to our short-term and long-term strategic, capital and financial plans, as well as compensation programs. This risk appetite and the related Board-level risk limits and risk tolerance statements are reviewed and approved by the BRC and the Board on at least an annual basis.

Risk Governance Structure

Risk management at the Firm requires independent Firm-level oversight, accountability of our business divisions, and effective communication of risk matters across the Firm, to senior management and ultimately the Board. Our risk to governance structure is set forth in the following chart and also includes risk managers, committees, and groups within and across business segments and operating legal entities. The **ERM** framework, composed of independent but complementary entities, facilitates efficient and comprehensive supervision of our risk exposures and processes.

4Q23 Morgan Stanley ERM Framwork chart 01.25.2024.jpg

- 1. Committees include the Capital Commitment Committee, Global Large Loan Committee, Equity Underwriting Committee, Leveraged Finance Underwriting Committee and Municipal Capital Commitment Committee.
- 2. Committees include the Securities Risk Committee, Wealth Management Risk Committee and Investment Management Risk Committee.

December 2023 Form 10-K

Risk Disclosures

Image12.jpg

Morgan Stanley Board of Directors

The Board has oversight of the ERM framework and is responsible for helping to ensure that our risks are managed in a sound manner. The Board has authorized the committees within the ERM framework help facilitate our risk oversight responsibilities. As set forth in the Board's Corporate Governance Policies, the Board also oversees, and receives reports on, our performance, strategy financial business plans, as well as our practices and procedures relating to reputational and franchise risk, and culture, values and conduct.

Risk Committee of the Board

The BRC assists the Board in its oversight of the ERM framework; oversees significant financial risk exposures of the Firm, including market, credit, model and liquidity risk, against established risk measurement methodologies and the steps management has taken to monitor and control such exposures; oversees our risk appetite statement, including risk tolerance levels and limits; reviews capital, liquidity and funding strategy and planning and related guidelines and policies; reviews contingency funding plan and capital planning process; oversees our significant risk governance, risk management and risk assessment guidelines and policies; oversees the performance of the Chief Risk Officer; reviews reports from our Strategic Transactions Committee, CCAR Committee and RRP Committee; reviews significant new product risk, emerging risks, regulatory matters and climate risk; and reviews reports from the Chief Audit Officer regarding the results of reviews and assessments of the risk management, liquidity and capital functions. The BRC reports to the Board on a regular basis and coordinates with the Board and other Board committees with respect to oversight of risk management and risk assessment guidelines.

Audit Committee of the Board

The BAC oversees the integrity of our financial statements, compliance with legal and regulatory requirements, and system of internal controls; oversees risk

Operations and Technology Committee of the Board

The BOTC oversees our operations and technology strategy and significant investments in support of such strategy; oversees operational risk, including information technology, information third-party security. oversight. fraud, business disruption and resilience and cybersecurity risks and the management has taken to monitor and control such exposures. The BOTC reviews and approves significant operations and technology policies. The BOTC also reviews risk management and risk assessment guidelines in coordination with the Board and other Board committees, and policies regarding operational risk. The BOTC reports to the Board on a regular basis.

Firm Risk Committee

The Board has also authorized the Firm Risk Committee ("FRC"), а management committee appointed and co-chaired by the Chief Executive Officer and Chief Risk Officer, which includes the most senior officers of the Firm from the business, independent risk functions and control help groups, to oversee the framework. The FRC's responsibilities include: oversight of our risk management principles, procedures, limits tolerances; the monitoring of capital levels material market, credit, model, operational, liquidity, legal, compliance and reputational risk matters, and other risks, as appropriate; and the steps management has taken to monitor and manage such risks. The FRC also establishes and communicates risk appetite, including aggregate Firm limits and tolerances, as appropriate. The Governance Review Subcommittee of the FRC oversees governance and process issues on behalf of the FRC. The FRC reports to the Board, the BAC, the BOTC and the BRC through the Chief Risk Officer, Chief Financial Officer, Chief Legal Officer and Head of Non-Financial Risk.

Functional Risk and Control Committees

Functional risk and control committees and other committees within the ERM

Risk Disclosures

Image12.jpg

Chief Risk Officer

The Chief Risk Officer, who is independent of business units, reports to the BRC and the Chief Executive Officer. The Chief Risk Officer oversees compliance with our risk limits; approves exceptions to our risk limits; independently reviews material market, credit, model and liquidity risks; and reviews results of risk management processes with the Board, the BRC, the BOTC and the BAC, as appropriate. The Chief Risk Officer also coordinates with the Head of NFR regarding non-financial risk, the Chief Financial Officer and the Chief Executive Officer regarding capital and liquidity management and works with the Compensation, Management Development and Succession Committee of the Board to help ensure that the structure and design of incentive compensation arrangements do not encourage unnecessary and excessive risk taking.

Head of Non-Financial Risk

The Head of Non-Financial Risk, who is independent of business units, reports to Chief Legal Officer and Administrative Officer. The Head of Non-Financial Risk oversees the compliance, operational risk financial crimes and management functions; independently non-financial risks, including reviews compliance (including conduct), financial crimes. and operational (including cybersecurity) risks, as well as material regulatory risks; and reviews results of risk management processes with the Board, the BAC, the BOTC and the BRC as appropriate. The Head of Non-Financial Risk also coordinates with the Chief Risk Officer regarding financial risks.

Independent Risk Management Functions

The Financial Risk Management functions (Market Risk, Credit Risk, Model Risk and Liquidity Risk Management Departments) and Non-Financial Risk Management functions (Compliance, Global Financial Crimes, and Operational Risk Departments) are independent of our business units and report to the Chief Risk Officer and Head of Non-Financial Risk, respectively. These functions assist senior management and

management policies and procedures relating to, among other things, controls over financial reporting and disclosure; each business segment's market, credit and operational risk profile; liquidity risks; model risks; sales practices; reputational, compliance legal enforceability, regulatory risks; and technological risks. Participation by the senior officers of the Firm and business segment control groups ensure that risk policies procedures, exceptions to risk limits, new products and business ventures, transactions with risk elements undergo thorough review.

Internal Audit Department

The Internal Audit Department ("IAD") independently identifies and assesses risks facing the Firm and provides independent, objective and timely assurance stakeholders about the effectiveness of risk management, governance and controls over key risks within the Firm's businesses and functions. IAD develops and executes a comprehensive risk-based assurance plan to fulfill its role and purpose, which includes assessing compliance with procedures and laws and regulations. IAD may also conduct other activities, such as retrospective reviews, pre-implementation reviews and investigations as requested by the BAC, senior management or the Firm's regulators.

IAD executes its activities in accordance with the mandatory elements of The Institute of Internal Auditors' International Professional Practices Framework as well as the Firm's Code of Ethics and Business Conduct, regulatory requirements, IAD's policies, procedures, standards and guidance. The Chief Audit Officer, who reports functionally to the BAC administratively to the Firm's Executive Officer, communicates the results of IAD activities to the BAC on a quarterly basis and periodically to the BRC and BOTC.

Culture, Values and Conduct of Employees

Employees of the Firm are accountable for conducting themselves in accordance with our core values: Put Clients First, Do the Right Thing, Lead with Exceptional Ideas, **Risk Disclosures**

Image12.jpg

employee annually is required to certify to their understanding of and adherence to the Code of Conduct. The Firm's Global Conduct Risk Management Policy also sets out a consistent global framework for managing conduct risk (i.e., the risk arising from misconduct by employees or contingent workers) and conduct risk incidents at the Firm.

The employee annual performance review process includes evaluation of employee conduct related to risk management practices and the Firm's expectations. We also have several mutually reinforcing processes to identify employee conduct that may have an impact on employment status, current-year compensation and/or prior-year compensation. For example, the Global Incentive Compensation Discretion Policy sets forth standards for managers when making annual compensation decisions and specifically provides that managers must consider whether their employees effectively managed and/or supervised risk control practices during the Control performance year. function management meets to discuss employees whose conduct is not in line with our expectations. results These are incorporated into identified employees' performance reviews and compensation and promotion decisions.

The Firm's clawback and cancellation provisions apply to deferred incentive compensation and cover a broad scope of employee conduct, including any act or omission (including with respect to direct supervisory responsibilities) that constitutes a breach of obligation to the Firm or causes a restatement of the Firm's financial results, constitutes a violation of the Firm's global risk management principles, policies and standards, or causes a loss of revenue associated with a position on which the employee was paid and the employee operated outside of risk management policies.

Risk Limits Framework

Risk limits and quantitative metrics provide the basis for monitoring risk-taking activity and avoiding outsized risk taking. Our risktaking capacity is sized through the Firm's activities of our Institutional Securities, Management and Investment Wealth Management business segments. These sections and the estimated amounts of our risk exposure generated by our statistical analyses are forward-looking statements. However, the analyses used to assess such risks are not predictions of future events, and actual results may vary significantly from such analyses due to events in the markets in which we operate and certain other factors described in the following paragraphs.

Market Risk

Market risk refers to the risk that a change in the level of one or more market prices, rates, spreads, indices, volatilities, correlations or other market factors, such as market liquidity, will result in losses for a position or portfolio. Generally, we incur market risk as a result of trading, investing and client facilitation activities, principally within the Institutional Securities business segment where the substantial majority of our VaR for market risk exposures is generated. In addition, we incur non-trading market risk, principally within the Wealth Management and Investment Management segments. The Management business segment primarily incurs non-trading market risk (including interest rate risk) from lending and deposittaking activities. The Investment Management business segment primarily incurs non-trading market risk from capital investments in its funds.

Market risk also includes non-trading interest rate risk. Non-trading interest rate risk in the banking book (amounts classified for regulatory capital purposes under the banking book regime) refers to the exposure that a change in interest rates will result in prospective earnings changes for assets and liabilities in the banking book.

Sound market risk management is an integral part of our culture. The various business units and trading desks are responsible for ensuring that market risk exposures are well-managed and prudent. The control groups help ensure that these risks are measured and closely monitored and are made transparent to senior management. The Market Risk Department

Risk Disclosures

Image12.jpg

Department that are circulated to and discussed with senior management, the FRC, the BRC and the Board.

Trading Risks

Primary Market Risk Exposures and Market Risk Management

We have exposures to a wide range of risks related to interest rates and credit spreads, equity prices, foreign exchange rates and commodity prices as well as the associated implied volatilities, correlations and spreads of the global markets in which we conduct our trading activities.

We are exposed to interest rate and credit spread risk as a result of our market-making activities and other trading in interest ratesensitive financial instruments (i.e., risk arising from changes in the level or implied volatility of interest rates, the timing of mortgage prepayments, the shape of the yield curve and/or credit spreads). The activities from which those exposures arise and the markets in which we are active include, but are not limited to. following: derivatives, corporate government debt across both developed and emerging markets and asset-backed debt, including mortgage-related securities.

We are exposed to equity price, correlation and implied volatility risk as a result of making markets in equity securities and derivatives and maintaining other positions, including positions in non-public entities. Positions in non-public entities may include, but are not limited to, exposures to private equity, venture capital, private partnerships, real estate funds and other funds. Such positions are less liquid, have longer investment horizons and are more difficult to hedge than listed equities.

We are exposed to foreign exchange rate, correlation and implied volatility risk as a result of making markets in foreign currencies and foreign currency derivatives, from maintaining foreign exchange positions and from holding non-U.S. dollar-denominated financial instruments.

We are exposed to commodity price and implied volatility risk as a result of market-making activities in commodity products

terms, specific characteristics or other basis risks that may exist between the hedge instrument and the risk exposure that is being hedged.

We manage the market risk associated with our trading activities on a Firmwide basis, on a worldwide trading division level and on an individual product basis. We manage and monitor our market risk exposures in such a way as to maintain a portfolio that we believe is well diversified in the aggregate with respect to market risk factors and that reflects our aggregate risk tolerance as established by our senior management.

Aggregate market risk limits have been approved for the Firm across all divisions worldwide. Additional market risk limits are assigned to trading desks and, as appropriate, products and regions. Trading division risk managers, desk risk managers, traders and the Market Risk Department monitor market risk measures against limits in accordance with policies set by our senior management.

Value-at-Risk

The statistical technique known as VaR is one of the tools we use to measure, monitor and review the market risk exposures of our trading portfolios. The Market Risk Department calculates and distributes daily VaR-based risk measures to various levels of management.

We estimate VaR using a model based on a one-year equal-weighted historical simulation for general market risk factors and name-specific risk in corporate equities and related derivatives, and Monte Carlo simulation for name-specific risk in bonds, loans and related derivatives. The model constructs a distribution of hypothetical daily changes in the value of trading portfolios based on historical observation of daily changes in key market indices or other market risk factors, and information on the sensitivity of the portfolio values to these market risk factor changes.

VaR for risk management purposes ("Management VaR") is computed at a 95% level of confidence over a one-day time horizon, which is a useful indicator of possible trading losses resulting from

We use VaR as one of a range of risk management tools. Among their benefits, VaR models permit estimation of a portfolio's aggregate market risk exposure, incorporating a range of varied market risks and portfolio assets. One key element of the VaR model is that it reflects risk reduction due to portfolio diversification or hedging activities. However, VaR has various limitations, which include, but are not limited to: use of historical changes in market risk factors, which may not be accurate predictors of future market conditions and may not fully incorporate the risk of extreme market events that are outsized relative to observed historical market behavior or reflect the historical distribution of results beyond the 95% confidence interval; and reporting of losses in a single day, which does not reflect the risk of positions that cannot be liquidated or hedged in one day. A small proportion of market risk generated by trading positions is not included in VaR.

The modeling of the risk characteristics of some positions relies on approximations that, under certain circumstances, could produce significantly different results from those produced using more precise measures. VaR is most appropriate as a risk measure for trading positions in liquid financial markets and will understate the risk associated with severe events, such as periods of extreme illiquidity. We are aware of these and other limitations and, therefore, use VaR as only one component in our risk management oversight process. This process also incorporates stress testing and scenario analyses and extensive risk monitoring, analysis and control at the trading desk, division and Firm levels.

We update our VaR model in response to changes in the composition of trading portfolios and to improvements in modeling techniques and systems capabilities. We are committed to continuous review and enhancement of VaR methodologies and assumptions in order to capture evolving risks associated with changes in market structure and dynamics. As part of our regular process improvements, additional systematic and name-specific risk factors may be added to improve the VaR model's ability to more accurately estimate risks to

history is updated and the confidence level. As a result, VaR statistics are more useful when interpreted as indicators of trends in a firm's risk profile rather than as an absolute measure of risk to be compared across firms.

Our regulators have approved the same VaR model we use for risk management purposes for use in regulatory calculations.

portfolio of positions used for Management VaR differs from that used for Regulatory VaR. Management VaR contains certain positions that are excluded from Regulatory VaR.

2023

95%/One-Day Management VaR

\$ in millions	E	End	Av	erage	Н	igh¹	L	.ow¹
Interest rate and credit								
spread	\$	29	\$	34	\$	43	\$	27
Equity price		19		24		38		15
Foreign exchange rate		6		9		18		5
Commodity price		11		17		35		10
Less: Diversification								
benefit ²		(27)		(40)		N/A		N/A
Primary Risk Categories	\$	38	\$	44	\$	60	\$	33
Credit Portfolio		25		21		25		18
Less: Diversification								
benefit ²		(22)		(15)	_	N/A		N/A
Total Management VaR	\$	41	\$	50	\$	72	\$	41
	_			202	22			
\$ in millions		eriod End	Av	202 erage		ligh¹	L	.ow¹
\$ in millions Interest rate and credit			Av			ligh¹	L	.ow¹
				erage		ligh¹ 43		ow ¹
Interest rate and credit	į.	≣nd		erage	Н			
Interest rate and credit spread	į.	End 37		erage 31	Н	43		21
Interest rate and credit spread Equity price	į.	∃nd 37 16		erage 31 23	Н	43		21 16
Interest rate and credit spread Equity price Foreign exchange rate	į.	37 16 10		erage 31 23 8	Н	43 41 19		21 16 3
Interest rate and credit spread Equity price Foreign exchange rate Commodity price	į.	37 16 10		erage 31 23 8	\$ \$	43 41 19	\$	21 16 3
Interest rate and credit spread Equity price Foreign exchange rate Commodity price Less: Diversification	į.	37 16 10 26	\$	23 8 27	\$ \$	43 41 19 41	\$	21 16 3 15
Interest rate and credit spread Equity price Foreign exchange rate Commodity price Less: Diversification benefit ²	\$	37 16 10 26 (36)	\$	erage 31 23 8 27 (40)	\$ \$	43 41 19 41 N/A	\$	21 16 3 15
Interest rate and credit spread Equity price Foreign exchange rate Commodity price Less: Diversification benefit ² Primary Risk Categories	\$	37 16 10 26 (36) 53	\$	erage 31 23 8 27 (40) 49	\$ \$	43 41 19 41 N/A	\$	21 16 3 15 N/A
Interest rate and credit spread Equity price Foreign exchange rate Commodity price Less: Diversification benefit ² Primary Risk Categories Credit Portfolio	\$	37 16 10 26 (36) 53	\$	erage 31 23 8 27 (40) 49	\$ \$	43 41 19 41 N/A	\$	21 16 3 15 N/A

Daily 95%/One-Day Total Management VaR for 2023

 $\begin{array}{l} \text{($\$ in millions)} \\ 9895604662885 \end{array}$

Daily Net Trading Revenues for 2023

(\$ in millions)

14843406987881

Daily net trading revenues include profits and losses from Interest rate and credit spread, Equity price, Foreign exchange rate, Commodity price, and Credit Portfolio positions and intraday trading activities for our trading businesses. Certain items such as fees, commissions, net interest income and counterparty default risk are excluded from daily net trading revenues and the VaR model. Revenues required for Regulatory VaR backtesting further exclude intraday trading.

Non-Trading Risks

We believe that sensitivity analysis is an appropriate representation of our non-trading risks. The following sensitivity analyses cover substantially all of the non-trading risk in our portfolio.

Credit Spread Risk Sensitivity¹

		At		
	D	ecember		At
		31,	De	cember 31,
\$ in millions		2023		2022
Derivatives	\$	6	\$	7
Borrowings carried at fair value		48		39

 Amounts represent the potential gain for each 1 bps widening of our credit spread.

Credit spread risk sensitivity for borrowings carried at fair value at December 31, 2023 increased from December 31, 2022, primarily driven by debt issuances and credit spread tightening.

The Wealth Management business segment reflects a substantial portion of our non-trading interest rate risk. Net interest income in the Wealth Management business segment primarily consists of interest income earned on non-trading assets held, including loans and investment securities, as well as margin and other lending on non-bank entities and interest expense incurred on non-trading liabilities, primarily deposits.

Wealth Management Net Interest Income Sensitivity Analysis

		At		
	De	cember		At
		31,	Dece	ember 31,
\$ in millions		2023		2022
Basis point change				
+100	\$	585	\$	643
-100		(609)		(745)

The previous table presents an analysis of selected instantaneous upward downward parallel interest rate shocks (subject to a floor of zero percent in the downward scenario) on net interest income over the next 12 months for our Wealth Management business segment. These shocks are applied to our 12-month forecast for our Wealth Management business segment, which incorporates expectations of interest rates and our forecasted business activity, deposit forecasts as a key assumption.

We do not manage to any single rate scenario but rather manage net interest

Investments Sensitivity, Including Related Carried Interest

	Lo	ss from 1	0% Decline
		At	At
	Dec	ember	December
		31,	31,
\$ in millions	2	2023	2022
Investments related to			
Investment			
Management activities	\$	481	\$ 431
Other investments:			
MUMSS		134	143
Other Firm investments		399	378

We have exposure to public and private companies through direct investments, as well as through funds that invest in these assets. These investments are predominantly equity positions with long investment horizons, a portion of which is for business facilitation purposes. The market risk related to these investments is measured by estimating the potential reduction in net revenues associated with a reasonably possible 10% decline investment values and related impact on performance-based income, as applicable.

Asset Management Revenue Sensitivity

Certain asset management revenues in the Wealth Management and Investment Management business segments derived from management fees, which are based on fee-based client assets in Wealth Management or AUM in Investment Management (together, "client holdings"). The assets underlying client holdings are primarily composed of equity, fixed income and alternative investments and sensitive to changes in related markets. These revenues depend on multiple factors including, but not limited to, the level and duration of a market increase or decline, price volatility, the geographic and industry mix of client assets, and client behavior such as the rate and magnitude of client investments and redemptions. Therefore, revenues may not correlate completely with changes in the related markets.

Credit Risk

- providing short- or long-term funding that is secured by physical or financial collateral, including, but not limited to, real estate and marketable securities, whose value may at times be insufficient to fully cover the repayment amount;
- posting margin and/or collateral to clearinghouses, clearing agencies, exchanges, banks, securities firms and other financial counterparties;
- placing funds on deposit at other financial institutions to support our clearing and settlement obligations; and
- investing or trading in securities and loan pools, whereby the value of these assets may fluctuate based on realized or expected defaults on the underlying obligations or loans.

We incur credit risk in our Wealth Management business segment, primarily through lending to individuals and entities, including, but not limited to, the following:

- margin loans collateralized by securities;
- securities-based lending and other forms of secured loans, including tailored lending to ultra-high net worth clients, that are in most cases secured by various types of collateral, including marketable securities, private investments, commercial real estate and other financial assets;
- single-family residential mortgage loans in conforming, non-conforming or HELOC form, primarily to existing Wealth Management clients; and
- employee loans granted primarily to recruit certain Wealth Management representatives.

Monitoring and Control

The Credit Risk Management Department ("CRM") establishes Firmwide practices to evaluate, monitor and control credit risk at the transaction, obligor and portfolio levels. The CRM approves extensions of credit, evaluates the creditworthiness of the counterparties and borrowers on a regular basis, and helps ensure that credit exposure is actively monitored and managed. The evaluation of counterparties and borrowers includes an assessment of the probability that an obligor will default on its financial obligations and any losses that may occur when an obligor defaults. In addition, credit

parameters (e.g., probability of default and loss given default), recovery rates and expected losses in order to assess the impact of stresses on exposures, profit and loss, and our capital position. Stress tests are conducted in accordance with our established policies and procedures.

Credit Evaluation

evaluation of corporate institutional counterparties and borrowers includes assigning credit ratings, which reflect an assessment of an obligor's probability of default and loss given default. Credit evaluations typically involve the of financial assessment statements; leverage; liquidity; capital strength; asset composition and quality; capitalization; access to capital markets; adequacy of collateral, if applicable; and, in the case of certain loans, cash flow projections and debt service requirements. The CRM also evaluates strategy, market position, industry dynamics, management and other factors such as country risks and legal and contingent risks that could affect the obligor's risk profile. Additionally, the CRM evaluates the relative position of our exposure in the borrower's capital structure and relative recovery prospects, as well as other structural elements of the particular transaction. The underwriting of commercial real estate loans includes, but is not limited to, review of the property type, LTV ratio, occupancy levels, debt service ratio, prevailing capitalization rates and market dynamics.

The evaluation of consumer borrowers is tailored to the specific type of lending. Securities-based loans are evaluated based on factors that include, but are not limited to, the amount of the loan and the amount, quality, diversification, price volatility and liquidity of the collateral. The underwriting of residential real estate loans includes, but is not limited to, review of the obligor's debt-to-income ratio, net worth, liquidity, collateral, LTV ratio and industry standard credit-scoring models (e.g., FICO scores). Subsequent credit monitoring for individual loans is performed at the portfolio level, and collateral values are monitored on an ongoing basis.

Credit risk metrics assigned to our

forwards, swaps and options). Additionally, we may sell, assign or syndicate loans and lending commitments to other financial institutions in the primary and secondary loan markets.

In connection with our derivatives trading activities, we generally enter into master agreements and collateral arrangements with counterparties. These agreements provide us with the ability to demand collateral, as well as to liquidate collateral and offset receivables and payables covered under the same master agreement in the event of a counterparty default. A collateral management group monitors collateral levels against requirements and the oversees administration of the collateral function. See Note 8 to the financial statements for additional information about our collateralized transactions.

Loans and Lending Commitments

	At	Decembe	er 31, 20	23
\$ in millions	HFI	HFS	FVO ¹	Total
Institutional				
Securities:				
Corporate	\$ 6,758	\$11,862	\$ —	\$ 18,620
Secured lending				
facilities	39,498	3,161	_	42,659
Commercial and Residential real estate	8,678	209	3,331	12,218
Securities-based lending and Other	2,818	_	4,402	7,220
Total				
Institutional				
Securities	57,752	15,232	7,733	80,717
Wealth				
Management:				
Residential real				
estate	60,375	22	_	60,397
Securities-based lending and Other	86,423	1	_	86,424
Total Wealth				
Management	146,798	23	_	146,821
Total				
Investment				
Management ²	4	_	455	459
Total loans	204,554	15,255	8,188	227,997

- Investment Management, composed primarily of senior secured loans to corporations.
- 3. Lending commitments represent the notional amount of legally binding obligations to provide funding to clients for lending transactions. Since commitments associated with these business activities may expire unused or may not be utilized to full capacity, they do not necessarily reflect the actual future cash funding requirements.

We provide loans and lending commitments to a variety of customers, including large corporate and institutional clients, as well as high to ultra-high net worth individuals. In addition, we purchase loans in the secondary market. Loans and lending commitments are either held for investment, held for sale or carried at fair value. For more information on these loan classifications, see Note 2 to the financial statements.

In 2023, total loans and lending commitments increased by approximately \$18 billion, primarily due to an increase in Corporate lending and Secured lending facilities within the Institutional Securities business segment.

See Notes 4, 5, 9 and 14 to the financial statements for further information.

Allowance for Credit Losses—Loans and Lending Commitments

\$ in millions	2023
ACL—Loans	
Beginning balance	\$ 839
Gross charge-offs	(167)
Recoveries	2
Net (charge-offs) recoveries	(165)
Provision for credit losses	488
Other	7
Ending balance	\$ 1,169
ACL—Lending commitments	
Beginning balance	\$ 504
Provision for credit losses	44
Other	3
Ending balance	\$ 551
Total ending balance	\$ 1,720

Provision for Credit Losses by Business Segment

Year Ended December 31, 2023

2022

deteriorating conditions in the commercial real estate sector, including provisions for certain specific loans, mainly in the office portfolio, and modest growth in certain other loan portfolios. Charge-offs in 2023 were primarily related to Commercial real estate and Corporate loans.

The base scenario used in our ACL models as of December 31, 2023 was generated using a combination of consensus economic forecasts, forward rates, and internally developed and validated models, and assumes slow economic growth in 2024, followed by a gradual improvement in 2025. Given the nature of our lending portfolio, the most sensitive model input is U.S. gross domestic product ("GDP").

Forecasted U.S. Real GDP Growth Rates in Base Scenario

	4Q 2024	4Q 2025
Year-over-year growth		
rate	0.9 %	2.0 %

See Note 2 to the financial statements for a discussion of the Firm's ACL methodology under CECL.

Status of Loans Held for Investment

	At Decem	ber 31,	At Decem	ber 31,
	202	3	202	2
	IS	WM	IS	WM
Accrual	98.9 %	99.8 %	99.3 %	99.9 %
Nonaccrual ¹	1.1 %	0.2 %	0.7 %	0.1 %

 Nonaccrual loans are loans where principal or interest is not expected when contractually due or are past due 90 days or more.

Net Charge-off Ratios for Loans Held for Investment

loans	\$7,062	\$37,702	\$8,590	\$57,177	\$91,126	\$201,657
ratio ¹ Average	0.47 %	- %	1.50 %		– %	0.08 %
off						
charge-						
Net						
2023						
millions	Corporate	Facilities	CRE	Real Estate	Other	Total
\$ in		Lending		Residential	SBL and	
		Secured				

Institutional Securities Loans and Lending Commitments¹

Institutional Securities Loans and Lending **Commitments by Industry**

	At Dece	mber 31	L, 2023				At	At
Contra	actual Year	s to Matu	ırity			D	ecember	December
< 1	1-5	5-15	>15	Total			31,	31,
					\$ in millions		2023	2022
					Financials	\$	57,804 \$	54,222
\$ 3 \$	11	\$ 216	\$ - S	230			35 342	32,358
1,054	950	182	_	2,186	6		•	
7 117	10.076	3/16	_	17 530			18,056	14,557
<u> </u>	•			•	Communications services		15,301	15,336
11,723	16,367	1,775	277	30,142	2 Healthcare		14,274	12,353
9,586	12,961	2,924	156	25,627			12.420	12.700
111	1,036	62	2,910	4,119	• • • • • • • • • • • • • • • • • • • •		12,430	13,790
					Consumer discretionary		12,190	11,592
20 504	41 401	E	2 242	70.94	Utilities		11,522	10,542
29,594	41,401	3,303	3,343	79,043			9.305	7,823
mitments					•		•	
_	50	_	_	50	Energy		9,156	9,115
2.610	3.064	154	_	5.828	Materials 3		6,503	6,102
•	•			•	Insurance		6,486	5,925
7,704	21,256	593		29,553			1 825	1,831
9,161	46,304	106	_	55,57	<u>L</u>		<u> </u>	
4,069	16,431	1,594	414	22,508	Total exposure	\$	210,204 \$	195,546
1,916	13,842	1,077	3	16,838				
6	7	_	_	13	Institutional Securi	ities	Lending	J
	<pre></pre>	Contractual Year < 1 1-5 \$ 3 \$ 11 1,054 950 7,117 10,076 11,723 16,367 9,586 12,961 111 1,036 29,594 41,401 mitments - 50 2,610 3,064 7,704 21,256 9,161 46,304 4,069 16,431 1,916 13,842	Contractual Years to Mature	\$ 3 \$ 11 \$ 216 \$ — 9 1,054 950 182 — 7,117 10,076 346 — 11,723 16,367 1,775 277 9,586 12,961 2,924 156 111 1,036 62 2,910 29,594 41,401 5,505 3,343 mitments — 50 — — 2,610 3,064 154 — 7,704 21,256 593 — 9,161 46,304 106 — 4,069 16,431 1,594 414 1,916 13,842 1,077 3	Contractual Years to Maturity < 1	Contractual Years to Maturity < 1	Contractual Years to Maturity	Contractual Year Sto Maturity Contractual Year Sto Maturity Contractual Year Sto Maturity Contractual Year Store Contractual Year Year Year Year Year Year Year Year

Total lending

417 130,361The Institutional commitments 25,466 100,954 3,524 Total exposure \$55,060 \$142,355 \$9,029 \$3,760 \$210,204 Segment

€orporate, Secured lending Commercial and Residential real estate, and At December 31, 2022 Securities-based lending and Other. As of December 31, 2023 and December 31, 2022, over 90% of our total lending exposure, which consists of loans and lending commitments, is investment grade and/or secured by collateral.

	Cont	ractual Yea	rs to Mat	urity	
\$ in millions	< 1	1-5	5-15	>15	Total
Loans					
AA	\$ 66	\$ —	\$ 139	\$ —	\$ 205
Α	1,331	787	185	_	2,303
BBB	5,632	10,712	465	_	16,809
ВВ	11,045	19,219	796	162	31,222
Other NIG	7,274	10,249	3,945	139	21,607
Unrated ²	95	924	624	2,066	3,709
Total loans,					
net of ACL	25,443	41,891	6,154	2,367	75,855
Lending comm	itments				
AAA	_	50	_	_	50
AA	2,515	2,935	11	_	5,461
Α	5,030	19,717	202	330	25,279
BBB	10,263	39,615	566	_	50,444
ВВ	3,691	17,656	1,416	96	22,859
Other NIG	1,173	13,872	530	_	15,575
Unrated ²	_	20	_	3	23

Corporate comprises relationship and event-driven loans and lending commitments supporting general event-driven financing needs for institutional clients, which typically consist of revolving lines of credit, term loans and bridge loans; may have varying terms; may be senior or subordinated; may be secured or unsecured; are generally contingent representations, warranties contractual conditions applicable to the borrower; and may be syndicated, traded or hedged. Relationship loans and lending commitments are extended to select institutional clients, primarily for general corporate purposes and generally with the intent to hold for the foreseeable future.

Securities

activities

lending

business

facilities,

include

Commercial real estate loans are primarily senior, secured by underlying real estate and are typically in term loan form. In addition, as part of certain of its trading and securitization activities, Institutional Securities may also hold residential real estate loans.

Securities-based lending and Other includes financing extended to sales and trading customers and corporate loans purchased in the secondary market.

Institutional Securities Event-Driven Loans and Lending Commitments

	 ı	At I	Decemb	er	31, 20	23	
	 Contract	ual	Years to	. М	aturity	_	
\$ in millions	<1		1-5		5-15		Total
Loans, net of ACL	\$ 1,974	\$	2,564	\$	2,580	\$	7,118
Lending							
commitments	3,564		685		549		4,798
Total exposure	\$ 5,538	\$	3,249	\$	3,129	\$	11,916
		At	Decemi	oer	31, 202	2	
	 Contract		Deceml			2	
\$ in millions	 Contract					2	Total
\$ in millions Loans, net of ACL	<1	ua	Years to	o M	laturity 5-15	-	
	<1	ua	Years to	o M	laturity 5-15	-	
Loans, net of ACL	<1	s \$	Years to	o M \$	laturity 5-15	\$	

Event-driven loans and lending commitments are associated with certain underwritings and/or syndications to finance a specific transaction, such as merger, acquisition, recapitalization or project finance activities. Balances may fluctuate as such lending is related to transactions that vary in timing and size from period to period.

Institutional Securities Loans and Lending Commitments Held for Investment

	At December 31, 2023								
		Lending							
\$ in millions		Loans	Со	mmitments	Total				
Corporate	\$	6,758	\$	91,752 \$	98,510				
Secured lending									
facilities		39,498		15,589	55,087				
Commercial real estate		8,678		266	8,944				
Other		2,818		915	3,733				
Total before ACI		E7 7E2		100 522 #	166 274				

Institutional Securities Commercial Real Estate Loans and Lending Commitments

By Region

	At Dece	mber	31, 2023	At December 31, 2022			
\$ in							
millions	Loans ¹	LC^1	Total	Loans ¹	LC ¹	Total	
Americas	\$5,410	\$ 289	\$5,699	\$6,320	\$ 378	\$ 6,698	
EMEA	3,127	56	3,183	3,040	79	3,119	
Asia	485	_	485	445	5	450	
Total	\$9,022	\$ 345	\$9,367	\$9,805	\$ 462	\$10,267	

By Property Type

At December 31,

		2023		At Dece	31, 2022	
\$ in millions	Loans ¹	LC ¹	Total	Loans ¹	LC ¹	Total
Office	\$3,310	\$186	\$3,496	\$3,861	\$301	\$ 4,162
Industrial	2,435	5	2,440	2,561	25	2,586
Multifamily	1,715	74	1,789	1,889	85	1,974
Retail	842	7	849	659	6	665
Hotel	718	73	791	780	45	825
Other	2	_	2	55	_	55
Total	\$9,022	\$345	\$9,367	\$9,805	\$462	\$10,267

LC-Lending Commitments

The current economic environment and changes in business and consumer behavior have adversely impacted commercial real estate borrowers due to pressure from higher interest rates, tenant lease renewals, and elevated refinancing risks for loans with near-term maturities, among other issues. While we continue to actively monitor all our loan portfolios, the commercial real estate sector remains under heightened focus given the sector's sensitivity to economic and secular factors, credit conditions, and difficulties specific to certain property types, most notably office.

As of December 31, 2023 and December 31, 2022, our lending against commercial real estate ("CRE") properties totaled \$9.4 billion and \$10.3 billion within the Institutional Securities business segment, which represents 4.5% and 5.3% of total exposure reflected in the Institutional Securities Loans and Lending Commitments table above. Those CRE loans are originated for experienced sponsors and are generally

Institutional Securities Allowance for Credit Losses—Loans and Lending Commitments

Year Ended December 31, 2023

		Year	En	ded L)e	cembe	er	31, 2	02	.3
			Se	cured						
			Le	nding						
\$ in millions	Cor	porate	Fac	cilities		CRE	C	ther		Total
ACL—Loans										
Beginning										
balance	\$	235	\$	153	\$	275	\$	11	\$	674
Gross										
charge-offs		(34)		_		(129)		(1)		(164)
Recoveries		1		_		_		_		1
Net (charge-										
offs)										
recoveries		(33)		_		(129)		(1)		(163)
Provision										
(release)		37		_		314		5		356
Other		2		_		3		2		7
Ending										
balance	\$	241	\$	153	\$	463	\$	17	\$	874
ACL—Lending	g co	mmitm	en	ts						
Beginning										
balance	\$	411	\$	51	\$	15	\$	7	\$	484
Provision										
(release)		16		18		11		_		45
Other		4		1		_		(1)		4
Ending										
balance	\$	431	\$	70	\$	26	\$	6	\$	533
Total ending										
balance	\$	672	\$	223	\$	489	\$	23	\$	1,407

CRE—Commercial real estate

Institutional Securities HFI Loans—Ratios of Allowance for Credit Losses to Balance before Allowance

	At	At
	December	December
	31,	31,
	2023	2022
Corporate	3.6 %	3.6 %
Secured lending facilities	0.4 %	0.4 %
Commercial real estate	5.3 %	3.2 %
Securities-based lending and		
Other	0.6 %	0.4 %
Total Institutional Securities		
loans	1.5 %	1.3 %

Wealth Management Loans and Lending Commitments

against qualifying securities and monitor limits daily and, pursuant to such guidelines, require customers to deposit additional collateral, or reduce debt positions, when necessary. These credit lines are primarily uncommitted loan facilities, as we reserve the right not to make any advances or may terminate these credit lines at any time. Factors considered in the review of these loans include, but are not limited to, the loan amount, the client's credit profile, the degree of leverage, collateral diversification, price volatility and liquidity of the collateral. Other loans primarily include tailored lending, which typically consist of bespoke lending arrangements provided to ultra-high net worth clients. Securities-based lending and Other loans are generally secured by various types of eligible collateral, including marketable securities, private investments, commercial real estate and other financial assets.

Residential real estate loans consist of firstand second-lien mortgages, including policy HELOCs. Our underwriting designed to ensure that all borrowers pass an assessment of capacity and willingness to pay, which includes an analysis utilizing industry standard credit scoring models (e.g., FICO scores), debt-to-income ratios and assets of the borrower. LTV ratios are determined based on independent thirdparty property appraisals and valuations, and security lien positions are established through title and ownership reports. The vast majority of mortgage loans, including HELOCs, are held for investment in the Wealth Management business segment's loan portfolio.

Wealth Management Commercial Real Estate Loans and Lending Commitments by Property Type

At December 31,

		2023		At December 31, 20			
\$ in millions	Loans ¹	LC ¹	Total	Loans ¹	LC ¹	Total	
Retail	\$2,180	\$ 3	\$2,183	\$2,135	\$ 6	\$ 2,141	
Multifamily	1,891	159	2,050	1,661	142	1,803	
Office	1,736	16	1,752	1,675	1	1,676	
Industrial	454	_	454	330	_	330	
Hotel	400	_	400	419	_	419	
Other	253	_	253	183	10	193	

Wealth Management Allowance for Credit Losses—Loans and Lending Commitments

	Ye	ear Ende	d I	December 3	31, 2023			
	Re	sidential		SBL and				
\$ in millions	Re	al Estate		Other	Total			
ACL—Loans								
Beginning balance	\$	87	\$	78 \$	165			
Gross charge-offs		_		(3)	(3)			
Recoveries		1		_	1			
Net (charge-offs)								
recoveries		1		(3)	(2)			
Provision (release)		13		119	132			
Other		(1)		1				
Ending balance	\$	100	\$	195 \$	295			
ACL—Lending comm	nitm	ents						
Beginning balance	\$	4	\$	16 \$	20			
Provision (release)		_		(1)	(1)			
Other		_		(1)	(1)			
Ending balance	\$	4	\$	14 \$	18			
Total ending								
balance	\$	104	\$	209 \$	313			

As of December 31, 2023 and December 31, 2022, more than 75% of Wealth Management residential real estate loans were to borrowers with "Exceptional" or "Very Good" FICO scores (i.e., exceeding 740). Additionally, Wealth Management's securities-based lending portfolio remains well-collateralized and subject to daily client margining, which includes requiring customers to deposit additional collateral or reduce debt positions, when necessary.

Customer and Other Receivables

Margin and Other Lending

		At		At	
	D	ecember	December		
	31, 31,				
\$ in millions	2023 2022				
Institutional Securities	\$	24,208	\$	16,591	
Wealth Management		21,436		21,933	
Total	\$	45,644	\$	38,524	

The Institutional Securities and Wealth Management business segments provide margin lending arrangements that allow customers to borrow against the value of qualifying securities, primarily for the purpose of purphasing additional securities.

Employee Loans

For information on employee loans and related ACL, see Note 9 to the financial statements.

Derivatives

Fair Value of OTC Derivative Assets

		Counte		_		
\$ in millions	AAA	AA	Α	BBB	NIG	Total
At Decembe	er 31, 20	23				
Less than 1						
year	\$2,013	\$16,885	\$ 37,517	\$25,529	\$10,084	\$ 92,028
1-3 years	1,013	7,274	18,451	12,757	7,360	46,855
3-5 years	504	8,897	8,814	5,989	3,825	28,029
Over 5 years	3,955	29,511	50,512	28,003	6,597	118,578
Total, gross	\$7,485	\$62,567	\$115,294	\$72,278	\$27,866	\$285,490
Counterparty	,					
netting	(3,691)	(48,821)	(86,826)	(53,178)	(15,888)	(208,404)
Cash and						
securities						
collateral	(2,709)	(10,704)	(25,921)	(13,025)	(5,554)	(57,913)
Total, net	\$1,085	\$ 3,042	\$ 2,547	\$ 6,075	\$ 6,424	\$ 19,173

		Counterparty Credit Rating ¹								
\$ in millions	AAA	AA	Α	BBB	NIG	Total				
At December	31, 202	2				-				
Less than 1										
year	\$2,903	\$18,166	\$ 40,825	\$ 32,373	\$10,730	\$104,997				
1-3 years	1,818	8,648	17,113	19,365	6,974	53,918				
3-5 years	655	6,834	8,632	9,105	4,049	29,275				
Over 5 years	4,206	42,613	45,488	46,660	8,244	147,211				
Total, gross	\$9,582	\$76,261	\$112,058	\$107,503	\$29,997	\$335,401				
Counterparty										
netting	(4,037)	(60,451)	(79,334)	(85,786)	(17,415)	(247,023)				
Cash and										
securities										
collateral	(3,632)	(13,402)	(28,776)	(14,457)	(5,198)	(65,465)				
Total, net	\$1,913	\$ 2,408	\$ 3,948	\$ 7,260	\$ 7,384	\$ 22,913				

	At		At
	De	cember	December
		31,	31,
\$ in millions		2023	2022
Industry			
Financials	\$	7,215 \$	6,294
Utilities		4,267	5,656
Regional governments		1,319	2,052
Industrials		937	1,433

Credit Derivatives

A credit derivative is a contract between a seller and buyer of protection against the risk of a credit event occurring on one or more debt obligations issued by a specified reference entity. The buyer typically pays a periodic premium over the life of the contract and is protected for the period. If a credit event occurs, the seller is required to make payment to the beneficiary based on the terms of the credit derivative contract. Credit events, as defined in the contract, may be one or more of the following defined events: bankruptcy, dissolution or insolvency of the referenced entity, failure to pay, obligation acceleration, repudiation, payment moratorium and restructuring.

We trade in a variety of credit derivatives and may either purchase or write protection on a single name or portfolio of referenced entities. In transactions referencing a portfolio of entities or securities, protection may be limited to a tranche of exposure or a single name within the portfolio. We are an active market maker in the credit derivatives markets. As a market maker, we work to earn a bid-offer spread on client flow business and manage any residual credit or correlation risk on a portfolio basis. Further, we use credit derivatives to manage our exposure to residential and commercial mortgage loans and corporate lending exposures. The effectiveness of our CDS protection as a hedge of our exposures may vary depending upon a number of factors, including the contractual terms of the CDS.

We actively monitor our counterparty credit risk related to credit derivatives. A majority of our counterparties are composed of banks, broker-dealers, insurance and other financial institutions. Contracts with these counterparties may include provisions related to counterparty rating downgrades, which may result in the counterparty posting additional collateral to us. As with derivative contracts, we consider counterparty credit risk in the valuation of our positions and recognize CVAs as appropriate within Trading revenues in the income statement.

For additional credit exposure information

Country Risk

Country risk exposure is the risk that events in, or that affect, a foreign country (any country other than the U.S.) might adversely affect us. We actively manage country risk exposure through a comprehensive risk management framework that combines credit and other market fundamentals and allows us to effectively identify, monitor and limit country risk.

Our obligor credit evaluation process defines country of risk as the country that has the largest economic impact on the obligor and may be different from the obligor's country of jurisdiction. Examples where this applies may include corporations that are incorporated in one country but that derive the bulk of their revenue from another and mutual funds incorporated in one jurisdiction but with a concentration of investments in a different country.

In addition to the direct country risk reflected in the "Top 10 Non-U.S. Country Exposures" table below, we also have indirect country exposure, for example, from collateral received in secured financing transactions or from providing client clearing services. These indirect exposures are managed through the credit and market risk frameworks.

We conduct periodic stress testing that seeks to measure the impact on our credit and market exposures of shocks stemming from negative economic or political scenarios. When deemed appropriate by our risk managers, the stress test scenarios include possible contagion effects and second order risks. This analysis, and results of the stress tests, may result in the amendment of limits or exposure mitigation.

Our sovereign exposures consist of financial contracts and obligations entered into with sovereign and local governments. Our non-sovereign exposures consist of financial contracts and obligations entered into primarily with corporations and financial institutions.

Index credit derivatives are included in the following "Top 10 Non-U.S. Country

Top 10 Non-U.S. Country Exposures

	At December 31, 2023								
		United							
\$ in millions	Ki	ingdom	Korea	F	rance	Brazil		China	
Sovereign									
Net inventory ¹	\$	(407)	\$6,475	\$	419	\$3,630	\$	754	
Net									
counterparty									
exposure ²		9	338	}	_	2		14	
Exposure									
before									
hedges		(398)	6,813	}	419	3,632		89	
Hedges ³		(55)	_	•	(6)	(164)	-	
Net exposure	\$	(453)	\$6,813	\$	413	\$3,468	\$	89	
Non-									
sovereign									
Net inventory ¹	\$	1,335	\$ 65	\$ 1	L,524	\$ 127	\$2	,02	
Net	•	,		•	,-		•	•	
counterparty									
exposure ²		6,566	643	3 2	2,670	428		13	
Loans		8,035	14		858	424		45	
		-,							
Lending commitments		7,966	49		3,166	310		63	
		7,900			,,100	310		- 03	
Exposure before									
hedges	-	23,902	771	•	3,218	1,289	-	3,25	
		•			•				
Hedges ³		(1,952)			,984)			(:	
Net exposure	\$2	21,950	\$ 771	. \$6	5,234	\$1,271	\$3	,24	
Total net									
exposure	\$2	21,497	\$7,584 ———	\$6	5,647	\$4,739	\$4	,14	
\$ in millions	۸.	ıctralia	Canada	c	ooin	India	Co	rmar	
	AL	ana	Canada		pain	Illula		rmar	
Sovereign									
Net inventory ¹	\$	286	\$ 264	\$	197	\$1,563	\$(3	,74!	
Net									
counterparty									
exposure ²		79	62		_			7	
Exposure									
before									
hedges		365	326		197	1,563	(3	,668	
Hedges ³		_	_		(8)	_		(26	
Net exposure	\$	365	\$ 326	\$	189	\$1,563	\$(3	,930	
Non-									
Non- sovereign									

Net

counterparty

exposure²

575 1,058

332

950

2,696

Additional Information—Top 10 Non-U.S. Country Exposures

Collateral Held Against Net Counterparty Exposure¹

		At		
		Dec	December 31,	
\$ in millions		2023		
Country of				
Risk	Collateral ²			
United				
Kingdom	U.K., U.S., and France	\$	7,828	
Germany	France, Romania, and			
	Switzerland		4,616	
Other	U.S., Spain, and Italy		14,592	

- The benefit of collateral received is reflected in the Top 10 Non-U.S. Country Exposures at December 31, 2023.
- Primarily consists of cash and government obligations of the countries listed.

Operational Risk

Operational risk refers to the risk of loss, or of damage to our reputation, resulting from inadequate or failed processes or systems, from human factors or from external events (e.g., cyberattacks or third-party vulnerabilities) that may manifest as, for example, loss of information, business disruption, theft and fraud, legal and compliance risks, or damage to physical assets. We may incur operational risk across the full scope of our business activities, including revenue-generating activities and support and control groups (e.g., IT and trade processing).

We have established an operational risk framework to identify, measure, monitor and control risk across the Firm. Effective operational risk management is essential to reducing the impact of operational risk incidents and mitigating legal, regulatory and reputational risks. The framework is continually evolving to account for changes in the Firm and to respond to the changing regulatory and business environment.

We have implemented operational risk data and assessment systems to monitor and analyze internal and external operational risk events, to assess business environment and internal control factors, and to perform scenario analysis. The collected data elements are incorporated in the

implementation of enhanced policies and procedures, technology change management controls, exception management processing controls, and segregation of duties.

Primary responsibility for the management of operational risk is with the business segments, the control groups and the business managers therein. The business managers maintain processes and controls designed to identify, assess, manage, mitigate and report operational risk. Each of the business segments has a designated operational risk coordinator. The operational risk coordinator regularly reviews operational risk issues and reports to our senior management within each business. Each control group also has a designated operational risk coordinator and a forum for discussing operational risk matters with our senior management. Oversight operational risk is provided by the Non-Financial Risk Committee, legal entity risk committees, regional risk committees and senior management. In the event of a merger, ioint venture, divestiture, reorganization, or creation of a new legal entity, a new product, or a business activity, operational risks are considered, and any necessary changes in processes or controls are implemented.

The Operational Risk Department provides independent oversight of operational risk and assesses, measures and monitors operational risk against appetite. The Operational Risk Department works with the divisions and control groups to embed a transparent, consistent and comprehensive framework for managing operational risk within each area and across the Firm.

The Operational Risk Department scope includes oversight of technology risk, cybersecurity risk, information security risk, the fraud risk management and prevention program, and third-party risk management (supplier and affiliate risk oversight and assessment), among others.

Cybersecurity

For a discussion of our Cybersecurity Program, see "Cybersecurity."

Firm Resilience

applied consistently Firmwide and is aligned with regulatory requirements.

Third-Party Risk Management

In connection with our ongoing operations, we utilize the services of third-party suppliers, which we anticipate will continue and may increase in the future. These services include, for example, outsourced processing and support functions and other professional services. Our risk-based approach to managing exposure to these services includes the performance of due diligence, implementation of service-level and other contractual agreements, consideration of operational risks and ongoing monitoring of third-party suppliers' performance. We maintain and continue to enhance our third-party risk management program, which is designed to align with our risk tolerance and meet regulatory requirements. The program includes appropriate governance, policies, procedures and enabling technology. The third-party risk management program includes the adoption of appropriate risk controls management and practices throughout the third-party management life cycle to manage risk of service failure, risk of data loss and reputational risk, among others.

Model Risk

Model risk refers to the potential for adverse consequences from decisions based on incorrect or misused model outputs. Model risk can lead to financial loss, poor business and strategic decision-making or damage to our reputation. The risk inherent in a model is a function of the materiality, complexity and uncertainty around inputs and assumptions.

Model risk is generated from the use of models impacting financial statements, regulatory filings, capital adequacy assessments and the formulation of strategy.

Sound model risk management is an integral part of our Risk Management Framework. The Model Risk Management Department ("MRM") is a distinct department in Risk Management responsible for the oversight of model risk.

Risk Disclosures

development of controls to support a complete and accurate Firmwide model inventory.

Liquidity Risk

Liquidity risk refers to the risk that we will be unable to finance our operations due to a loss of access to the capital markets or difficulty in liquidating our assets. Liquidity risk also encompasses our ability (or perceived ability) to meet our financial obligations without experiencing significant business disruption or reputational damage that may threaten our viability as a going concern. Liquidity risk also encompasses the associated funding risks triggered by the market or idiosyncratic stress events that may negatively affect our liquidity and may impact our ability to raise new funding. Generally, we incur liquidity and funding risk as a result of our trading, lending, investing and client facilitation activities.

Our Liquidity Risk Management Framework is critical to helping ensure that we maintain sufficient liquidity reserves and durable funding sources to meet our daily obligations and to withstand unanticipated Liquidity stress events. The Risk Department is a distinct area in Risk Management responsible for the oversight and monitoring of liquidity risk. The Liquidity Risk Department ensures transparency of material liquidity and funding risks, compliance with established risk limits of and escalation risk concentrations appropriate senior to management.

To execute these responsibilities, the Liquidity Risk Department establishes limits in line with our risk appetite, identifies and analyzes emerging liquidity and funding risks to ensure such risks are appropriately mitigated, monitors and reports risk exposures against metrics and limits, and reviews the methodologies and assumptions underpinning our Liquidity Stress Tests to ensure sufficient liquidity and funding under a range of adverse scenarios.

The Treasury Department and applicable business units have primary responsibility for evaluating, monitoring and controlling the liquidity and funding risks arising from rules, related self-regulatory organization standards and codes of conduct applicable to our business activities. This risk also includes contractual and commercial risk, such as the risk that a counterparty's performance obligations will unenforceable. It also includes compliance with AML, terrorist financing, and anticorruption rules and regulations. We are generally subject to extensive regulation in the different jurisdictions in which we conduct our business (see also "Businessand "Risk Supervision and Regulation" Factors").

We have established procedures based on legal and regulatory requirements on a worldwide basis that are designed to facilitate compliance with applicable statutory and regulatory requirements and to require that our policies relating to business conduct, ethics and practices are followed globally. In addition, we have established procedures to mitigate the risk that counterparty's performance obligations will be unenforceable, including consideration of counterparty authority and capacity, adequacy of legal documentation, the permissibility of a transaction under applicable law and whether applicable bankruptcy insolvency laws limit or alter contractual remedies. The heightened legal and regulatory focus on the financial services and banking industries globally presents a continuing business challenge for us.

Climate Risk

Climate change manifests as physical and transition risks. The physical risks of climate change include harm to people and property arising from acute climate-related events. such as floods. hurricanes. heatwaves, droughts and wildfires, and chronic, longer-term shifts in climate patterns, such as higher global average temperatures, rising sea levels and longterm droughts. The transition risk of climate change include policy, legal, technology and market changes. Examples of these transition risks include changes consumer behavior and business sentiment, technologies, related shareholder preferences and any additional regulatory and legislative requirements, including

Risk Disclosures

practices and governance structures. The BRC oversees Firmwide risks, which include climate risk, and, as part of its oversight, receives updates on our risk management approach to climate risk, including our approaches toward scenario analysis and integration of climate risk into our existing risk management processes. Our climate risk management efforts are overseen by the Climate Risk Committee, which is cochaired by our Chief Risk Officer and Chief Sustainability Officer and shapes our approach to managing climate-related risks in line with our overall risk framework.

December 2023 Form 10-K

Financial Statements and Supplementary Data REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Morgan Stanley:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Morgan Stanley and subsidiaries (the "Firm") as of December 31, 2023 and 2022, the related consolidated income statements, comprehensive income statements, cash flow statements and statements of changes in total equity for each of the three years in the period ended December 31, 2023, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Firm as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Firm's internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 22, 2024, expressed an unqualified opinion on the Firm's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Firm's management. Our responsibility is to express an opinion on the Firm's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Firm in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Valuation of Level 3 Financial Assets and Liabilities Carried at Fair Value on a Recurring Basis and Level 3 Loans Held for Sale — Refer to Note 4 to the financial statements

Critical Audit Matter Description

The Firm's trading and financing activities result in the Firm carrying material financial instruments having limited price transparency. These financial instruments can span a broad array of product types and generally include derivatives, securities, loans, and borrowings. As described in Note 4, these Level 3 financial assets and liabilities carried at fair value on a recurring basis approximate \$9.3 billion and \$6.2 billion, respectively, and the Level 3 loans held for sale approximate \$6.7 billion at 31, 2023. December Unlike financial instruments whose inputs are readily observable and, therefore, more easily independently corroborated, the valuation of these financial instruments is inherently subjective and often involves the use of unobservable inputs and proprietary valuation models whose underlying algorithms and valuation methodologies are complex.

We identified the valuation of Level 3 financial assets and liabilities carried at fair value on a recurring basis and Level 3 loans held for sale as a critical audit matter given the Firm uses complex valuation models and/or valuation inputs that are not observable in the marketplace to determine the respective carrying values. Performing our audit procedures to evaluate the appropriateness of

- of its valuation methodologies and the relevant inputs and assumptions.
- We independently the evaluated appropriateness of management's valuation methodologies, for selected financial instruments, including the input assumptions, considering the expected assumptions of other market participants and external data when available.
- We developed independent estimates for selected financial instruments, using externally sourced inputs and independent valuation models, and used such estimates to further evaluate management's estimates. For certain of our selected financial instruments, this included a comparison to the Firm's estimates for similar transactions and an evaluation of the Firm's assumptions inclusive of the inputs, as applicable.
- We tested the revenues arising from the trade date fair value estimates for selected structured transactions for which we developed independent fair value estimates to test the valuation inputs and assumptions used by the Firm and evaluated whether these methods were consistent with the Firm's relevant valuation policies.
- We assessed the consistency by which management has applied significant and unobservable valuation assumptions used in developing the Firm's estimates.
- We performed a retrospective assessment of management's fair value estimates for certain of our selected financial instruments, for which there were events or transactions occurring after the valuation date. We did so by comparing management's estimates to the relevant evidence provided by such events or transactions, as applicable.

/s/ Deloitte & Touche LLP New York, New York February 22, 2024

We have served as the Firm's auditor since 1997.

Consolidated Income Statement

in millions, except per share data	2023	2022	2021
Revenues			
Investment banking	\$ 4,948 \$	5,599 \$	10,994
Trading	15,263	13,928	12,810
Investments	573	15	1,376
Commissions and fees	4,537	4,938	5,521
Asset management	19,617	19,578	19,967
Other	975	283	1,042
Total non-interest revenues	45,913	44,341	51,710
Interest income	50,281	21,595	9,411
Interest expense	 42,051	12,268	1,366
Net interest	8,230	9,327	8,045
Net revenues	54,143	53,668	59,755
Provision for credit losses	532	280	4
Non-interest expenses			
Compensation and benefits	24,558	23,053	24,628
Brokerage, clearing and exchange fees	3,476	3,458	3,341
Information processing and communications	3,775	3,493	3,119
Professional services	3,058	3,070	2,933
Occupancy and equipment	1,895	1,729	1,725
Marketing and business development	898	905	643
Other	4,138	3,591	3,694
Total non-interest expenses	41,798	39,299	40,083
Income before provision for income taxes	11,813	14,089	19,668
Provision for income taxes	2,583	2,910	4,548
Net income	\$ 9,230 \$	11,179 \$	15,120
Net income applicable to noncontrolling interests	 143	150	86
Net income applicable to Morgan Stanley	\$ 9,087 \$	11,029 \$	15,034
Preferred stock dividends	 557	489	468
Earnings applicable to Morgan Stanley common shareholders	\$ 8,530 \$	10,540 \$	14,566
Earnings per common share			
Basic	\$ 5.24 \$	6.23 \$	8.16
Diluted	5.18	6.15	8.03
Average common shares outstanding			
Basic	1,628	1,691	1,785
Diluted	1,646	1,713	1,814

Consolidated Comprehensive Income Statement

\$ in millions	 2023	2022	2021
Net income	\$ 9,230 \$	11,179 \$	15,120
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments	(20)	(337)	(331)
Change in net unrealized gains (losses) on available-for-sale			
securities	1,098	(4,437)	(1,542)
Pension and other	(87)	43	(53)
Change in net debt valuation adjustment	(1,290)	1,502	696
Net change in cash flow hedges	20	(4)	_
Total other comprehensive income (loss)	\$ (279) \$	(3,233) \$	(1,230)
Comprehensive income	\$ 8,951 \$	7,946 \$	13,890
Net income applicable to noncontrolling interests	143	150	86
Other comprehensive income (loss) applicable to noncontrolling			
interests	 (111)	(82)	(90)
Comprehensive income applicable to Morgan Stanley	\$ 8,919 \$	7,878 \$	13,894

See Notes to Consolidated Financial Statements

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Consolidated Balance Sheet

	At	At
	December	December
\$ in millions, except share data	31, 2023	31, 2022
Assets		
Cash and cash equivalents	\$ 89,232	128,127
Trading assets at fair value (\$162,698 and \$124,411 were pledged to various		201 215
parties)	367,074	301,315
Investment securities:	00 112	04.207
Available-for-sale at fair value (amortized cost of \$92,149 and \$89,772)	88,113	84,297
Held-to-maturity (fair value of \$57,453 and \$65,006)	66,694	75,634
Securities purchased under agreements to resell (includes \$7 and \$8 at fair value)	110,740	113,907
Securities borrowed	121,091	133,374
Customer and other receivables	80,105	78,540
Loans:		100.007
Held for investment (net of allowance for credit losses of \$1,169 and \$839)	203,385	198,997
Held for sale	15,255	14,788
Goodwill	16,707	16,652
Intangible assets (net of accumulated amortization of \$4,847 and \$4,253)	7,055	7,618
Other assets	28,242	26,982
Total assets	\$ 1,193,693	1,180,231
Liabilities		
Deposits (includes \$6,472 and \$4,796 at fair value)	\$ 351,804	
Trading liabilities at fair value	151,513	154,438
Securities sold under agreements to repurchase (includes \$1,020 and \$864 at fai value)	r 62,651	62,534
Securities loaned	15,057	15,679
Other secured financings (includes \$9,899 and \$4,550 at fair value)	12,655	8,158
Customer and other payables	208,148	216,134
Other liabilities and accrued expenses	28,151	27,353
Borrowings (includes \$93,900 and \$78,720 at fair value)	263,732	238,058
Total liabilities	1,093,711	1,079,000
Commitments and contingent liabilities (see Note 14)		
Equity		
Morgan Stanley shareholders' equity:		
Preferred stock	8,750	8,750
Common stock, \$0.01 par value:		
Shares authorized: 3,500,000,000 ; Shares issued: 2,038,893,979 ; Shares	5	
outstanding: 1,626,828,437 and 1,675,487,409	20	20
Additional paid-in capital	29,832	29,339
Retained earnings	97,996	94,862
Employee stock trusts	5,314	4,881
Accumulated other comprehensive income (loss)	(6,421)	(6,253)
Common stock held in treasury at cost, \$0.01 par value (412,065,542 and		/00 ===:
363,406,570 shares)	(31,139)	(26,577)
Common stock issued to employee stock trusts	(5,314)	(4,881)

Total Morgan Stanley shareholders' equity

100,141

99,038

Consolidated Statement of Changes in Total Equity

\$ in millions	2023	2022	2021
Preferred Stock			-
Beginning balance	\$ 8,750 \$	7,750 \$	9,250
Issuance of preferred stock	_	1,000	1,300
Redemption of preferred stock	_	_	(2,800)
Ending balance	8,750	8,750	7,750
Common Stock			
Beginning and ending balance	20	20	20
Additional Paid-in Capital			
Beginning balance	29,339	28,841	25,546
Share-based award activity	493	503	1,117
Issuance of preferred stock	_	(6)	(25)
Issuance of common stock for the acquisition of Eaton Vance	_	_	2,185
Other net increases (decreases)	_	1	18
Ending balance	29,832	29,339	28,841
Retained Earnings			
Beginning balance	94,862	89,432	78,694
Net income applicable to Morgan Stanley	9,087	11,029	15,034
Preferred stock dividends ¹	(557)	(489)	(468)
Common stock dividends ¹	(5,393)	(5,108)	(3,818)
Other net increases (decreases)	(3)	(2)	(10)
Ending balance	97,996	94,862	89,432
Employee Stock Trusts			
Beginning balance	4,881	3,955	3,043
Share-based award activity	433	926	912
Ending balance	5,314	4,881	3,955
Accumulated Other Comprehensive Income (Loss)			
Beginning balance	(6,253)	(3,102)	(1,962)
Net change in Accumulated other comprehensive income (loss)	(168)	(3,151)	(1,140)
Ending balance	(6,421)	(6,253)	(3,102)
Common Stock Held in Treasury at Cost			
Beginning balance	(26,577)	(17,500)	(9,767)
Share-based award activity	1,654	1,794	1,210
Repurchases of common stock and employee tax withholdings	(6,216)	(10,871)	(12,075)
Issuance of common stock for the acquisition of Eaton Vance	_	_	3,132
Ending balance	(31,139)	(26,577)	(17,500)
Common Stock Issued to Employee Stock Trusts			
Beginning balance	(4,881)	(3,955)	(3,043)
Share-based award activity	(433)	(926)	(912)
Ending balance	(5,314)	(4,881)	(3,955)
Noncontrolling Interests			
Beginning balance	1,090	1,157	1,368
Net income applicable to noncontrolling interests	143	150	86
Net change in Accumulated other comprehensive income (loss)			
applicable to noncontrolling interests	(111)	(82)	(90)

1. See Note 17 for information regarding dividends per share for each class of stock.

See Notes to Consolidated Financial Statements

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Consolidated Cash Flow Statement

\$ in millions	2023	2022	2021
Cash flows from operating activities			
Net income	\$ 9,230	\$ 11,179 \$	15,120
Adjustments to reconcile net income to net cash provided by (used for	or)		
operating activities:			
Deferred income taxes	(463)	(849)	4
Stock-based compensation expense	1,709	1,875	2,085
Depreciation and amortization	4,256	3,998	4,216
Provision for credit losses	532	280	4
Other operating adjustments	308	618	(147)
Changes in assets and liabilities:			
Trading assets, net of Trading liabilities	(61,026)	(39,422)	9,075
Securities borrowed	12,283	(3,661)	(17,322)
Securities loaned	(622)	3,380	4,568
Customer and other receivables and other assets	602	14,664	774
Customer and other payables and other liabilities	(3,629)	(4,897)	7,758
Securities purchased under agreements to resell	3,167	6,092	(3,765)
Securities sold under agreements to repurchase	117	346	11,601
Net cash provided by (used for) operating activities	(33,536)	(6,397)	33,971
Cash flows from investing activities			
Proceeds from (payments for):			
Other assets—Premises, equipment and software	(3,412)	(3,078)	(2,308)
Changes in loans, net	(4,059)	(23,652)	(36,106)
AFS securities:			
Purchases	(23,078)	(24,602)	(42,469)
Proceeds from sales	5,929	22,014	20,652
Proceeds from paydowns and maturities	14,316	13,435	26,375
HTM securities:			
Purchases	_	(5,231)	(27,102)
Proceeds from paydowns and maturities	8,143	9,829	14,541
Cash paid as part of the Eaton Vance acquisition, net of cash			
acquired	_	_	(2,648)
Other investing activities	(923)	(347)	(832)
Net cash provided by (used for) investing activities	(3,084)	(11,632)	(49,897)
Cash flows from financing activities			
Net proceeds from (payments for):			
Other secured financings	796	(884)	(625)
Deposits	(5,075)	1,659	36,897
Issuance of preferred stock, net of issuance costs	_	994	1,275
Proceeds from issuance of Borrowings	78,424	72,460	90,273
Payments for:	. 3,7=7	,	55,2,5
Borrowings	(64,805)	(34,898)	(70,124)
Repurchases of common stock and employee tax withholdings	(6,178)	(10,871)	(12,075)
Cash dividends	(5,763)	(5,401)	(4,171)
Other financing activities	(125)	(3,401)	97

Notes to Consolidated Financial Statements

1. Introduction and Basis of Presentation

The Firm

Morgan Stanley is a global financial services firm that maintains significant market positions in each of its business segments— Institutional Securities, Wealth Management Investment Management. Stanley, through its subsidiaries and affiliates, provides a wide variety of products and services to a large and diversified group of clients and customers, including corporations, governments, financial institutions and individuals. Unless the context otherwise requires, the terms "Morgan Stanley" or the "Firm" mean Morgan Stanley (the "Parent Company") together with its consolidated subsidiaries. See the "Glossary of Common Terms and Acronyms" for the definition of certain terms and acronyms used throughout this Form 10-K.

A description of the clients and principal products and services of each of the Firm's business segments is as follows:

Institutional Securities provides a variety of products and services to corporations, governments, financial institutions and ultra-high net worth clients. Investment Banking services consist of capital raising and financial advisory services, including the underwriting of debt, equity securities and other products, as well as advice on mergers and acquisitions, restructurings and project finance. Our Equity and Fixed Income businesses include sales. prime financing, brokerage, marketmaking, Asia wealth management services and certain business-related investments. Lending activities include originating corporate loans commercial real estate loans, providing secured lending facilities, and extending securities-based and other financing to Other activities customers. include research.

Wealth Management provides a comprehensive array of financial services and solutions to individual investors and small to medium-sized businesses and institutions covering: financial advisor-led brokerage, custody, administrative and

corporations. Individual clients are generally served through intermediaries, including affiliated and non-affiliated distributors.

Basis of Financial Information

The financial statements are prepared in accordance with U.S. GAAP, which requires the Firm to make estimates assumptions regarding the valuations of certain financial instruments, the valuations of goodwill and intangible assets, the outcome of legal and tax matters, deferred tax assets, ACL, and other matters that affect its financial statements and related disclosures. The Firm believes that the estimates utilized in the preparation of its financial statements are prudent and reasonable. Actual results could differ materially from these estimates.

The Notes are an integral part of the Firm's financial statements. The Firm has evaluated subsequent events for adjustment to or disclosure in these financial statements through the date of this report and has not identified any recordable or disclosable events not otherwise reported in these financial statements or the notes thereto.

Consolidation

The financial statements include the accounts of the Firm, its wholly owned subsidiaries and other entities in which the Firm has a controlling financial interest, including certain VIEs (see Note 15). Intercompany balances and transactions have been eliminated. For consolidated subsidiaries that are not wholly owned, the third-party holdings of equity interests are referred to as Noncontrolling interests. The net income attributable to Noncontrolling interests for such subsidiaries is presented as Net income applicable to noncontrolling interests in the income statement. The portion of shareholders' equity that is attributable to Noncontrolling interests for subsidiaries presented is Noncontrolling interests, a component of Total equity, in the balance sheet.

For entities where the total equity investment at risk is sufficient to enable the entity to finance its activities without

Notes to Consolidated Financial Statements

revenues (see Note 11) unless the Firm has elected to measure the investment at fair value, in which case net gains and losses are recorded within Investments revenues (see Note 5).

Equity and partnership interests held by entities qualifying for accounting purposes as investment companies are carried at fair value.

The Firm's significant regulated U.S. and international subsidiaries include:

- Morgan Stanley & Co. LLC ("MS&Co."),
- Morgan Stanley Smith Barney LLC ("MSSB"),
- Morgan Stanley Europe SE ("MSESE"),
- Morgan Stanley & Co. International plc ("MSIP"),
- Morgan Stanley Capital Services LLC ("MSCS"),
- Morgan Stanley Capital Group Inc. ("MSCG"),
- Morgan Stanley MUFG Securities Co., Ltd. ("MSMS"),
- Morgan Stanley Bank, N.A. ("MSBNA") and
- Morgan Stanley Private Bank, National Association ("MSPBNA").

For further information on the Firm's significant regulated U.S. and international subsidiaries, see Note 16.

2. Significant Accounting Policies

Revenue Recognition

Revenues are recognized when the promised goods or services are delivered to our customers in an amount that is based on the consideration the Firm expects to receive in exchange for those goods or services when such amounts are not probable of significant reversal.

Investment Banking

Revenues from investment banking activities consist of revenues earned from underwriting, primarily equity and fixed income securities and loan syndications, and advisory fees, primarily for mergers, acquisitions and restructurings.

Underwriting revenues are generally

related to sales and trading activities; and sales of mutual funds, alternative funds, futures, insurance products and options, as well as revenues from order flow payments for directing customer orders to broker-dealers, exchanges and market centers for execution. Commission and fee revenues are recognized on trade date when the performance obligation is satisfied.

Asset Management Revenues

Asset management, distribution and administration fees are generally based on related asset levels, such as the AUM of a customer's account or the net asset value of a fund. These fees are generally recognized when services are performed and the value of the assets is known. Management fees are reduced by estimated fee waivers and expense caps, if any, provided to the customer.

Performance-based fees not in the form of carried interest are recorded when the annual performance target is met and the revenues are not probable of a significant reversal.

Sales commissions paid by the Firm in connection with the sale of certain classes of shares of its open-end mutual fund products are accounted for as deferred commission assets and amortized to Other expenses over the expected life of the contract. The Firm periodically tests commission deferred assets recoverability based on cash flows expected to be received in future periods. Other asset management and distribution costs are recognized as incurred in the relevant noninterest expenses line items.

Investments Revenues—Carried Interest

The Firm is entitled to receive performance-based fees in the form of carried interest when the return in certain funds exceeds specified performance targets. When the Firm earns carried interest from funds as specified performance thresholds are met, that carried interest and any related general or limited partner interest are accounted for under the equity method of accounting and measured based on the Firm's claim on the NAV of the fund at the

Notes to Consolidated Financial Statements

underlying performance obligations have been satisfied and the Firm has the right per the contract to bill the customer. Contract assets are recognized in Other assets when the Firm has satisfied its performance obligations but customer payment is conditional on something other than the passage of time. Contract liabilities are recognized in Other liabilities and accrued expenses when the Firm has collected payment from a customer based on the terms of the contract but the underlying performance obligations are not yet satisfied.

For contracts with a term of less than one year, incremental costs to obtain the contract are expensed as incurred. Revenues are not discounted when payment is expected within one year.

The Firm generally presents, net within revenues, taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction and collected by the Firm from a customer.

Cash and Cash Equivalents

Cash and cash equivalents consist of Cash and due from banks and Interest-bearing deposits with banks. Cash equivalents are highly liquid investments with remaining maturities of three months or less from the acquisition date that are readily convertible to cash and are not held for trading purposes.

Cash and cash equivalents also include Restricted cash, such as cash segregated in compliance with federal or other regulations, including minimum reserve requirements set by the Federal Reserve Bank and other central banks, and the Firm's initial margin deposited with clearing organizations.

Fair Value of Financial Instruments

Instruments within Trading assets and Trading liabilities are measured at fair value, either as required or allowed by accounting guidance. These financial instruments primarily represent the Firm's trading and investment positions and include both cash and derivative products.

within Trading revenues or Investments revenues. Otherwise, it is recorded within Interest income or Interest expense. Dividend income is recorded in Trading revenues or Investments revenues depending on the business activity.

The fair value of OTC financial instruments, including derivative contracts related to financial instruments and commodities, is presented in the accompanying balance sheet on a net-by-counterparty basis, when appropriate. Additionally, the Firm nets the fair value of cash collateral paid or received against the fair value amounts recognized for net derivative positions executed with the same counterparty under the same master netting agreement.

Fair Value Option

The Firm has elected to measure certain eligible instruments at fair value, including Securities purchased under agreements to resell, Loans and lending commitments, equity method investments and certain other assets, Deposits, Securities sold under agreements to repurchase, Other secured financings and Borrowings.

Fair Value Measurement—Definition and Hierarchy

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., the "exit price") in an orderly transaction between market participants at the measurement date.

Fair value is a market-based measure considered from the perspective of a market participant rather than an entityspecific measure. Therefore, even when assumptions are not readily market available, assumptions are set to reflect those that the Firm believes market participants would use in pricing the asset or liability at the measurement date. Where the Firm manages a group of financial assets, financial liabilities, and nonfinancial items accounted for as derivatives on the basis of its net exposure to either market risks or credit risk, the Firm measures the fair value of that group of financial instruments consistently with how market participants would price the net risk exposure at the measurement date.

Notes to Consolidated Financial Statements

Level 1. Valuations based on quoted prices in active markets that the Firm has the ability to access for identical assets or liabilities. Valuation adjustments, block discounts and discounts for entity-specific and contractual restrictions that would not transfer to market participants are not applied to Level 1 instruments. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of these products does not entail a significant degree of judgment.

Level 2. Valuations based on quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in inactive markets, significant market inputs other than quoted prices that are observable for the asset or liability, or market-corroborated inputs.

Level 3. Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

The availability of observable inputs can vary from product to product and is affected by a wide variety of factors, including the type of product, whether the product is new and not yet established in the marketplace, liquidity of markets and other characteristics particular to the product. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market. the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Firm in determining fair value is greatest for instruments categorized in Level 3 of the fair value hierarchy.

The Firm considers prices and inputs that are current as of the measurement date, including during periods of market dislocation. In periods of market dislocation, the observability of prices and inputs may be reduced for many instruments. This condition could cause an instrument to be reclassified from Level 1 to Level 2 or from Level 2 to Level 3 of the fair value hierarchy.

In certain cases, the inputs used to measure fair value may fall into

including, where applicable, commodity prices, equity prices, interest rate yield curves, credit curves, correlation, creditworthiness of the counterparty, creditworthiness of the Firm, option volatility and currency rates.

Where appropriate, valuation adjustments are made to account for various factors such as liquidity risk (bid-ask adjustments), credit quality, model uncertainty, and concentration risk and funding in order to arrive at fair value. Adjustments for liquidity adjust model-derived mid-market risk amounts of Level 2 and Level 3 financial instruments for the bid-mid or mid-ask spread required to properly reflect the exit price of a risk position. Bid-mid and mid-ask spreads are marked to levels observed in trade activity, broker quotes or other external third-party data. Where these spreads are unobservable for the particular position in question, spreads are derived from observable levels of similar positions.

The Firm applies credit-related valuation adjustments to its Borrowings for which the fair value option was elected and to OTC derivatives. The Firm considers the impact of changes in its own credit spreads based upon observations of the secondary bond market spreads when measuring the fair value for Borrowings.

For OTC derivatives, which are recognized in Trading assets at fair value in the balance sheet, the impact of changes in both the Firm's and the counterparty's credit rating is considered when measuring fair value. In determining the expected exposure, the Firm simulates the distribution of the future exposure to a counterparty, then applies market-based default probabilities to the future exposure, leveraging external thirdparty CDS spread data. Where CDS spread are unavailable for a specific counterparty, bond market spreads, CDS spread data based on the counterparty's credit rating or CDS spread data that reference a comparable counterparty may utilized. The Firm also considers collateral held and legally enforceable master netting agreements that mitigate its exposure to each counterparty.

Adjustments for model uncertainty are

Notes to Consolidated Financial Statements

and in collateralized derivatives where the terms of the agreement do not permit the reuse of the collateral received. In general, FVA reflects a market funding risk premium inherent the noted derivative instruments. The methodology for measuring FVA leverages the Firm's existing credit-related valuation adjustment calculation methodologies, which apply to both assets and liabilities.

See Note 4 for a description of valuation techniques applied to the major categories of financial instruments measured at fair value.

Assets and Liabilities Measured at Fair Value on a Non-recurring Basis

Certain of the Firm's assets and liabilities are measured at fair value on a non-recurring basis. The Firm incurs losses or gains for any adjustments of these assets or liabilities to fair value.

For assets and liabilities measured at fair value on a non-recurring basis, fair value is determined by using various valuation approaches. The same hierarchy for inputs as described above, which requires that observable inputs be used when available, is used in measuring fair value for these items.

For further information on financial assets and liabilities that are measured at fair value on a recurring and non-recurring basis, see Note 4.

Offsetting of Derivative Instruments

In connection with its derivative activities, the Firm generally enters into master netting agreements and collateral agreements with its counterparties. These agreements provide the Firm with the right, in the event of a default by the counterparty, to net a counterparty's rights and obligations under the agreement and to liquidate and set off cash collateral against any net amount owed by the counterparty. Derivatives with enforceable master netting agreements are reported net of cash collateral received and posted.

However, in certain circumstances, the Firm may not have such an agreement in place; the relevant insolvency regime may not default. The enforceability of the master netting agreement is taken into account in the Firm's risk management practices and application of counterparty credit limits.

For information related to offsetting of derivatives, see Note 6.

Hedge Accounting

The Firm applies hedge accounting using various derivative financial instruments for the following types of hedges: hedges of changes in the fair value of assets and liabilities due to the risk being hedged (fair value hedges); hedges of variability in forecasted cash flows from floating-rate assets due to contractually specified interest rates (cash flow hedges) and hedges of net investments in foreign operations whose functional currency is different from the reporting currency of the Parent Company (net investment hedges). These financial instruments are included within Trading assets—Derivative and other contracts or Trading liabilities—Derivative and other contracts in the balance sheet. For hedges where hedge accounting is Firm being applied, the performs effectiveness testing and other procedures. The change in the fair value of the designated portion of the hedging instrument should be highly correlated, between 80 and 125 percent of the change in the fair value, cash flows, or carrying value (due to translation gains or losses) of the hedged item attributable to the risk being hedged. The Firm considers the impact of valuation adjustments related to counterparty credit spreads and its own credit spreads to determine whether they would cause the hedging relationship to be ineffective.

Fair Value Hedges—Interest Rate Risk

The Firm's designated fair value hedges consist of interest rate swaps designated as hedges of changes in the benchmark interest rate of certain fixed rate AFS securities and senior borrowings. The Firm also designates interest rate swaps as fair value hedges of changes in the benchmark interest rate of certain fixed rate deposits. The Firm is permitted to hedge the full, or part of the contractual term of the hedged instrument. The Firm uses regression

Notes to Consolidated Financial Statements

Net Investment Hedges

The Firm uses forward foreign exchange contracts to manage a portion of the currency exposure relating to its net investments in foreign operations. To the extent that the notional amounts of the hedging instruments equal the portion of the investments being hedged and the underlying exchange rate of the derivative hedging instrument is the same as the exchange rate between the functional currency of the investee and the intermediate parent entity's functional currency, it is considered to be perfectly effective. The gain or loss from revaluing hedges of net investments in foreign operations at the spot rate is reported within AOCI. The forward points on the hedging instruments are excluded from hedge effectiveness testing and changes in the fair value of this excluded component are recorded currently in Interest income.

Cash Flow Hedges—Interest Rate Risk

The Firm's designated cash flow hedges consist of interest rate derivatives designated as hedges of variability in forecasted cash flows from floating-rate assets due to changes in the contractually specified interest rates. The Firm uses regression analysis to perform an ongoing prospective and retrospective assessment of the effectiveness of these hedging relationships.

The objective of this strategy is to hedge the risk of changes in the hedged item's cash flows attributable to changes in the contractually specified interest rate. For qualifying cash flow hedges of contractually specified interest rates, changes in the fair value of the derivative are recorded in OCI and subsequently reclassified to earnings in the same periods when the hedged item affects earnings. If cash flow hedge accounting is discontinued, AOCI is released into earnings immediately if the cash flow of the hedged item is probable of not occurring. Otherwise the amount in AOCI is released into earnings as the forecasted transaction affects earnings.

Other Hedges

In addition to hedges that are designated

unrealized losses are recorded either in OCI or in Other revenues as described below.

AFS securities in an unrealized loss position are first evaluated to determine whether there is an intent to sell or it is more likely than not the Firm will be required to sell before recovery of the amortized cost basis. If so, the amortized cost basis is written down to the fair value of the security such that the entire unrealized loss is recognized in Other revenues, and any previously established ACL is written off.

For all other AFS securities in an unrealized loss position, any portion of unrealized losses representing a credit loss is recognized in Other revenues and as an increase to the ACL for AFS securities, with the remainder of unrealized losses recognized in OCI. A credit loss exists if the Firm does not expect to recover the amortized cost basis of the security. When considering whether a credit loss exists, the Firm considers relevant information, including:

- guarantees (implicit or explicit) by the U.S. government;
- the extent to which the fair value has been less than the amortized cost basis;
- adverse conditions specifically related to the security, its industry or geographic area:
- changes in the financial condition of the issuer of the security or, in the case of an asset-backed debt security, changes in the financial condition of the underlying loan obligors;
- the payment structure of the debt security and the likelihood of the issuer being able to make payments that increase in the future;
- failure of the issuer of the security to make scheduled interest or principal payments;
- the current rating and any changes to the rating of the security by a rating agency.

If a credit loss exists, the Firm measures the credit loss as the difference between the present value of cash flows expected to be collected (discounted at the implicit interest rate at acquisition of the security or discounted at the effective yield for securities that incorporate changes in prepayment assumptions) and the amortized cost basis of the security.

Notes to Consolidated Financial Statements

Nonaccrual & ACL Charge-offs on AFS Securities

AFS securities follow the same nonaccrual and charge-off guidance as discussed in "Allowance for Credit Losses" herein.

HTM Securities

HTM securities are reported at amortized cost, net of any ACL, in the balance sheet. Refer to "Allowance for Credit Losses" herein for guidance on the ACL determination. Interest income, including amortization of premiums and accretion of discounts on HTM securities, is included in Interest income in the income statement.

Loans

The Firm accounts for loans based on the following categories: loans held for investment; loans held for sale; and loans at fair value.

Nonaccrual and ACL Charge-offs on Loans

All loan categories described below follow the same nonaccrual and charge-off guidance as discussed in "Allowance for Credit Losses" herein.

Loans Held for Investment

Loans held for investment are reported at amortized cost, which consists of the outstanding principle balance adjusted for any charge-offs, the allowance for credit losses, any unamortized deferred fees or costs for originated loans, and any unamortized premiums or discounts for purchased loans.

Interest Income. Interest income on performing loans held for investment is accrued and recognized as interest income at the contractual rate of interest. Purchase price discounts or premiums, as well as net deferred loan fees or costs, are amortized into interest income over the life of the loan to produce a level rate of return.

Lending Commitments. The Firm records the liability and related expense for the credit exposure related to commitments to fund loans. The liability is recorded in Other Liabilities in the balance sheet and the product level. Any decreases in fair value below the initial carrying amount and any recoveries in fair value up to the initial carrying amount are recorded in Other revenues. Increases in fair value above initial carrying value are not recognized.

Interest Income. Interest income on loans held for sale is accrued and recognized based on the contractual rate of interest. Loan origination fees or costs and purchase price discounts or premiums are deferred as an adjustment to the loan's cost basis until the related loan is sold and, as such, are included in the periodic determination of the lower of cost or fair value adjustments and the gain or loss recognized at the time of sale.

Lending Commitments. Commitments to fund mortgage loans held for sale are derivatives and are reported in Trading assets or Trading liabilities in the balance sheet and in Trading revenues in the income statement.

For commitments to fund non-mortgage loans, the Firm records the liability and related expense for the fair value exposure below cost of such commitments in Other liabilities and accrued expenses in the balance sheet with an offset to Other revenues in the income statement.

Because loans and lending commitments held for sale are recognized at the lower of cost or fair value, the allowance for credit losses and charge-off policies do not apply to these loans.

Loans at Fair Value

Loans for which the fair value option is elected are carried at fair value and included in Trading assets in the balance sheet, with changes in fair value recognized in earnings. For further information on loans carried at fair value and classified as Trading assets, see Note 4.

Lending Commitments. The Firm records the liability and related expense for the fair value exposure related to commitments to fund loans that will be measured at fair value. The liability is recorded in Trading liabilities in the balance sheet, and the expense is recorded in Trading revenues in

Notes to Consolidated Financial Statements

estimate of expected credit losses over the entire life of the financial instrument.

Factors considered by management when determining the ACL include payment status, fair value of collateral and expected payments of principal and interest, as well as internal or external information relating to past events, current conditions, and reasonable and supportable forecasts. The Firm uses three forecasts that include assumptions about certain macroeconomic variables, including, but not limited to, U.S. gross domestic product ("GDP"), equity market indices and unemployment rates, as well as commercial real estate and home price indices. At the conclusion of the Firm's reasonable and supportable forecast period of 13 quarters, there is a gradual reversion back to historical averages.

The ACL is measured on a collective basis when similar risk characteristics exist for multiple instruments, considering all available information relevant to assessing the collectability of cash flows. Generally, the Firm applies a probability of default/loss given default model for instruments that are collectively assessed, under which the ACL is calculated as the product of probability of default, loss given default and exposure at default. These parameters are forecast for each collective group of assets using a scenario-based statistical model.

If the instrument does not share similar risk characteristics with other instruments, including when it is probable that the Firm will be unable to collect the full payment of principal and interest on the instrument when due, the ACL is measured on an individual basis. The Firm generally applies a discounted cash flow method for instruments that are individually assessed.

The Firm may also elect to use an approach that considers the fair value of the collateral when measuring the ACL if the loan is collateral dependent (i.e., repayment of the loan is expected to be provided substantially by the sale or operation of the underlying collateral and the borrower is experiencing financial difficulty).

Additionally, the Firm can elect to use an approach to measure the ACL that considers the fair value of collatoral where

generally correspond to external ratings published by S&P. The Firm also considers transaction structure, including type of collateral, collateral terms and position of the obligation within the capital structure. In addition, for commercial real estate, the Firm considers property type and location, net operating income and LTV ratios, among other factors, as well as commercial real estate price and credit spread indices and capitalization rates.

- Residential real estate loans: Loan origination Fair Isaac Corporation ("FICO") credit scores as determined by independent credit agencies in the U.S. and LTV ratios.
- Employee loans: Employment status, which includes those currently employed by the Firm and for which the Firm can deduct any unpaid amounts due to it through certain compensation arrangements; and those no longer employed by the Firm where such arrangements are no longer applicable.

Qualitative and environmental factors such as economic and business conditions, the nature and volume of the portfolio, and lending terms and the volume and severity of past due loans are also considered in the ACL calculations.

Presentation of ACL and Provision for Credit Losses

		Provision for
	ACL	Credit Losses
Held for investment loans	Contra asset	Provision for credit losses
Other instruments measured at amortized cost (e.g., HTM securities and customer and other receivables)	Contra asset	Other revenues
Employee loans	Contra asset	Compensation and benefits expenses
Held for investment lending commitments	Other liabilities and accrued expenses	Provision for credit losses
Other off-balance sheet instruments (e.g., certain guarantees)	Other liabilities and accrued expenses	Other expenses

Nonaccrual

The Firm places financial instruments on

Notes to Consolidated Financial Statements

balances that are separately recorded from the related financial instruments are charged off against Interest income when the related financial instrument is placed on nonaccrual status. Accordingly, the Firm elected not to measure an ACL for accrued interest receivables.

Transfers of Financial Assets

Transfers of financial assets are accounted for as sales when the Firm has relinquished control over the transferred assets. Any related gain or loss on sale is recorded in Net revenues. Transfers that are not accounted for as sales are treated as collateralized financings. Securities borrowed or purchased under agreements to resell and securities loaned or sold under agreements to repurchase are treated as collateralized financings (see Note 8).

Securities purchased under agreements to resell ("reverse repurchase agreements") and Securities sold under agreements to repurchase ("repurchase agreements"), including repurchase and reverse repurchase agreements-to-maturity, carried in the balance sheet at the amount of cash paid or received plus accrued interest except for certain reverse repurchase and repurchase agreements for which the Firm has elected the fair value option (see Note 5). Where appropriate, repurchase agreements and reverse repurchase agreements with the same counterparty are reported on a net basis. Securities borrowed and securities loaned are recorded at the amount of cash collateral advanced or received.

In instances where the Firm is the lender in securities-for-securities transactions and is permitted to sell or repledge these securities, the fair value of the collateral received is reported in Trading assets, and the related obligation to return the collateral is reported in Trading liabilities in the balance sheet. Securities-for-securities transactions where the Firm is the borrower are not included in the balance sheet.

In order to manage credit exposure arising from these transactions, in appropriate circumstances, the Firm enters into master netting agreements and collateral agreements with its counterparties. These

Premises, Equipment and Capitalized Software Costs

Premises, equipment and capitalized consist buildings, software costs of leasehold improvements, furniture, fixtures, computer and communications equipment, power generation assets and capitalized software (externally purchased developed for internal use). Premises, equipment and capitalized software costs are stated at cost less accumulated depreciation and amortization and are included in Other assets in the balance sheet. Depreciation and amortization are provided by the straight-line method over the estimated useful life of the asset.

Estimated Useful Life of Assets

in years	Estimated Useful Life
Buildings	39
Leasehold improvements—Building	term of lease to 25
Leasehold improvements—Other	term of lease to 15
Furniture and fixtures	7
Computer and communications	
equipment	3 to 9
Power generation assets	15 to 29
Capitalized software costs	2 to 10

Premises, equipment and capitalized software costs are tested for impairment whenever events or changes in circumstances suggest that an asset's carrying value may not be fully recoverable.

Goodwill and Intangible Assets

The Firm tests goodwill and indefinite-lived intangible assets for impairment on an annual basis and on an interim basis when certain events or circumstances exist. The Firm tests goodwill for impairment at the reporting unit level, which is generally at the level of or one level below the asset's business segment. The Firm tests indefinitelived intangible assets for impairment at the aggregate level of management contracts. For both the annual and interim tests, the Firm has the option to either (i) perform a quantitative impairment test or (ii) first perform a qualitative assessment to determine whether it is more likely than not that the fair value is less than its carrying amount, in which case, the quantitative test

Notes to Consolidated Financial Statements

Intangible assets with a finite life are amortized over their estimated useful life and are reviewed for impairment on an interim basis when impairment indicators are present. Impairment losses are recorded within Other expenses in the income statement.

Earnings per Common Share

Basic EPS is computed by dividing earnings available to Morgan Stanley common shareholders by the weighted average number of common shares outstanding for the period. Earnings available to Morgan Stanley common shareholders represents net income applicable to Morgan Stanley reduced by preferred stock dividends. Common shares outstanding include common stock and vested RSUs where recipients have satisfied the relevant vesting terms. Diluted EPS reflects the assumed conversion of all dilutive securities.

Share-based awards that pay dividend equivalents subject to vesting are included in diluted shares outstanding (if dilutive) under the treasury stock method.

The Firm has granted PSUs that vest and convert to shares of common stock only if predetermined performance and market goals are satisfied. Since the issuance of the shares is contingent upon the satisfaction of certain conditions, the PSUs are included in diluted EPS based on the number of shares (if any) that would be issuable if the reporting date was the end of the performance period.

For further information on diluted earnings (loss) per common share, see Note 17 to the financial statements.

Deferred Compensation

Stock-Based Compensation

The Firm measures compensation expense for stock-based awards at fair value. The Firm determines the fair value of RSUs (including PSUs with non-market performance conditions) based on the grant-date fair value of its common stock, measured as the volume-weighted average price on the date of grant ("VWAP"). The fair value of RSUs not entitled to dividends

Stock-based awards generally contain clawback and cancellation provisions. Certain awards provide the Firm discretion to claw back or cancel all or a portion of the award under specified circumstances. Where award terms are considered to be subjective, a grant date cannot be established and the awards are subject to variable accounting which requires that compensation expense for those awards is adjusted for changes in the fair value of the Firm's common stock or the relevant model valuation, as appropriate, until conversion, exercise or expiration. Following amendments to clarify specific subjective award terms in the second quarter of 2023, a grant date for the awards was established such that compensation expense for those awards is no longer adjusted for changes in the fair value of the Firm's common stock. The Firm also operates an Employee Stock Purchase Plan ("ESPP") which allows eligible employees of the Firm to purchase shares of Morgan Stanley at a discount.

Employee Stock Trusts

In connection with certain stock-based compensation plans, the Firm has established employee stock trusts to provide, at its discretion, common stock voting rights to certain RSU holders. Following the grant of an RSU award, when a stock trust is utilized, the Firm contributes shares to be held in the stock trust until the RSUs convert to common shares. The assets of the employee stock trusts are consolidated with those of the Firm and are generally accounted for in a manner similar to treasury stock, where the shares of common stock outstanding reported in Common stock issued to employee stock trusts are offset by an equal amount reported in Employee stock trusts in the balance sheet.

The Firm uses the grant-date fair value of stock-based compensation as the basis for recording the movement of the assets to or from the employee stock trusts. Changes in the fair value are not recognized as the Firm's stock-based compensation must be settled by delivery of a fixed number of shares of the Firm's common stock.

Deferred Cash-Rased Compensation

Notes to Consolidated Financial Statements

the deferred recognition of the related compensation expense over the vesting period.

Retirement-Eligible Employee Compensation

For year-end stock-based awards and DCP awards anticipated to be granted to retirement-eligible employees under award terms that do not contain a future service requirement, the Firm accrues the estimated cost of the awards over the course of the calendar year preceding the grant date, which reflects the period over which the compensation is earned.

Carried Interest Compensation

The generally Firm recognizes compensation expense for any portion of interest (both realized unrealized) that is allocated to employees. For information on performance-based fees in the form of carried interest, which are directly related to carried interest compensation, see "Revenue Recognition-Carried Interest" herein.

Income Taxes

Deferred tax assets and liabilities are recorded based upon the temporary differences between the financial statement and income tax bases of assets and liabilities using currently enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income tax expense (benefit) in the period that includes the enactment date. Such effects are recorded in Provision for income taxes regardless of where deferred taxes were originally recorded.

The Firm recognizes net deferred tax assets to the extent that it believes these assets are more likely than not to be realized. In making such a determination, the Firm considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax planning strategies and results of recent operations. When performing the assessment, the Firm considers all types of

largest amount of tax benefit that is more likely than not to be realized upon ultimate settlement with the related tax authority. Interest and penalties related to unrecognized tax benefits are recognized as a component of the provision for income taxes.

Foreign Currencies

Assets and liabilities of operations with nondollar functional currencies U.S. translated at year-end rates of exchange. Gains or losses resulting from translating foreign currency financial statements, net of hedge gains or losses and related tax effects, are reflected in AOCI in the balance sheet. Gains or losses resulting from remeasurement of foreign currency transactions are included in net income, and amounts recognized in the income statement are translated at the rate of exchange on the respective date of recognition for each amount.

Accounting Updates Adopted in 2023

Fair Value Measurement - Equity Securities Subject to Contractual Sale Restrictions

The Firm early adopted the Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions accounting update on July 1, 2023, with no material impact on the Firm's financial condition or results of operations upon adoption. The update clarifies that a contractual sale restriction is not considered part of the unit of account of an equity security and, therefore, is not considered in measuring fair value.

Financial Instruments - Credit Losses

The Firm adopted the Financial Instruments-Credit Losses accounting update on January 1, 2023, with no impact on the Firm's financial condition or results of operations upon adoption.

This accounting update eliminates the accounting guidance for troubled debt restructurings ("TDRs") and requires new disclosures regarding certain modifications of financing receivables (i.e., principal forgiveness, interest rate reductions, other-than-insignificant payment delays and term

Notes to Consolidated Financial Statements

expedients and exceptions for applying generally accepted accounting principles to contracts, hedging relationships and other transactions that reference LIBOR or other interest rate benchmarks for which the referenced rate is expected be discontinued or replaced. The Firm is applying the accounting relief as relevant contract and hedge accounting relationship modifications are made during the course of the reference rate reform transition period. There was no impact to the Firm's financial statements upon issuance of this accounting standard update.

3. Cash and Cash Equivalents

	At						
1	December	At					
	31,	December 31,					
\$ in millions	2023	2022					
Cash and due from banks \$	7,323	\$ 5,409					
Interest bearing deposits with							
banks	81,909	122,718					
Total Cash and cash							
equivalents \$	89,232	\$ 128,127					
Restricted cash \$	30,571	\$ 35,380					

For additional information on cash and cash equivalents, including restricted cash, see Note 2.

4. Fair Values

MARS

Recurring Fair Value Measurements

Assets and Liabilities Measured at Fair Value on a Recurring Basis

1,540

489

		At Dec	ember 3	1, 2023	Other secured					
\$ in millions	Level 1	Level 2	Level 3	Netting ¹	Tot和hancings	_	9,807	92	_	9,899
Assets at fair v	/alue				Borrowings	_	92,022	1,878		93,900
Trading assets:					Total liabilities					
U.S. Treasury					at fair value	\$105,852	\$193,529	\$6,179	\$(42,757)) \$262,803
and agency										
securities	\$ 56,459	\$ 53,741	\$ –	\$ —	\$110,200		At Dece	mber 31	, 2022	
Other sovereig	n				\$ in millions	Level 1	Level 2	Level 3	Netting ¹	Total
government obligations	22,580	9,946	94	_	Assets at fair v	/alue				
State and municipal					Trading assets: U.S. Treasury					
securities	_	2,148	34	_	and agency					

securities

Other sovereign

2.029

\$ in millions

Deposits

Trading

liabilities:

U.S. Treasury

and agency

Other sovereign

government

obligations

Corporate and

Derivative and other

other debt

Corporate equities3

contracts: Interest rate

Credit

Foreign exchange

Equity

Commodity and other

Netting¹

and other

contracts

Total trading liabilities

Securities sold under

agreements to

repurchase

Total derivative

securities

Liabilities at fair value

Level 1

27,708

26,829

46,809

8,000

96

2,411

1,642

4,506

105,852

At December 31, 2023

Level 3

33 \$

6

9

45

857

297

385

(7,643) (237,497) (1,082) (42,757) (288,979)

3,667

3,727

449

17 \$

— \$ 80,742

(42,757)

(42,757) 151,512

1,689

Netting¹

Total

6.472

27,724

30,790

10,569

47,154

138,840

11,092

90,361

68,894

15,067

35,275

1,020

Level 2

6.439 \$

16

3,955

10,560

129,983

10,795

89,880

64,794

69,859

84,690

571

\$ 38,462 \$ 42,263 \$

11,904 1,521

300

Notes to Consolidated Financial Statements

	At December 31, 2022					Valuation	Techniques	for Assets and
\$ in millions	Level 1	Level 2	Level 3	Netting ¹	Total		-	Fair Value on a
Liabilities at fa	ir value					Recurring	Basis	
Deposits	\$ —	\$ 4,776	\$ 20	\$ -	\$ 4,796	IIS Treasi	iry and Ager	ncy Securities
Trading						U.S. Treasur	v Securities	icy Securities
liabilities:						Valuation T	•	
U.S. Treasury							•	ned using quoted
and agency						market p	rices.	
securities	20,776	228	_	_	21,004		lierarchy Class	
Other sovereign	ı						-	observable and in
government						an active		
obligations	23,235	2,688	3		25,926	U.S. Agency		
Corporate and						Valuation T	•	aviagued debt
other debt	_	8,786	29	_	8,815	Non-calla socurition	able agen s are genera	cy-issued debt ally valued using
Corporate							_	es, and callable
equities ³	59,998	518	42	_	60,558	•		curities are valued
Derivative and	other							del-derived prices
contracts:						•	•	es and trade data
Interest rate	3,446	161,044	668	_	165,158	for compa	arable instrum	nents.
Credit	_	7,987	315	_	8,302)	_	cy mortgage pass-
Foreign		.,			5,55	– through		s is model-driven
exchange	89	113,383	117	_	113,589	_	•	comparable to-be-
							ed securities.	duad using guatad
Equity	3,266	46,923	1,142		31,33.		-	alued using quoted e data adjusted by
Commodity	6 107	17.574	2.610		26.27	cubcoque		in related indices
and other	6,187	17,574	2,618	_	26,379	for compa	arable instrum	
Netting ¹	(9,618)	(258,821)	(1,078)	(57,107)	(326,624	1) -	lierarchy Class	
Total derivative						• Level 1-	-on-the-run a	gency issued debt
and other						securities	if actively t	traded and inputs
contracts	3,370	88,090	3,782	(57,107)	38,135			
Total trading						• Level 2-		ency issued debt
liabilities	107,379	100,310	3,856	(57,107)	154,438	_		mortgage pass-
Securities sold						•	•	es and CMOs if
under						-	•	uts are observable
agreements to						activity	is limited	where the trading or inputs are
repurchase	_	352	512	_	864	unobserv		or inputs are
Other secured							adic	
financings		4,459	91	_		Other	Sovereign	Government
Borrowings		77,133	1,587	_	78,720	Obligation		
T. L. I. W. L. Well.						Valuation T	echniques:	

MABS—Mortgage- and asset-backed securities

Total liabilities

at fair value

- 1. For positions with the same counterparty that cross over the levels of the fair value hierarchy, both counterparty netting and cash collateral netting are included in the column titled "Netting." Positions classified within the same level that are with the same counterparty are netted within that level. For further information on derivative instruments and hedging activities, see Note 6.
- 2. For a further breakdown by type, see the following Detail of Loans and Lending Commitments at Fair Value table.

Valuation Techniques:

\$107,379 \$187,030 \$6,066 \$(57,107) \$243,368 • Fair value is determined using quoted prices in active markets when available. When not available, quoted prices in less active markets are used. In the absence of position-specific quoted prices, fair value may be determined through benchmarking from comparable instruments.

Valuation Hierarchy Classification:

- Level 1—if actively traded and inputs are observable
- · Level 2—if the market is less active or

Notes to Consolidated Financial Statements

Mortgage- and Asset-Backed Securities Valuation Techniques:

- Mortgage- and asset-backed securities may be valued based on price or spread data obtained from observed transactions or independent external parties such as vendors or brokers.
- · When position-specific external price data are not observable, the fair value determination may require benchmarking to comparable instruments, and/or analyzing expected credit losses, default and recovery rates, and/or applying discounted cash flow techniques. When evaluating comparable instruments for use in the valuation of each security, security collateral-specific attributes, including payment priority, credit enhancement levels, type of collateral, delinquency rates and loss severity, are considered. In addition, for RMBS borrowers, FICO scores and the level of documentation for the loan are considered.
- Market standard cash flow models may be utilized to model the specific collateral composition and cash flow structure of each transaction. Key inputs to these models are market spreads, forecasted credit losses, and default and prepayment rates for each asset category.
- Valuation levels of RMBS and CMBS indices are used as an additional data point for benchmarking purposes or to price outright index positions.

Valuation Hierarchy Classification:

- Level 2—if value based on observable market data supported by market liquidity for comparable instruments
- Level 3—if external prices or significant spread inputs are unobservable or not supported by market liquidity or if the comparability assessment involves significant subjectivity related to property type differences, cash flows, performance or other inputs

Loans and Lending Commitments

Valuation Techniques:

 Fair value of corporate loans is determined using recently executed transactions, market price quotations (where observable), implied yields from comparable debt, market observable CDS spread levels obtained from

- or borrower types or based on the present value of expected future cash flows using the Firm's best available estimates of the key assumptions, including forecasted credit prepayment rates, forward yield curves and discount rates commensurate with the risks involved or a methodology that utilizes the capital structure and credit spreads of recent comparable securitization transactions.
- Fair value of equity margin loans is determined by discounting future interest cash flows, net of potential losses resulting from large downward price movements of the underlying margin loan collateral. The potential losses are modeled using the margin loan rate, which is calibrated from market observable CDS spreads, implied debt yields or volatility metrics of the loan collateral.

Valuation Hierarchy Classification:

- Level 2—if value based on observable market data supported by market liquidity for comparable instruments
- Level 3—in instances where prices or significant spread inputs are unobservable or not supported by market liquidity or if the comparability assessment involves significant subjectivity

Corporate and Other Debt

Corporate Bonds

Valuation Techniques:

- Fair value is determined using recently executed transactions, market price quotations, bond spreads and CDS spreads obtained from independent external parties, such as vendors and brokers, adjusted for any basis difference between cash and derivative instruments.
- The spread data used are for the same maturity as the bond. If the spread data do not reference the issuer, then data that reference comparable issuers are used. When position-specific external price data are not observable, fair value determined based on either benchmarking to comparable instruments or cash flow models with yield curves, bond or single-name CDS spreads and recovery rates or loss given default as significant inputs.

Valuation Higrarchy Classifications

Notes to Consolidated Financial Statements

asset-backed CDO position is evaluated independently taking into consideration available comparable market levels, underlying collateral performance and pricing, deal structures and liquidity.

Valuation Hierarchy Classification:

- Level 2—when either comparable market transactions are observable or credit correlation input is insignificant
- Level 3—when either comparable market transactions are unobservable or the credit correlation input is significant

Equity Contracts with Financing Features Valuation Techniques:

· Fair value of certain equity contracts, are not classified as OTC derivatives because they do not meet investment criteria, the net is determined by discounting future interest cash flows, inclusive of the estimated value of the embedded optionality. The valuation uses the same derivative pricing models and valuation techniques as described under "OTC Derivative Contracts" herein.

Valuation Hierarchy Classification:

- Level 2—when the contract is valued using observable inputs or where the unobservable input is not deemed significant
- Level 3—when the contract is valued using an unobservable input that is deemed significant

Corporate Equities

Valuation Techniques:

- Exchange-traded equity securities are generally valued based on quoted prices from the exchange.
- Unlisted equity securities are generally valued based on an assessment of each security, considering rounds of financing and third-party transactions, discounted cash flow analyses and market-based information. including comparable transactions, trading multiples changes in market outlook, among other factors.
- Listed fund units are generally marked to the exchange-traded price if actively traded, or to NAV if not. Unlisted fund units are generally marked to NAV.

Valuation Hierarchy Classification:

- Level 1—actively traded exchange-traded securities and fund units

OTC Derivative Contracts Valuation Techniques:

- OTC derivative contracts include forward, swap and option contracts related to interest rates, foreign currencies, credit standing of reference entities, equity prices or commodity prices.
- Depending on the product and the terms of the transaction, the fair value of OTC derivative products can be modeled using a series of techniques, including closed-form analytic formulas, such as the Black-Scholes option-pricing model, simulation models or a combination thereof. Many pricing models do not entail material subjectivity as the methodologies employed do not necessitate significant judgment since model inputs may be observed from actively quoted markets, as is the case for generic interest rate swaps, many equity, commodity and foreign currency option contracts, and certain CDS. In the case of more established derivative products, the pricing models used by the Firm are widely accepted by the financial services industry.
- More complex OTC derivative products are typically less liquid and require more judgment in the implementation of the valuation technique since direct trading activity or quotes are unobservable. This includes certain types of interest rate derivatives with both volatility and correlation exposure, equity, commodity or foreign currency derivatives that are either longer-dated or include exposure multiple underlyings, and credit derivatives, including CDS on certain mortgage- or asset-backed securities and basket CDS. Where required inputs are unobservable, relationships points, observable data based historical and/or implied observations, may be employed as a technique to estimate the model input values. For further information on the valuation techniques for OTC derivative products, see Note 2.

Valuation Hierarchy Classification:

- Level 2—when valued using observable inputs supported by market liquidity or where the unobservable input is not deemed significant
- Level 3—when valued using observable inputs with limited market liquidity or if

Notes to Consolidated Financial Statements

- Interests table in the "Net Asset Value Measurements" section herein.
- For non-exchange-traded investments either held directly or held within internally managed funds, fair value after initial recognition is based on assessment underlying of each investment, considering rounds of financing and third-party transactions, discounted cash flow analyses and information, market-based including comparable Firm transactions, trading multiples and changes in market outlook, among other factors.

Valuation Hierarchy Classification:

- Level 1—if actively traded
- Level 2—when not actively traded and valued based on rounds of financing or third-party transactions
- Level 3—when not actively traded and rounds of financing or third-party transactions are not available

Physical Commodities

Valuation Techniques:.

 Fair value is determined using observable inputs, including broker quotations and published indices.

Valuation Hierarchy Classification:

• Level 2—valued using observable inputs

Investment Securities—AFS Securities

Valuation Techniques:

AFS securities are composed of U.S. government and agency securities (e.g., U.S. Treasury securities, agency-issued debt, agency mortgage pass-through securities and CMOs), CMBS, ABS, state and municipal securities. For further information on the determination of fair value, refer to the corresponding asset/liability Valuation Technique described herein for the same instruments.

Valuation Hierarchy Classification:

 For further information on the determination of valuation hierarchy classification, see the corresponding Valuation Hierarchy Classification described herein.

Deposits

Valuation Techniques:

 The Firm issues FDIC-insured certificates of deposit that pay either fixed coupons or that have repayment terms linked to the performance of debt or equity securities, indices or currencies. The fair value of

Securities Purchased under Agreements to Resell and Securities Sold under Agreements to Repurchase Valuation Techniques:

- Fair value is computed using a standard cash flow discounting methodology.
- The inputs to the valuation include contractual cash flows and collateral funding spreads, which are the incremental spread over the OIS rate for a specific collateral rate (which refers to the rate applicable to a specific type of security pledged as collateral).

Valuation Hierarchy Classification:

- Level 2—when the valuation inputs are observable and supported by market liquidity
- Level 3—in instances where the valuation input is observable but not supported by market liquidity or if an unobservable input is deemed significant

Other Secured Financings

Valuation Techniques:

 Other secured financings are composed of short-dated notes secured by Corporate agreements to repurchase equities, Physical commodities, the liabilities related to sales of Loans and lending commitments accounted for as financings, and secured contracts that are not classified as OTC derivatives because they fail net investment criteria. For further information on the determination of fair value, refer to the Valuation Techniques described herein for the corresponding instruments, which are the collateral referenced by the other secured financing liability.

Valuation Hierarchy Classification:

 For further information on the determination of valuation hierarchy classification, see the Valuation Hierarchy Classification described herein for the corresponding instruments, which are the collateral referenced by the other secured financing liability.

Borrowings

Valuation Techniques:

 The Firm carries certain borrowings at fair value that are primarily composed of: instruments whose payments and redemption values are linked to the performance of a specific index, a basket of stocks, a specific equity security, a

Notes to Consolidated Financial Statements

Valuation Hierarchy Classification:

- Level 2—when valued using observable inputs or where the unobservable input is not deemed significant
- Level 3—in instances where an unobservable input is deemed significant

Rollforward of Level 3 Assets and Liabilities Measured at Fair Value on a Recurring Basis

\$ in millions		2023		2022		2021
U.S. Treasury and agency						
securities						
Beginning balance	\$	17	\$	2	\$	9
Realized and unrealized gains						
(losses)		_		(3)		
Purchases		_		14		2
Sales		(10)		(1)		(9)
Net transfers		(7)		5		_
Ending balance	\$		\$	17	\$	2
Unrealized gains (losses)	\$	_	\$	(1)	\$	_
Other sovereign governmen obligations	t					
Beginning balance	\$	169	\$	211	\$	268
Realized and unrealized gains						
(losses)		5		(5)		(1)
Purchases		38		116		146
Sales		(86)		(107)		(192)
Net transfers		(32)		(46)		(10)
Ending balance	\$	94	\$	169	\$	211
Unrealized gains (losses)	\$	2	\$	(14)	\$	_
State and municipal securities						
Beginning balance	\$	145	\$	13	\$	_
Realized and unrealized gains						
(losses)		_		(4)		_
Purchases		9		91		4
Sales		(6)		(82)		(4)
Net transfers		(114)		127		13
Ending balance	\$	34	\$	145	\$	13
Unrealized gains (losses)	\$	_	\$	_	\$	_
MABS						
Beginning balance	\$	416	\$	344	\$	322
Realized and unrealized gains						
(losses)		(2)		(342)		51
Purchases		232		511		254
Sales		(165)		(130)		(215)
Net transfers		8		33		(68)
Ending balance	\$	489	_	416	_	344

simmillions 2023 2022 2021 Corporate equities Beginning balance 116 \$ 135 \$ 86 Realized and unrealized gains (losses) 12 (97) (8) Purchases 85 73 121 Sales (41) (22) (50) Net transfers 27 47 (34) Ending balance 199 \$ 116 \$ 101 Investments 35 (409) 382 Realized and unrealized gains (losses) 35 (409) 382 Realized and unrealized gains (losses) 35 (409) 382 Purchases 158 63 202 382 Purchases 158 63 202 382 Realized and unrealized gains (losses) 32 (30) 400 382 Investment securities—AFS 35 3 2 200 300 400 300 400 300 400 300 400 300 400 300 400							
Beginning balance \$ 116	\$ in millions		2023		2022		2021
Realized and unrealized gains (losses)	Corporate equities						
12	Beginning balance	\$	116	\$	115	\$	86
Purchases 85 73 121 Sales (41) (22) (50) Net transfers 27 47 (34) Ending balance \$ 199 \$ 116 \$ 115 Unrealized gains (losses) \$ 19 \$ 11 \$ (3) Investments Beginning balance \$ 923 \$ 1,125 \$ 828 Realized and unrealized gains (losses) 35 (409) 382 Purchases 158 63 226 Sales (183) (107) (115) Net transfers 16 251 (196) Ending balance \$ 949 \$ 923 \$ 1,25 Investment securities—AFS 35 — \$ 2,804 Realized gains (losses) — (3) (4) Sales (32) — \$ 2,804 Realized and unrealized gains (losses) — \$ (3) — Realized gains (losses) — \$ (3) — Securities purchased under gains (losses) — 9	Realized and unrealized gains						
Sales (41) (22) (50) Net transfers 27 47 (34) Ending balance \$ 199 \$ 116 \$ 115 Unrealized gains (losses) 19 \$ 11 \$ (3) Investments Beginning balance \$ 923 \$ 1,125 \$ 828 Realized and unrealized gains (losses) 35 (409) 382 Purchases 158 63 226 Sales (183) (107) (115) Net transfers 16 251 (196) Ending balance \$ 949 \$ 923 \$ 1,125 Investment securities—AFS 2 (397) 359 Investment securities—AFS 2 (394) (49) 359 Investment securities—AFS 2 (394) (49) 369 (49) 369 (49) 369 (49) 369 (49) 369 (49) 369 369 369 369 369 369 369 369 369 369 369<	(losses)		12		(97)		(8)
Net transfers 27 47 (34) Ending balance \$ 199 \$ 116 \$ 115 Unrealized gains (losses) \$ 923 \$ 1,125 \$ 828 Beginning balance \$ 923 \$ 1,125 \$ 828 Realized and unrealized gains (losses) 35 (409) 382 Purchases 158 63 226 Sales (183) (107) (115) Net transfers 16 251 (196) Ending balance \$ 949 \$ 23 \$ 1,225 Unrealized gains (losses) \$ 27 \$ (397) 359 Investment securities—AFS 35 \$ - \$ 2,804 Realized and unrealized gains (losses) \$ 35 \$ - \$ 2,804 Realized and unrealized gains (losses) \$ 3 \$ 2,597) Ending balance \$ 35 \$ - \$ 2,804 Sales (32) 38 (2,597) Ending balance \$ - \$ 35 \$ - Ending balance \$ - \$ 3	Purchases		85		73		121
Ending balance \$ 199 \$ 116 \$ 115 Unrealized gains (losses) \$ 19 \$ 11 \$ (3) Investments Beginning balance \$ 923 \$ 1,125 \$ 828 Realized and unrealized gains (losses) 35 (409) 382 Purchases 158 63 226 Sales (183) (107) (115) Net transfers 16 251 (196) Ending balance \$ 949 \$ 923 \$ 1,125 Unrealized gains (losses) \$ 27 (397) 359 Investment securities—AFS Beginning balance \$ 35 \$ - \$ 2,804 Realized and unrealized gains (losses) - (3) (4) Sales (32) - (203) Net transfers³ (3) 38 (2,597) Ending balance \$ - \$ 35 \$ - Unrealized gains (losses) \$ - \$ 35 \$ - Securities purchased under agreements toresell - \$ - \$ -	Sales		(41)		(22)		(50)
Unrealized gains (losses)	Net transfers		27		47		(34)
Investments Beginning balance \$923 \$1,125 \$828 Realized and unrealized gains (losses) 35 (409) 382 Purchases 158 63 226 Sales (183) (107) (115) Net transfers 16 251 (196) Ending balance \$949 \$923 \$1,125 Unrealized gains (losses) \$27 (397) 359 Investment securities—AFS Beginning balance \$35 \$ — \$ 2,804 Realized and unrealized gains (losses) — (3) (4) (4) (4)	Ending balance	\$	199	\$	116	\$	115
Beginning balance \$ 923 \$ 1,125 \$ 828 Realized and unrealized gains (losses) 35 (409) 382 Purchases 158 63 226 Sales (183) (107) (115) Net transfers 16 251 (196) Ending balance \$ 949 \$ 923 \$ 1,125 Unrealized gains (losses) 27 (397) 359 Investment securities—AFS 8 5	Unrealized gains (losses)	\$	19	\$	11	\$	(3)
Realized and unrealized gains (losses) 35 (409) 382 Purchases 158 63 226 Sales (183) (107) (115) Net transfers 16 251 (196) Ending balance \$ 949 \$ 923 \$ 1,125 Unrealized gains (losses) 27 (397) 359 Investment securities—AFS Beginning balance 35 — \$ 2,804 Realized and unrealized gains (losses) — (3) (4) Sales (32) — (203) Net transfers³ (3) 38 (2,597) Ending balance \$ — \$ 35 \$ — Unrealized gains (losses) \$ — \$ 35 \$ — Securities purchased under agreements to resell Beginning balance \$ — \$ 3 Beginning balance \$ — \$ — \$ — Lurrealized gains (losses) — \$ — \$ — Net derivatives: Interest rate Beginning balance \$ (151) \$ 708 \$ 682 Realized and unrealized gains (1052)	Investments						
Net transfers	Beginning balance	\$	923	\$	1,125	\$	828
Purchases 158 63 226 Sales (183) (107) (115) Net transfers 16 251 (196) Ending balance \$ 949 \$ 923 \$ 1,125 Unrealized gains (losses) 27 (397) \$ 359 Investment securities—AFS Beginning balance 35 \$ — \$ 2,804 Realized and unrealized gains (losses) — (3) (4) Sales (32) — (203) (4) Sales (33) (3) (4) Sales (33) (3) (2,597) Ending balance — \$ — \$ — \$ — \$ — (3) — (3) — (3) — (2	Realized and unrealized gains						
Sales (183) (107) (115) Net transfers 16 251 (196) Ending balance \$ 949 \$ 923 \$ 1,125 Unrealized gains (losses) 27 \$ (397) \$ 359 Investment securities—AFS Beginning balance \$ 35 \$ — \$ 2,804 Realized and unrealized gains (losses) — (3) (4) Sales (32) — (203) Net transfers³ (3) 38 (2,597) Ending balance \$ — \$ 35 \$ — Unrealized gains (losses) \$ — \$ 35 \$ — Securities purchased under agreements to resell — (3) — (3) Beginning balance \$ — \$ — \$ — \$ — \$ — (3) — (3) Ending balance \$ — \$ — \$ — \$ — \$ — (3) — (3) Ending balance \$ — \$ — \$ — \$ — \$ — (3) — (3) Ending balance \$ — \$ — \$ — \$ — \$ — (3) — (3) Ending balance \$ — \$ — \$ — \$ — \$ — (3) — (3) Realized and unrealized gains (losses) \$ — \$ — \$ — \$ — (3) — (3)	(losses)		35		(409)		382
Net transfers 16 251 (196) Ending balance \$ 949 \$ 923 \$ 1,125 Unrealized gains (losses) 27 \$ (397) \$ 359 Investment securities—AFS Beginning balance \$ 35 \$ — \$ 2,804 Realized and unrealized gains (losses) — (3) (4) Sales (32) — (203) Net transfers³ (3) 38 (2,597) Ending balance \$ — \$ 35 \$ — Unrealized gains (losses) \$ — \$ 35 \$ — Securities purchased under agreements to resell 33 34	Purchases		158		63		226
Ending balance \$ 949 \$ 923 \$ 1,125 Unrealized gains (losses) \$ 27 \$ (397) \$ 359 Investment securities—AFS Beginning balance \$ 35 \$ — \$ 2,804 Realized and unrealized gains (losses) — (3) (4) Sales (32) — (203) Net transfers³ (3) 38 (2,597) Ending balance \$ — \$ 35 \$ — Unrealized gains (losses) \$ — \$ (3) \$ — Securities purchased under agreements to resell Beginning balance \$ — \$ — \$ 3 Net transfers — (3) Ending balance \$ — \$ — \$ — \$ 3 Net transfers — — (3) Ending balance \$ — \$ — \$ — \$ — \$ Net derivatives: Interest rate Beginning balance \$ (151) \$ 708 \$ 682 Realized and unrealized gains (losses) (336) (643) 284 Purchases (43) — (52) Settlements 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292	Sales		(183)		(107)		(115)
Unrealized gains (losses)	Net transfers		16		251		(196)
Investment securities—AFS	Ending balance	\$	949	\$	923	\$	1,125
Beginning balance \$ 35 \$ — \$ 2,804 Realized and unrealized gains (losses) — (3) (4) Sales (32) — (203) Net transfers³ (3) 38 (2,597) Ending balance \$ — \$ 35 \$ — Unrealized gains (losses) \$ — \$ (3) \$ — Securities purchased under agreements to resell Beginning balance \$ — \$ — \$ 3 Net transfers — — (3) Ending balance \$ — \$ — \$ — Unrealized gains (losses) \$ — \$ — \$ — Net derivatives: Interest rate Seginning balance \$ (151) \$ 708 \$ 682 Realized and unrealized gains (losses) (336) (643) 284 Purchases 140 1 67 Issuances (43) — (52) Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292	Unrealized gains (losses)	\$	27	\$	(397)	\$	359
Realized and unrealized gains (losses) — (3) (4) Sales (32) — (203) Net transfers³ (3) 38 (2,597) Ending balance \$ — \$35 \$ Unrealized gains (losses) \$ — \$ — Securities purchased under agreements to resell Beginning balance \$ — \$ — \$ 3 Net transfers — \$ — \$ — \$ 3 Net derivatives: Interest rate Realized and unrealized gains (losses) \$ — \$ — — — Net derivatives: Interest lasuances (151) \$ 708 \$ 682 Purchases 140 1 67 1 67 1 1 67 1 1 67 1 1 67 1 1 67 1 1 67 1 1 67 1 1 67 1 1 67 1 1 67 1 1 67 1 1 <td>Investment securities—AFS</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Investment securities—AFS						
Closses - (3) (4)	Beginning balance	\$	35	\$	_	\$	2,804
Sales (32) — (203) Net transfers³ (3) 38 (2,597) Ending balance \$ - \$ 35 \$ - — Unrealized gains (losses) \$ - \$ (3) \$ - Securities purchased under agreements to resell — Beginning balance \$ - \$ - \$ 3 Net transfers — — Unrealized gains (losses) * - \$ - \$ - * - Net derivatives: Interest rate * - \$ - \$ - \$ - * - Beginning balance \$ (151) \$ 708 \$ 682 682 Realized and unrealized gains (losses) (336) (643) 284 284 Purchases 140 1 67 67 Issuances (43) — (52) 14 Settlements 241 (92) 14 14 Net transfers 76 (125) (287) 151) \$ 708 Ending balance (73) \$ (151) \$ 708 151) \$ 708 Unrealized gains (losses) (210) \$ (327) \$ 292 Net derivatives: Credit	Realized and unrealized gains						
Net transfers (3) 38 (2,597)	(losses)		_		(3)		(4)
Ending balance \$ - \$ 35 \$ - Unrealized gains (losses) \$ - \$ (3) \$ - Securities purchased under agreements to resell Beginning balance \$ - \$ - \$ 3 Net transfers - (3) Ending balance \$ - \$ - \$ - Unrealized gains (losses) \$ - \$ - \$ - Unrealized gains (losses) \$ - \$ - \$ - Net derivatives: Interest rate Beginning balance \$ (151) \$ 708 \$ 682 Realized and unrealized gains (losses) (336) (643) 284 Purchases (43) - (52) Settlements (43) - (52) Settlements 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Sales		(32)		_		(203)
Unrealized gains (losses) \$ - \$ (3) \$ - Securities purchased under agreements to resell Beginning balance \$ - \$ - \$ 3 Net transfers (3) Ending balance \$ - \$ - \$ - Unrealized gains (losses) \$ - \$ - \$ - Net derivatives: Interest rate Beginning balance \$ (151) \$ 708 \$ 682 Realized and unrealized gains (losses) (336) (643) 284 Purchases 140 1 67 Issuances (43) - (52) Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Net transfers ³		(3)		38		(2,597)
Securities purchased under agreements to resell Beginning balance \$ - \$ - \$ 3 Net transfers (3) Ending balance \$ - \$ - \$ - Unrealized gains (losses) \$ - \$ - \$ - Net derivatives: Interest rate 8 Beginning balance \$ (151) \$ 708 \$ 682 Realized and unrealized gains (losses) (336) (643) 284 Purchases 140 1 67 Issuances (43) - (52) Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Ending balance	\$		\$	35	\$	
resell Beginning balance \$ - \$ - \$ 3 Net transfers (3) Ending balance \$ - \$ - \$ - Unrealized gains (losses) \$ - \$ - \$ - Net derivatives: Interest rate 8 Beginning balance \$ (151) \$ 708 \$ 682 Realized and unrealized gains (losses) (336) (643) 284 Purchases 140 1 67 Issuances (43) - (52) Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Unrealized gains (losses)	\$	_	\$	(3)	\$	
Beginning balance \$ - \$ - \$ 3 Net transfers (3) Ending balance \$ - \$ - \$ - Unrealized gains (losses) \$ - \$ - \$ - Net derivatives: Interest rate 8 Beginning balance \$ (151) \$ 708 \$ 682 Realized and unrealized gains (losses) (336) (643) 284 Purchases 140 1 67 Issuances (43) - (52) Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Securities purchased under	agı	reemei	nts	to		
Net transfers — — (3) Ending balance \$ — \$ —	resell						
Ending balance \$ - \$ - \$ - Unrealized gains (losses) \$ - \$ - \$ - Net derivatives: Interest rate Beginning balance \$ (151) \$ 708 \$ 682 Realized and unrealized gains (losses) (336) (643) 284 Purchases 140 1 67 Issuances (43) - (52) Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Beginning balance	\$	_	\$	_	\$	3
Unrealized gains (losses) \$ - \$ - \$ - Net derivatives: Interest rate Beginning balance \$ (151) \$ 708 \$ 682 Realized and unrealized gains (losses) (336) (643) 284 Purchases 140 1 67 Issuances (43) - (52) Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Net transfers		_				(3)
Net derivatives: Interest rate Beginning balance \$ (151) \$ 708 \$ 682 Realized and unrealized gains (losses) (336) (643) 284 Purchases 140 1 67 Issuances (43) — (52) Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Ending balance	\$		\$	_	\$	
rate Beginning balance \$ (151) \$ 708 \$ 682 Realized and unrealized gains (151) \$ 708 \$ 682 (Iosses) (336) (643) 284 Purchases 140 1 67 Issuances (43) — (52) Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Unrealized gains (losses)	\$	_	\$	_	\$	_
Beginning balance \$ (151) \$ 708 \$ 682 Realized and unrealized gains (1336) (643) 284 Purchases 140 1 67 Issuances (43) — (52) Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Net derivatives: Interest						-
Realized and unrealized gains (losses) (336) (643) 284 Purchases 140 1 67 Issuances (43) — (52) Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	rate						
(losses) (336) (643) 284 Purchases 140 1 67 Issuances (43) — (52) Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Beginning balance	\$	(151)	\$	708	\$	682
Purchases 140 1 67 Issuances (43) — (52) Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Realized and unrealized gains						
Issuances (43) — (52) Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	(losses)		(336)		(643)		284
Settlements 241 (92) 14 Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Purchases		140		1		67
Net transfers 76 (125) (287) Ending balance \$ (73) \$ (151) \$ 708 Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Issuances		(43)		_		(52)
Ending balance	Settlements		241		(92)		14
Unrealized gains (losses) \$ (210) \$ (327) \$ 292 Net derivatives: Credit	Net transfers		76		(125)		(287)
Net derivatives: Credit	Ending balance	\$	(73)	\$	(151)	\$	708
	Haradian danian (lanas)			_	(227)	_	202
Beginning balance \$ 110 \$ 98 \$ 49	Unrealized gains (losses)	\$	(210)	\$	(327)	\$	292
-5g		\$	(210)	\$	(327)	\$	

Notes to Consolidated Financial Statements

\$ in millions		2023	2022		2021
Net derivatives: Equity					
Beginning balance	\$	(736)	\$ (945)	\$	(2,231)
Realized and unrealized gains					
(losses)		(91)	201		344
Purchases		221	77		70
Issuances		(572)	(339)		(443)
Settlements		87	348		160
Net transfers ²		(11)	(78)		1,155
Ending balance	\$(1,102)	\$ (736)	\$	(945)
Unrealized gains (losses)	\$	(201)	\$ 328	\$	(103)
Net derivatives: Commodity	an	d			
other					
Beginning balance	\$	1,083	\$ 1,529	\$	1,709
Realized and unrealized gains					
(losses)		910	315		529
Purchases		78	185		44
Issuances		(136)	(210)		(86)
Settlements		(701)	(510)		(599)
Net transfers		56	(226)		(68)
Ending balance	\$	1,290	\$ 1,083	\$	1,529
Unrealized gains (losses)	\$	243	\$ (935)	\$	141
Deposits					
Beginning balance	\$	20	\$ 67	\$	126
Realized and unrealized losses					
(gains)		1	_		
Issuances		25	11		
Settlements		_	(3)		(10)
Net transfers		(13)	(55)		(49)
Ending balance	\$	33	\$ 20	\$	67
Unrealized losses (gains)	\$	1	\$ —	\$	
Nonderivative trading					
liabilities					
Beginning balance	\$	74	\$ 61	\$	79
Realized and unrealized losses			(0.5)		(21)
(gains) Purchases		(38)	(86)		(21)
		(38)	(35)		(30)
Sales Net transfers		22	93		(10)
		(6)	41 t 74	_	(10)
Ending balance	\$	60		_	61
Unrealized losses (gains)	\$		\$ 17	\$	(21)
Securities sold under agree repurchase	me	nts to			
Beginning balance	\$	512	\$ 651	¢	444
Realized and unrealized losses	ф	212	ψ U31	ф	444
(gains)		2	(8)		1
13: 11=7		_	(3)		

\$ in millions	2023	2022		2021
Borrowings				
Beginning balance	\$ 1,587	\$ 2,157	\$	4,374
Realized and unrealized losses				
(gains)	219	(133)		(99)
Issuances	708	513		717
Settlements	(391)	(285)		(448)
Net transfers ²	(245)	(665)		(2,387)
Ending balance	\$ 1,878	\$ 1,587	\$	2,157
Unrealized losses (gains)	\$ 182	\$ (138)	\$	(114)
Portion of unrealized losses				
(gains) recorded in OCI—				
Change in net DVA	29	 (35)	_	(17)

- Net transfers in 2021 reflect the transfer in the third quarter of \$895 million of equity margin loans from Level 3 to Level 2 as a result of the reduced significance of the margin loan rate input.
- 2. Net transfers in 2021 reflect the transfer in the second quarter of \$2.0 billion of Corporate and other debt, \$1.0 billion of net Equity derivatives and \$2.2 billion of Borrowings from Level 3 to Level 2 as the unobservable inputs were not significant to the overall fair value measurements.
- Net transfers in 2021 reflect the transfer in the first quarter of \$2.5 billion of AFS securities from Level 3 to Level 2 due to increased trading activity and observability of pricing inputs.

Level 3 instruments may be hedged with instruments classified in Level 1 and Level 2. The realized and unrealized gains or losses for assets and liabilities within the Level 3 category presented in the previous tables do not reflect the related realized and unrealized gains or losses on hedging instruments that have been classified by the Firm within the Level 1 and/or Level 2 categories.

The unrealized gains (losses) during the period for assets and liabilities within the Level 3 category may include changes in fair value during the period that were attributable to both observable and unobservable inputs. Total realized and unrealized gains (losses) are primarily included in Trading revenues in the income statement.

Additionally, in the previous tables, consolidations of VIEs are included in Purchases, and deconsolidations of VIEs are included in Settlements.

Significant Unobservable Inputs Used in Recurring and Nonrecurring Level 3 Fair Value Measurements

Notes to Consolidated Financial Statements

	Balance / Rango	e (Average¹)		Balance / Ran	nge (Average¹)
\$ in millions, except inputs	At December 31, 2023	at December 31, 2022	\$ in millions, except inputs	At December 31, 2023	At December 31, 2022
Loans and			Commodity and		
lending			other	\$ 1,290	\$ 1,083
commitments	\$ 2,066 \$	2,017	Option model:		
Margin loan			Forward power	\$0 to \$220 (\$49)	\$1 to \$292 (\$43) per
model:			price	per MWh	MWh
Margin loan rate	2% to 4% (3%)	2% to 4% (3%)	Commodity		
Comparable			volatility	8% to 123% (31%)	12% to 169% (34%)
pricing:			Cross-		
	-	87 to 105 points (99	commodity	54% to 100%	
Loan price	(98 points)	points)	correlation	(94%)	70% to 100% (94%)
Corporate and		2.005	Liabilities at Fai	r Value on a Recurrii	ng Basis
other debt	\$ 1,983 \$	2,096	Securities sold		
Comparable			under 		
pricing:			agreements to	4.40	¢ 512
	-	51 to 132 points (90	repurchase	\$ 449	\$ 512
Bond price	(82 points)	points)	Discounted cash		
Discounted cash			flow:		
flow:			For diameter and	28 to 135 bps (79	
Loss given	54% to 84% (62% /	54% to 84% (62% /	Funding spread	bps)	bps)
default	54%)	54%)	Other secured		
Corporate			financings	\$ 92	\$ 91
equities	\$ 199 \$	116	Comparable		
Comparable			pricing:		
pricing:				22 to 101 points	23 to 101 points (75
Equity price	100%	100%	Loan price	(76 points)	points)
Investments	\$ 949 \$	923	Borrowings	\$ 1,878	\$ 1,587
Discounted cash f	low:		Option model:		
WACC	16% to 18% (17%)	15% to 17% (16%)	Equity volatility	6% to 69% (13%)	7% to 86% (23%)
Exit multiple	9 to 17 times (15	7 to 17 times (14	Equity volatility		
	times)	times)	skew	-2% to 0% (0%)	-2% to 0% (0%)
Market approach:			Equity		
EBITDA multiple		7 to 21 times (11	correlation	41% to 97% (79%)	39% to 98% (86%)
	22 times	times)	Equity - FX	-65% to 40%	
Comparable			correlation	(-30%)	-50% to 0% (-21%)
pricing:			IR curve	50% to 89% (71% /	
Equity price	24% to 100%		correlation	70%)	N/M
	(86%)	24% to 100% (89%)	IR - Volatility		47% to 136% (74% /
Net derivative a	nd other contracts:		skew	N/M	59%)
Interest rate	\$ (73) \$	(151)	Discounted cash		
Option model:			flow:		
IR volatility	70% to 100%	105% to 130%	Loss given	54% to 84% (62% /	
skew	(81% / 93%)	(113% / 109%)	default	54%)	54%)
IR curve	49% to 99% (77% /		Nonrecurring Fa Measurement	ir Value	
correlation	79%)	84%)	Loans	\$ 4,532	\$ 6,610
Bond volatility	79% to 85% (82% /		Corporate loan mo	adal.	

N/M

85%)

Notes to Consolidated Financial Statements

During 2023, there were no significant revisions made to the descriptions of the Firm's significant unobservable inputs.

An increase (decrease) to the following significant unobservable inputs would generally result in a higher (lower) fair value.

- Comparable Bond or Loan Price. A pricing input used when prices for the identical instrument are not available. Significant subjectivity may be involved when fair value is determined using pricing data available for comparable instruments. Valuation using comparable instruments can be done by calculating an implied yield (or spread over a liquid benchmark) from the price of a comparable bond or loan, then adjusting that yield (or spread) to derive a value for the bond or loan. The adjustment to yield (or spread) should account for relevant differences in the bonds or loans, such as maturity or credit quality. Alternatively, a price-to-price basis can be assumed between the comparable instrument and the bond or loan being valued in order to establish the value of the bond or loan.
- Comparable Equity Price. A price derived from equity raises, share buybacks and external bid levels, etc. A discount or premium may be included in the fair value estimate.
- Contingency Probability. Probability associated with the realization of an underlying event upon which the value of an asset is contingent.
- EBITDA Multiple/Exit Multiple. The ratio of enterprise value to EBITDA, enterprise value is the aggregate value of equity and debt minus cash and cash equivalents. The EBITDA multiple reflects the value of a company in terms of its fullyear EBITDA, whereas the exit multiple reflects the value of a company in terms of its full-year expected EBITDA at exit. multiple Either allows comparison between companies from an operational perspective as the effect of capital and structure, taxation depreciation/ amortization is excluded.

An increase (decrease) to the following

- Margin Loan Rate. The annualized rate that reflects the possibility of losses as a result of movements in the price of the underlying margin loan collateral. The rate is calibrated from the discount rate, credit spreads and/or volatility measures.
- WACC. WACC represents the theoretical rate of return required to debt and equity investors. The WACC is used in a discounted cash flow model that calculates the value of the equity. The model assumes that the cash flow assumptions, including projections, are fully reflected in the current equity value, while the debt to equity ratio is held constant.

An increase (decrease) to the following significant unobservable inputs would generally result in an impact to the fair value, but the magnitude and direction of the impact would depend on whether the Firm is long or short the exposure.

- Correlation. A pricing input where the payoff is driven by more than one underlying risk. Correlation is a measure of the relationship between the movement of two variables (i.e., how the change in one variable influences a change in the other variable).
- Credit Spread. The credit spread reflects the additional net yield an investor can earn from a security with more credit risk relative to one with less credit risk. The credit spread of a particular security is often quoted in relation to the yield on a credit risk-free benchmark security or reference rate.
- Interest Rate Curve. The term structure of interest rates (relationship between interest rates and the time to maturity) and a market's measure of future interest rates at the time of observation. An interest rate curve is used to set interest rate and foreign exchange derivative cash flows and is a pricing input used in the discounting of any OTC derivative cash flow.
- Volatility. The measure of variability in possible returns for an instrument given how much that instrument changes in value over time. Volatility is a pricing

Notes to Consolidated Financial Statements

Net Asset Value Measurements

Fund Interests

At December 31,

		2023				t Decem	ber	31, 2022
	C	arrying			C	Carrying		
\$ in millions		Value	Commi	itment		Value	Со	mmitment
Private								
equity	\$	2,685	\$	720	\$	2,622	\$	638
Real estate		2,765		240		2,642		239
Hedge		74		3		190		3
Total	\$	5,524	\$	963	\$	5,454	\$	880

Amounts in the previous table represent the Firm's carrying value of general and limited partnership interests in fund investments, as well as any related performance-based income in the form of carried interest. The carrying amounts are measured based on the NAV of the fund taking into account the distribution terms applicable to the interest held. This same measurement applies whether the fund investments are accounted for under the equity method or fair value.

Private Equity. Funds that pursue multiple strategies, including leveraged buyouts, venture capital, infrastructure growth capital, distressed investments and mezzanine capital. In addition, the funds may be structured with a focus on specific geographic regions.

Real Estate. Funds that invest in real estate assets such as commercial office buildings, retail properties, multifamily residential properties, developments or hotels. In addition, the funds may be structured with a focus on specific geographic regions.

Investments in private equity and real estate funds generally are not redeemable due to the closed-end nature of these funds. Instead, distributions from each fund will be received as the underlying investments of the funds are disposed and monetized.

Hedge. Funds that pursue various investment strategies, including long-short equity, fixed income/credit, event-driven and multi-strategy. Investments in hedge funds may be subject to initial period lock-up or gate provisions, which restrict an investor from withdrawing from the fund

Nonrecurring Fair Value Measurements

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

	At December 31, 2023						
\$ in millions	ı	_evel 2	L	evel 3 ¹		Total	
Assets							
Loans	\$	4,215	\$	4,532	\$	8,747	
Other assets—Other							
investments		_		4		4	
Other assets—ROU assets		23		_		23	
Total	\$	4,238	\$	4,536	\$	8,774	
Liabilities							
Other liabilities and							
accrued expenses—							
Lending commitments	\$	110	\$	60	\$	170	
Total	\$	110	\$	60	\$	170	
		At De	ece	mber 31	, 20	022	
\$ in millions	ı	Level 2	L	evel 3 ¹		Total	
Assets							
Loans	\$	4,193	\$	6,610	\$	10,803	
Other assets—Other							
investments		_		7		7	
Other assets—ROU assets		4		_		4	
Total	\$	4,197	\$	6,617	\$	10,814	
Liabilities							
Other liabilities and							
accrued expenses—							
Lending commitments	\$	275	\$	153	\$	428	
Total	\$	275	\$	153	\$	428	

For significant Level 3 balances, refer to "Significant Unobservable Inputs Used in Recurring and Nonrecurring Level 3 Fair Value Measurements" section herein for details of the significant unobservable inputs used for nonrecurring fair value measurement.

Gains (Losses) from Nonrecurring Fair Value Remeasurements¹

\$ in millions	2023	2022	2021
Assets			
Loans ²	\$ (426) \$	(563) \$	(89)
Goodwill	_	_	(8)
Intangibles	_	_	(3)
Other assets—Other investments ³	(15)	(14)	(57)
Other assets—Premises, equipment and software ⁴	(8)	(6)	(14)

Notes to Consolidated Financial Statements

Financial Insti Value	ruments		easured		financial assets an	d liabilities, such a ble assets, and certai
-			-	Value	method investme	•
	- Carrying				receivables.	
\$ in millions	Value	Level 1	Level 2	Level 3	<u>™5.</u> Fair Value Op	tion
Financial assets					raii value Op	CION
Cash and cash equivalents	\$ 89.232	\$89,232	s –	e _		d the fair value optio
·	, 05,252	403,232	Ψ –	Ψ –	\$ 89 for certain eligible in	
Investment securities—HTM	66,694	21,937	34,411	1,105	57,4530me statement	alue basis to mitigat volatility caused b
	00,094	21,937	34,411	1,105		differences betwee
Securities						ruments and the
purchased under agreements						nagement transaction
to resell	110,733	_	108,099	2.674	110,973 to eliminate cor	_
			•	2,074	certain accounting m	
Securities borrowed	121,091		121,091		121,091	
Customer and other	74 227		70 110	4 021	-	d at Fair Value on
receivables	74,337		70,110	4,031	74 ,Rec urring Basis	
Loans ^{1,2} :						At At
Held for					De	cember 31, December 31,
investment	203,385		20,125	176,291	196,416 _{millions}	2023 2022
Held for sale	15,255	_	8,652	6,672	15, និដទ់ iness Unit Responsible	for Risk Management
Other assets	704	_	704	_	296 ity \$	46,073 \$ 38,945
Financial liabilities					Interest rates	31,055 26,077
Deposits 9	\$ 345,332	\$ –	\$345,391	s –	\$ 345,&9 1hmodities	12,798 10,717
Securities sold					Credit	2,400 1,564
under agreements						
to repurchase	61,631	_	61,621	_	Foreign exchange 61,621	1,574 1,417
Securities loaned	15,057	_	15,055	_	Total \$ 15,055	93,900 \$ 78,720
Other secured						
financings	2,756	_	2,756	_		orrowings under the Fa
Customer and other					^{2,756} Value Option	
payables	208,015	_	208,015	_	208, 5 in millions	2023 2022 2021
			,	4	171,013 revenues	\$(7,991) \$ 12,370 \$ 899
Borrowings	169,832		171,009	4	Interest expense	503 293 305
(Commitment				<u>-</u>	
	Amount				Net revenues ¹	\$(8,494) \$ 12,077 \$ 594
Lending commitments ³	149,464	\$ —	\$ 1,338	\$ 749	1. Amounts do not reflect any ga \$ 2,087 hedges.	ains or losses from related econor
					-	
		At Dec	ember 31,	2022		changes in fair valu
			Fair '	Value		ling revenues and ar
	Carrying				•	to movements in th
\$ in millions	Value	Level 1	Level 2	Level 3	Telerence price or in 	ndex, interest rates (
Financial assets					IOLEIGH EXCHANGE FAR	
					Gains (Losses) Due to	Changes in Instrumen
Cash and cash equivalents	\$ 128,127	\$128,127	7 \$	\$ —	Specific Credit Risk \$128,127	
	T 120,12/	Ψ12U,12/	Ψ —	Ψ —		Trading
Investment						ii auiiig

Revenues OCI

securities_HTM 75.634 26.754 37.218 1.034 65.05n millions

Notes to Consolidated Financial Statements

2023	2022	2
\$ (2,166)	\$	(457)
		2023 2022

Loans and other receivables-specific credit gains (losses) were determined by excluding the non-credit components of gains and losses.

Difference between Contractual Principal and Fair Value¹

		At	At
	Dec	ember 31,	December 31,
\$ in millions		2023	2022
Loans and other			
receivables ²	\$	11,086	\$ 11,916
Nonaccrual loans ²		8,566	9,128
Borrowings ³		3,030	5,203

- Amounts indicate contractual principal greater than or (less than)
 fair value.
- The majority of the difference between principal and fair value amounts for loans and other receivables relates to distressed debt positions purchased at amounts well below par.
- Excludes borrowings where the repayment of the initial principal amount fluctuates based on changes in a reference price or index.

The previous tables exclude non-recourse debt from consolidated VIEs, liabilities related to transfers of financial assets treated as collateralized financings, pledged commodities and other liabilities that have specified assets attributable to them.

Fair Value Loans on Nonaccrual Status

		At		At
	Dec	ember 31,	Dece	ember 31,
\$ in millions		2023		2022
Nonaccrual loans	\$	440	\$	585
Nonaccrual loans 90 or				
more				
days past due	\$	75	\$	116

6. Derivative Instruments and Hedging Activities

The Firm trades and makes markets globally in listed futures, OTC swaps, forwards, options and other derivatives referencing, among other things, interest rates, equities, currencies, investment grade and non-investment grade cornerate credits loans.

Fair Values of Derivative Contracts

		Asse	ts at De	em	ber 31,	202	23
	ı	Bilateral	Cleared	E	kchange-		
\$ in millions		отс	отс		Traded	-	Total
Designated as acco	un	ting hed	lges				
Interest rate	\$	25	\$ -	- \$	_	\$	25
Foreign exchange		5	5	<u> </u>			10
Total		30		5	_		35
Not designated as	aco	ounting	hedges				
Economic hedges							
of loans							
Credit		2	27	•	_		29
Other derivatives							
Interest rate		127,414	19,914	ŀ	854	14	18,182
Credit		5,712	4,896	•	_	1	10,608
Foreign exchange		90,654	2,570)	16	9	3,240
Equity		20,338	_	-	37,737	5	8,075
Commodity and othe	r	13,928	_	-	2,353	1	L6,281
Total	2	258,048	27,407	,	40,960	32	26,415
Total gross							
derivatives	\$2	258,078	\$27,412	2 \$	40,960	\$32	26,450
Amounts offset							
Counterparty netting	(1	L84,553)	(23,851	.) (38,510)	(24	6,914
Cash collateral							
netting		(39,493)	(2,730)	_	(4	2,223
Total in Trading							
assets	\$	34,032	\$ 831	\$	2,450	\$ 3	37,313
Amounts not	t						
offset ¹							
Financial instruments							
collateral		(15,690)	_	-		(1	5,690
Net amounts	\$	18,342	\$ 831	\$	2,450	\$ 2	21,623
Net amounts for whic	h n	naster ne	tting or c	olla	teral		
agreements are not	in	place or r	nay not b	e le	gally		
enforceable						\$	2,641
		ı	_iabilitie	s at	t Decem	ber	31. 20
		Bila	ateral (llea	red Exc	hang	ie-

_	Liabilities at December 31, 2023								
	Bilat	eral	Clea	red	Exchar	ıge-			
\$ in millions	ОТ	C	ОТ	С	Trade	ed		Total	
Designated as accounting	hedg	jes							
Interest rate	\$	467	\$	_	\$	_	\$	46	7
Foreign exchange		414		43		_		45	7_
Total		881		43		_		92	4
Not designated as accoun	ting h	nedge	es						

43

702

745

Economic hedges of

Credit

Notes to Consolidated Financial Statements

			ember 31, 2		monomuna or D	siivative	Contr	acts	
	Bilateral	Cleared	Exchange-			Asset	ts at Dec	ember 31	. 2023
\$ in millions	ОТС	ОТС	Traded	Total			-	Exchange-	-
Designated as ac	counting	hedges			\$ in billions	OTC	OTC	Traded	Total
Interest rate	\$ 62	\$ 1	\$	\$ 63	Designated as acc	ounting h	ednes		
Foreign exchange	15	44	_	59	Interest rate	\$ –		s –	\$ 92
Total	77	45	_	122		1	1	Ψ —	2
Not designated a	as account	ing hedg	es		Foreign exchange			_	
Economic hedges	s				Total	1	93		94
of loans					Not designated as	accounti	ng hedg	es	
Credit	2	59	_	61	Economic hedges				
Other derivative	s				of loans				_
Interest rate	141,291	29,007	1,029	171,327	Credit	_	1	_	1
Credit	5,888	2.352	_	8.240	Other derivatives				
Foreign exchange	113,540	2,337	62	115,939	Interest rate	4,153	8,357	560	13,070
	· · · · · · · · · · · · · · · · · · ·		26,850		Credit	214	176	_	390
Equity	16,505	_	20,650	43,355	Foreign exchange	3,378	165	7	3,550
Commodity and other	24 200	_	6,164	30,462	Equity	528	_	440	968
	24,298			<u> </u>	Commodity and				
Total	301,524	33,755	34,105	369,384	other	142		65	207
Total gross					Total	8,415	8,699	1,072	18,186
derivatives	\$301,601	\$33,800	\$ 34,105	\$369,506	Total gross				
Amounts offset					derivatives	\$ 8,416	\$8,792	\$ 1,072	\$18,280
Counterparty									
netting	(214,773)	(32,250)	(32,212)	(279,235)		Liabilit	ies at D	ecember 3	1 2022
Cash collateral									1, 2023
						Bilateral	Cleared	Exchange-	
netting	(44,711)	(1,348)	_	(46,059)	\$ in billions	Bilateral OTC	Cleared OTC		
Total in Trading				<u></u>	\$ in billions Designated as according to the second secon	ОТС	ОТС	Exchange-	
	\$ 42,117			(46,059)		OTC	ОТС	Exchange- Traded	
Total in Trading assets Amounts no	\$ 42,117			<u></u>	Designated as acc	OTC	OTC	Exchange- Traded	Total
Total in Trading assets Amounts no offset¹	\$ 42,117			<u></u>	Designated as acc	OTC counting h	OTC nedges \$ 183	Exchange- Traded	Total
Total in Trading assets Amounts no offset¹ Financial	\$ 42,117			<u></u>	Designated as acconnected as accountered as acconnected as acconnected as acconnected as accountered as account	OTC counting h	OTC nedges \$ 183 3 186	Exchange- Traded \$ -	Total \$ 186
Total in Trading assets Amounts no offset¹ Financial instruments	\$ 42,117 t	\$ 202		\$ 44,212	Designated as accommodate and	OTC counting h	OTC nedges \$ 183 3 186	Exchange- Traded \$ -	Total \$ 186
Total in Trading assets Amounts no offset¹ Financial instruments collateral	\$ 42,117 t	\$ 202	\$ 1,893	\$ 44,212 (19,406)	Designated as accommodate as accommo	OTC counting h	OTC nedges \$ 183 3 186	Exchange- Traded \$ -	Total \$ 186
Total in Trading assets Amounts no offset¹ Financial instruments collateral Net amounts	\$ 42,117 t (19,406) \$ 22,711	\$ 202) — \$ 202	\$ 1,893 — \$ 1,893	\$ 44,212	Designated as accommendated as accommend	OTC counting h	OTC nedges \$ 183 3 186	Exchange- Traded \$ -	Total \$ 186
Total in Trading assets Amounts no offset¹ Financial instruments collateral Net amounts Net amounts for with the second seco	\$ 42,117 t (19,406) \$ 22,711 hich master	\$ 202	\$ 1,893 - \$ 1,893	\$ 44,212 (19,406)	Designated as accommendate of loans Credit	oTC sounting h 3 14 17 s accounti	OTC nedges \$ 183 3 186 ng hedg	Exchange- Traded \$ -	Total \$ 186 17 203
Total in Trading assets Amounts no offset¹ Financial instruments collateral Net amounts Net amounts for w agreements are no	\$ 42,117 t (19,406) \$ 22,711 hich master not in place	\$ 202	\$ 1,893 - \$ 1,893	\$ 44,212 (19,406) \$ 24,806	Designated as accommendate of the second of	oTC counting h \$ 3 14 17 counting h 2	oTC sedges \$ 183	\$ — — es	Total \$ 186 17 203
Total in Trading assets Amounts no offset¹ Financial instruments collateral Net amounts Net amounts for with the second seco	\$ 42,117 t (19,406) \$ 22,711 hich master not in place	\$ 202	\$ 1,893 - \$ 1,893	\$ 44,212 (19,406)	Designated as accommendate of the second sec	s accounting to the state of th	OTC nedges \$ 183	Exchange- Traded \$ -	Total \$ 186 17 203
Total in Trading assets Amounts no offset¹ Financial instruments collateral Net amounts Net amounts for w agreements are no	\$ 42,117 t (19,406) \$ 22,711 hich master not in place le	\$ 202 \$ 202 r netting or or may no	\$ 1,893 - \$ 1,893	\$ 44,212 (19,406) \$ 24,806 \$ 4,318	Designated as accommendated as accommend	ott ounting h	OTC nedges \$ 183 3 186 ng hedg 22 8,197 155	\$ — es 455	Total \$ 186 17 203 24 13,283 384
Total in Trading assets Amounts no offset¹ Financial instruments collateral Net amounts Net amounts for w agreements are no	\$ 42,117 t (19,406) \$ 22,711 hich master not in place le Liabil	\$ 202 \$ 202 r netting or may no	\$ 1,893 \$ 1,893 r collateral t be	\$ 44,212 (19,406) \$ 24,806 \$ 4,318	Designated as accommendate of the second sec	s accounting to the state of th	OTC nedges \$ 183	\$ — — es	Total \$ 186 17 203
Total in Trading assets Amounts no offset¹ Financial instruments collateral Net amounts Net amounts for w agreements are no	\$ 42,117 t (19,406) \$ 22,711 hich master not in place le Liabil	\$ 202 \$ 202 r netting or may no	\$ 1,893 \$ 1,893 r collateral t be	\$ 44,212 (19,406) \$ 24,806 \$ 4,318	Designated as accommendated as accommend	ott ounting h	OTC nedges \$ 183 3 186 ng hedg 22 8,197 155	\$ — es 455	Total \$ 186 17 203 24 13,283 384
Total in Trading assets Amounts no offset¹ Financial instruments collateral Net amounts Net amounts for will agreements are in legally enforceable	\$ 42,117 (19,406) \$ 22,711 hich master not in place le Liabil Bilateral OTC	\$ 202 \$ 202 The netting or or may not lities at Declared OTC	\$ 1,893 \$ 1,893 r collateral t be cember 31 Exchange-	\$ 44,212 (19,406) \$ 24,806 \$ 4,318	Designated as accommendate of the second of	OTC counting h \$ 3 14 17 s accounti 2 4,631 229 3,496 587	OTC nedges \$ 183 3 186 ng hedg 22 8,197 155	\$ —	Total \$ 186 17 203 24 13,283 384 3,696 1,299
Total in Trading assets Amounts no offset¹ Financial instruments collateral Net amounts Net amounts for w agreements are n legally enforceable \$ in millions	\$ 42,117 (19,406) \$ 22,711 hich master not in place le Liabil Bilateral OTC	\$ 202 \$ 202 netting or or may no or may no OTC hedges	\$ 1,893 \$ 1,893 r collateral t be cember 31 Exchange- Traded	\$ 44,212 (19,406) \$ 24,806 \$ 4,318 , 2022	Designated as accommendate of the second sec	OTC counting h \$ 3 14 17 s accounti 2 4,631 229 3,496	OTC nedges \$ 183 3 186 ng hedg 22 8,197 155	\$ — es 455 — 33	Total \$ 186 17 203 24 13,283 384 3,696
Total in Trading assets Amounts no offset¹ Financial instruments collateral Net amounts Net amounts for we agreements are in legally enforceable \$ in millions Designated as acounterest rate	\$ 42,117 (19,406) \$ 22,711 hich master out in place le Liabil Bilateral OTC ccounting \$ 457	\$ 202 \$ 202 netting or or may no or may no OTC hedges	\$ 1,893 \$ 1,893 r collateral t be cember 31 Exchange- Traded	\$ 44,212 (19,406) \$ 24,806 \$ 4,318 , 2022 Total	Designated as accommendate of the second sec	OTC counting h \$ 3 14 17 s accounti 2 4,631 229 3,496 587	OTC nedges \$ 183 3 186 ng hedg 22 8,197 155	\$ —	Total \$ 186 17 203 24 13,283 384 3,696 1,299
Total in Trading assets Amounts no offset¹ Financial instruments collateral Net amounts Net amounts for w agreements are n legally enforceable \$ in millions Designated as according to the property of t	\$ 42,117 (19,406) \$ 22,711 hich master not in place le Liabil Bilateral OTC ccounting	\$ 202 \$ 202 retting or or may no or may no OTC hedges \$ 4	\$ 1,893 \$ 1,893 r collateral t be cember 31 Exchange- Traded	\$ 44,212 (19,406) \$ 24,806 \$ 4,318 , 2022 Total	Designated as accommendate of the second sec	OTC counting h \$ 3 14 17 s accounti 2 4,631 229 3,496 587	OTC nedges \$ 183	\$ —	Total \$ 186 17 203 24 13,283 384 3,696 1,299

Economic hedges of loans

Assets at December 31, 2022

Notes to Consolidated Financial Statements

	Liabilities at December 31, 2022						
	Bilateral Cleared Exchange-						
\$ in billions	OTC OTC Trade			Traded	Total		
Designated as acco	un						
Interest rate	\$	3	\$ 187	\$	_	\$ 190	
Foreign exchange		12	2			14	
Total		15	189		_	204	
Not designated as a	acc	ountir	ng hedg	es			
Economic hedges							
of loans							
Credit		_	15		_	15	
Other derivatives							
Interest rate		3,436	7,761		497	11,694	
Credit		199	125		_	324	
Foreign exchange		3,516	123		35	3,674	
Equity		488	_		552	1,040	
Commodity and other		101	_		79	180	
Total		7,740	8,024		1,163	16,927	
Total gross							
derivatives	\$	7,755	\$8,213	\$	1,163	\$ 17,131	

The notional amounts of derivative contracts generally overstate the Firm's exposure. In most circumstances, notional amounts are used only as a reference point from which to calculate amounts owed between the parties to the contract. Furthermore, notional amounts do not reflect the benefit of legally enforceable netting arrangements or risk mitigating transactions.

Gains (Losses) on Accounting Hedges

\$ in millions	2023	2022	2021						
Fair value hedges—Recognized in Interest income									
Interest rate contracts	\$ (576) \$ 1,928	\$ 742						
Investment Securities—AFS	638	(1,838)	(629)						
Fair value hedges—Recogn	ized in In	terest exp	ense						
Interest rate contracts	\$ 3,664	\$(15,159)) \$ (4,306)						
Deposits	(88)) 124	88						
Borrowings	(3,564) 15,042	4,214						
Net investment hedges—F	oreign ex	change co	ntracts						
Recognized in OCI	\$ (168) \$ 657	\$ 664						
Forward points excluded from									
hedge									
effectiveness testing—									
Recognized in									
Interest income	211	. (33)	(53)						

Fair Value Hedges—Hedged Items

		At		At
	D	ecember	ı	December
\$ in millions	31, 2023			31, 2022
Investment securities—AFS				
Amortized cost basis currently or				
previously hedged	\$	47,179	\$	34,073
Basis adjustments included in				
amortized cost ¹	\$	(732)	\$	(1,628)
Deposits				
Carrying amount currently or				
previously hedged	\$	10,569	\$	3,735
Basis adjustments included in				
carrying amount ¹	\$	(31)	\$	(119)
Borrowings				
Carrying amount currently or				
previously hedged	\$	158,659	\$	146,025
Basis adjustments included in				
carrying amount—Outstanding				
hedges	\$	(9,219)	\$	(12,748)
Basis adjustments included in				
carrying amount—Terminated				
hedges	\$	(671)	\$	(715)

 Hedge accounting basis adjustments are primarily related to outstanding hedges.

Gains (Losses) on Economic Hedges of Loans

\$ in millions	2023	2022	2021
Recognized in Other revenues			
Credit contracts ¹	(522)	(62)	(285)

 Amounts related to hedges of certain held-for-investment and held-for-sale loans.

Derivatives with Credit Risk-Related Contingencies

Net Derivative Liabilities and Collateral Posted

		At		At
	D	ecember	De	cember
\$ in millions	3	1, 2023	31	, 2022
Net derivative liabilities with				
credit risk-related contingent				
features	\$	21,957	\$	20,287
Collateral posted		16,389		12,268

The previous table presents the aggregate fair value of certain derivative contracts that contain credit risk-related contingent features that are in a net liability position

Notes to Consolidated Financial Statements

downgrade scenarios based on the relevant contractual downgrade triggers.

Maximum Potential Payout/Notional of Credit Protection Sold¹

	1	ears				ty at 2023	De	cem		,
\$ in billions		< 1		1-3		3-5	0	ver 5	_	Total
Single-name CDS										
Investment grade	\$	19	\$	29	\$	39	\$	10	\$	97
Non-investment										
grade		7		14		17		1		39
Total	\$	26	\$	43	\$	56	\$	11	\$	136
Index and basket CI	os									
Investment grade	\$	8	\$	19	\$	85	\$	4	\$	116
Non-investment										
grade		8		14		95		17		134
Total	\$	16	\$	33	\$	180	\$	21	\$	250
Total CDS sold	\$	42	\$	76	\$	236	\$	32	\$	386
Other credit contracts		_		_		_		3		3
Total credit										
		42	4	76	\$	236	\$	35	\$	389
CDS protection sold w purchased	\$ ith				tec	ction			\$	330
CDS protection sold w	_	ident	tica	al pro	uri	ty at I	Dec	cemb	_	
CDS protection sold w purchased	_	ident	tica	al prof	uri	ty at 2022			er	
CDS protection sold w	_	ident	tica	al pro	uri	ty at I		cemb ver 5	er	31,
CDS protection sold w purchased \$ in billions	_	ident	tica	al prof	uri	ty at 2022	0		er	31,
CDS protection sold w purchased \$ in billions Single-name CDS	ith	Year	s to	o Mat	uri	ty at 2022 3-5	0	ver 5	er	31, Total
CDS protection sold w purchased \$ in billions Single-name CDS Investment grade	ith	Year	s to	o Mat	uri	ty at 2022 3-5	0	ver 5 9	er	31, Total 79
CDS protection sold w purchased \$ in billions Single-name CDS Investment grade Non-investment grade	\$ \$	Year < 1 12	s to	1-3 29	uri	ty at 12022 3-5 29	\$	ver 5 9 2	er \$	31, Total 79 36
CDS protection sold w purchased \$ in billions Single-name CDS Investment grade Non-investment grade Total	\$ \$	Year < 1 12	s to	1-3 29	uri	ty at 12022 3-5 29	\$	ver 5 9 2	er \$	31, Total 79 36
\$ in billions Single-name CDS Investment grade Non-investment grade Total Index and basket CI	\$ \$ \$	Year < 1 12 5 17	s to	1-3 29 13 42	\$	ty at 12022 3-5 29 16 45	\$	9 2 11	er \$	31, Total 79 36 115
\$ in billions Single-name CDS Investment grade Non-investment grade Total Index and basket CI Investment grade	\$ \$ \$	Year < 1 12 5 17 3	s to	29 13 42	\$	2022 3-5 29 16 45	\$	yer 5 9 2 11	er \$	31, Total 79 36 115
\$ in billions \$ in billions Single-name CDS Investment grade Non-investment grade Index and basket CI Investment grade Non-investment grade	\$ \$	Year < 1 12 5 17 3 8	\$ \$	1-3 29 13 42	\$ \$	2022 3-5 29 16 45 37	\$	9 2 11 3	er \$	31, 79 36 115 56 152
CDS protection sold w purchased \$ in billions Single-name CDS Investment grade Non-investment grade Index and basket CI Investment grade Non-investment grade Non-investment grade Total	\$ \$	Year < 1 12 5 17 3 8 11	\$ \$	11-3 29 13 42 13 17 30	\$ \$	2022 3-5 29 16 45 37 108	\$ \$	9 2 11 3 19 22	er \$ \$	31, 79 36 115 56 152 208
CDS protection sold w purchased \$ in billions Single-name CDS Investment grade Non-investment grade Index and basket CI Investment grade Non-investment grade Non-investment grade Total Total CDS sold	\$ \$	Year < 1 12 5 17 3 8 11	\$ \$	11-3 29 13 42 13 17 30	\$ \$	2022 3-5 29 16 45 37 108	\$ \$	9 2 11 3 19 22	er \$ \$	31, 79 36 115 56 152 208
\$ in billions Single-name CDS Investment grade Non-investment grade Index and basket Cl Investment grade Non-investment grade Total Intervent grade Non-investment grade Total Total CDS sold Other credit contracts	\$ \$	Year < 1 12 5 17 3 8 11	\$ \$ \$	11-3 29 13 42 13 17 30	\$ \$ \$	tty at 1 2022 3-5 29 16 45 37 108 145 190	\$ \$ \$	9 2 11 3 19 22	er \$	31, 79 36 115 56 152 208
\$ in billions Single-name CDS Investment grade Non-investment grade Index and basket CI Investment grade Non-investment grade Total Index and basket CI Investment grade Other credit contracts Total credit	\$ \$ \$ \$ \$ \$	Year 12 5 17 3 8 11 28 — 28	\$ \$ \$	1-3 29 13 42 13 77 72	\$ \$ \$ \$	ty at 1 2022 3-5 29 16 45 37 108 145 190 —	\$ \$ \$	9 2 11 3 19 22 33 —	er \$	31, 79 36 115 56 152 208 323

Fair Value Asset (Liability) of Credit Protection Sold¹

\$ in millions

At	At
December	December
31, 2023	31, 2022

Protection Purchased with CDS

		Not	ional	l
		At		
	D	ecember		At
		31,	Dec	ember 31,
\$ in billions		2023		2022
Single name	\$	166	\$	140
Index and basket		213		173
Tranched index and basket		30		26
Total	\$	409	\$	339

	Fa	air Value As	set	(Liability)
		At		
	D	ecember		At
		31,	Dec	ember 31,
\$ in millions		2023		2022
Single name	\$	(2,799)	\$	(33)
Index and basket		(1,208)		1,248
Tranched index and basket		(1,012)		(217)
Total	\$	(5,019)	\$	998

The Firm enters into credit derivatives, principally CDS, under which it receives or provides protection against the risk of default on a set of debt obligations issued by a specified reference entity or entities. A majority of the Firm's counterparties for these derivatives are banks, broker-dealers, and insurance and other financial institutions.

The fair value amounts as shown in the previous tables are prior to cash collateral or counterparty netting.

The purchase of credit protection does not represent the sole manner in which the Firm risk manages its exposure to credit derivatives. The Firm manages its exposure to these derivative contracts through a variety of risk mitigation strategies, which include managing the credit and correlation across single-name, non-tranched indices and baskets, tranched indices and baskets, and cash positions. Aggregate market risk limits have been established for credit derivatives, and market measures are routinely monitored against these limits. The Firm may also recover amounts on the underlying reference obligation delivered to the Firm under CDS where credit protection was sold.

Notes to Consolidated Financial Statements

tranche, they are passed on to the next most senior tranche in the capital structure.

Other Credit Contracts. The Firm has invested in CLNs and CDOs, which are hybrid instruments containing embedded derivatives, in which credit protection has

Investment Securities in an Unrealized Loss Position

2023

Gross

At December 31, At December 31,

2022

Gross

derivatives, in wh	as		Unrealized	Fair	Unrealized			
been sold to the i	re sin millions	Fair Value	Losses	Value	Losses			
is a credit ever underlying the i				o.s. freasury				
balance of the no				securities				
full to the Firm.	Less than12							
7	months	\$14,295	\$ 22	\$ 42,144	\$ 1,711			
7. Investment	Secu	irities		12 months or				
				longer	33,458	1,081	11,454	543
AFS and HTM Secu	Total	47,753	1,103	53,598	2,254			
	U.S. agency							
At December 31, 2023 Gross Gross			sec urities					
	Amortized	l Unrealized		Less than12 Fair				
\$ in millions	Cost ¹	Gains	Losses	months Value	4,297	43	13,662	1,271
AFS securities				12 months or				
U.S. Treasury securities	\$ 58.484	\$ 24	\$ 1,103	longer 57,405	18,459	2,485	7,060	1,482
U.S. agency securities ²	25,852		2,528	Total 23,328	22,756	2,528	20,722	2,753
			-	Agency CMBS				
Agency CMBS	5,871	_	456	5,415 Less than12				
State and municipal			_	months	_	_	5,343	448
securities	1,132	46	5	1,173 12 months or				
FFELP student loan				longer	5,415	456	185	22
ABS ³	810	<u> </u>	18	792 Total	5,415	456	5,528	470
Total AFS securities	92,149	74	4,110	88,113 State and munic	ipal			
HTM securities				securities				
U.S. Treasury securities	23,222	_	1,285	21,937 Less than12				
U.S. agency securities ²	40,894	_	7,699	33,195 nonths	524	3	2,106	40
Agency CMBS	1,337	_	121	1,216 2 months or				
Non-agency CMBS	1,241	2	138	1,1<u>05</u> onger	35	2	65	2
Total HTM securities	66,694	2	9,243	57,4 <u>5³tal</u>	559	5	2,171	42
Total investment				FFELP student lo	an ABS			
securities	\$158,843	\$ 76	\$ 13,353	\$145,566 ess than12				
				months	56	1	627	23
		At Decembe	r 31. 2022	12 months or				
		Gross	Gross	longer	616	17	476	22
	Amortized	Unrealized U		Fair Total	672	18	1,103	45
\$ in millions	Cost ¹	Gains	Losses	Value Total AFS secur	rities in an	unrealize	d loss	-
AFS securities				position				
U.S. Treasury securities	\$ 56.103	\$ 17 \$	5 2,254 \$	53.866 Less than12				
U.S. agency securities ²	23,926	1	2,753	months 21,174	19,172	69	63,882	3,493
Agency CMBS	5,998		470	12 months or 5,528				
	3,330		770	longer	57,983	4,041	19,240	2,071
State and municipal securities	2,598	71	42	Total 2,627	\$77,155	\$ 4,110	\$ 83,122	\$ 5,564
FFELP student loan	,			<u>, </u>				
								<u> </u>

Notes to Consolidated Financial Statements

Investment Securities by Contractual Maturity

	At December 31, 2023				
			Annualized		
	Amortized	Fair	Average		
\$ in millions	Cost ¹	Value	Yield ^{2,3}		
AFS securities					
U.S. Treasury securities:					
Due within 1 year	\$ 16,311	\$ 16,030	1.2 %		
After 1 year through 5					
years	40,412	39,620	2.6 %		
After 5 years through					
10 years	1,761	1,755	4.0 %		
Total	58,484	57,405			
U.S. agency securities:					
Due within 1 year	23	23	(0.6)%		
After 1 year through 5					
years	397	375	1.6 %		
After 5 years through					
10 years	547	504	1.8 %		
After 10 years	24,885	22,426	3.6 %		
Total	25,852	23,328			
Agency CMBS:					
Due within 1 year	1	1	(2.2)%		
After 1 year through 5			(212)/0		
years	2,491	2,392	1.8 %		
After 5 years through		-			
10 years	2,176	2,043	2.0 %		
After 10 years	1,203	979	1.4 %		
Total	5,871	5,415			
State and municipal					
securities:					
Due within 1 year	27	28	5.2 %		
After 1 year through 5					
years	185	184	4.7 %		
After 5 years through					
10 years	6	9	4.1 %		
After 10 years	914	952	4.2 %		
Total	1,132	1,173			
FFELP student loan ABS:					
After 1 year through 5					
years	96	91	6.1 %		
After 5 years through					
10 years	99	95	6.0 %		
After 10 years	615	606	6.2 %		
Total	810	792			
Total AFS securities	92,149	88,113	2.6 %		
	,		/0		

At December 31, 2023				
		Annualized		
Amortized	Fair	Average		
Cost ¹	Value	Yield ²		
\$ 6,403	\$ 6,317	2.1 %		
12,059	11,497	1.8 %		
3,202	2,965	2.4 %		
1,558	1,158	2.3 %		
23,222	21,937			
6	6	1.8 %		
294	276	2.1 %		
40,594	32,913	1.8 %		
40,894	33,195			
30	30	2.5 %		
1,063	985	1.4 %		
117	99	1.4 %		
127	102	1.6 %		
1,337	1,216			
208	185	4.0 %		
343	321	4.6 %		
641	551	3.7 %		
49	48	5.7 %		
1,241	1,105			
66,694	57,453	1.9 %		
\$158,843	\$145,566	2.3 %		
	\$ 6,403 12,059 3,202 1,558 23,222 6 40,594 40,594 40,894 30 1,063 117 127 1,337 208 343 641 49 1,241 66,694	* 6,403 * 6,317 12,059 11,497 3,202 2,965 1,558 1,158 23,222 21,937 640,594 32,913 40,894 33,195 30 30 1,063 985 117 99 127 102 1,337 1,216 208 185 343 321 641 551 49 48 1,241 1,105		

- 1. Amounts are net of any ACL.
- Annualized average yield is computed using the effective yield, weighted based on the amortized cost of each security. The effective yield is shown pre-tax and excludes the effect of related hedging derivatives.
- At December 31, 2023, the annualized average yield, including the interest rate swap accrual of related hedges, was 1.6% for AFS securities contractually maturing within 1 year and 3.6% for all AFS securities.

Notes to Consolidated Financial Statements

The risk related to a decline in the market value of collateral pledged or received is managed by setting appropriate marketbased margin requirements. Increases in collateral margin calls on secured financing due to market value declines may be mitigated by increases in collateral margin on securities purchased under agreements to resell and securities borrowed transactions with similar quality collateral. Additionally, the Firm may request lower quality collateral pledged be replaced with higher quality collateral through collateral substitution rights in the underlying agreements.

The Firm actively manages its secured financings in a manner that reduces the potential refinancing risk of secured financings of less liquid assets and also considers the quality of collateral when negotiating collateral eligibility with counterparties. The Firm utilizes shorter term secured financing for highly liquid assets and has established longer tenor limits for less liquid assets, for which funding may be at risk in the event of a market disruption.

Offsetting of Certain Collateralized Transactions

For information related to offsetting of derivatives, see Note 6.

Gross Secured Financing Balances by Remaining Contractual Maturity

		At Dec	ember 31	, 2023	
	Overnight	Less than	30-90	Over 90	
\$ in millions	and Open	30 Days	Days	Days	Total
Securities					
sold under					
agreements					
to					
repurchase	\$ 80,376	\$114,826	\$25,510	\$31,441	\$252,153
Securities					
loaned	21,508	1,345	709	12,857	36,419
Total					
included in					
the					
offsetting					
disclosure	\$101,884	\$116,171	\$26,219	\$44,298	\$288,572
Trading					
liabilities—					
Obligation					
to return					
securities					
received					
as collateral	13,528		_		13,528
Total	\$115,412	\$116,171	\$26,219	\$44,298	\$302,100

Transactio	ne										
ii aii saccio	,,,,							At Dec	ember 31,	2022	
		At Dec	ember 31,	2023		0	vernight	Less than	30-90	Over 90	
			Balance		\$ in millions	aı	nd Open	30 Days	Days	Days	Total
	Gross	Amounts	Sheet Net	Amounts	Net Securities						
\$ in millions	Amounts	Offset	Amounts	Not Offset ¹	Amounts sold under						
Assets					agreements						
Securities					to						
purchased					repurchase	\$	54,551	\$ 77,359	\$ 20,586	\$ 36,486	\$ 188,982
under					Securities						
agreements					loaned		15,150	882	1,984	9,629	27,645
to resell	\$300,242	\$(189,502)	\$110,740	\$(108,893)	\$ 1,847 lotal						
Securities					included in						
borrowed	142,453	(21,362)	121,091	(115,969)	5,12 2e						
Liabilities					offsetting						
Securities					disclosure	\$	69,701	\$ 78,241	\$ 22,570	\$ 46,115	\$ 216,627
sold under					Trading						
agreements					liabilities—						
to					Obligation						
repurchase	\$252,153	\$(189,502)	\$ 62,651	\$ (58,357)	\$ 4,294 return						
Securities					securities						
loaned	36,419	(21,362)	15,057	(15,046)	received as ${f 11}$						
Not one or	- -				collateral		22,880	_	_	_	22,880
Net amount	s for Which	n master ne	tting agree	ements are	not in Total		92,581		\$ 22,570		

Notes to Consolidated Financial Statements

loaned, other secured financings and derivatives and to cover customer short sales. Counterparties may or may not have the right to sell or repledge the collateral.

Pledged financial instruments that can be sold or repledged by the secured party are identified as Trading assets (pledged to various parties) in the balance sheet.

Fair Value of Collateral Received with Right to Sell or Repledge

		At	At
	D	ecember	December
\$ in millions	3	31, 2023	31, 2022
Collateral received with right to	_	725 020	¢ 627.041
sell or repledge	\$	735,830	\$ 637,941
Collateral that was sold or			
repledged ¹		553,386	486,820

 Does not include securities used to meet federal regulations for the Firm's U.S. broker-dealers.

The Firm receives collateral in the form of securities in connection with securities purchased under agreements to resell, securities borrowed, securities-for-securities transactions, derivative transactions, customer margin loans and securities-based lending. In many cases, the Firm is permitted to sell or repledge this collateral to secure securities sold under agreements to repurchase, to enter into securities lending and derivative transactions or to deliver to counterparties to cover short positions.

Securities Segregated for Regulatory Purposes

	At			At
	December			December
\$ in millions	31, 2023			31, 2022
Segregated securities ¹	\$	20,670	\$	32,254

 Securities segregated under federal regulations for the Firm's U.S. broker-dealers are sourced from Securities purchased under agreements to resell and Trading assets in the balance sheet.

Concentration Based on the Firm's Total

At	At
December	December
31, 2023	31, 2022

U.S. government and agency securities and other

Customer Margin and Other Lending

		At	At
	D	ecember	December
\$ in millions	3	1, 2023	31, 2022
Margin and other lending	\$	45,644	\$ 38,524

The Firm provides margin lending arrangements that allow customers to borrow against the value of qualifying securities. Receivables from arrangements are included within Customer and other receivables in the balance sheet. Under these arrangements, the Firm receives collateral, which includes U.S. government and agency securities, other government obligations, sovereign corporate and other debt, and corporate equities. Margin loans are collateralized by customer-owned securities held by the Firm. The Firm monitors required margin levels and established credit terms daily and, pursuant to such guidelines, requires customers to deposit additional collateral, or reduce positions, when necessary.

Margin loans are extended on a demand basis and generally are not committed facilities. Factors considered in the review of margin loans are the amount of the loan, the intended purpose, the degree of leverage being employed in the account and the amount of collateral, as well as an overall evaluation of the portfolio to ensure proper diversification or, in the case of concentrated positions, appropriate liquidity of the underlying collateral or potential hedging strategies to reduce risk. Underlying collateral for margin loans is reviewed with respect to the liquidity of the proposed collateral positions, valuation of securities, historic trading range, volatility analysis and an evaluation of industry concentrations. For these transactions, adherence to the Firm's collateral policies significantly limits its credit exposure in the event of a customer default. The Firm may request additional margin collateral from customers, if appropriate, and, if necessary, may sell securities that have not been paid for or purchase securities sold but not delivered from customers.

Also included in the amounts in the previous table is non-purpose securities-based lending on entities in the Wealth

Notes to Consolidated Financial Statements

9. Loans, Lending Commitments and Related Allowance for Credit Losses

The Firm's held-for-investment and held-forsale loan portfolios consist of the following types of loans:

- Corporate. Corporate includes revolving lines of credit, term loans and bridge loans made to corporate entities for a variety of purposes.
- Secured Lending Facilities. Secured lending facilities include loans provided to clients, which are collateralized by various assets, including residential and commercial real estate mortgage loans, investor commitments for capital calls, corporate loans and other assets.
- Commercial Real Estate. Commercial real estate loans include owner-occupied loans and income-producing loans.
- Residential Real Estate. Residential real estate loans mainly include nonconforming loans and HELOC.
- Securities-based Lending and Other. Securities-based lending includes loans that allow clients to borrow money against the value of qualifying securities, generally for any suitable purpose other than purchasing, trading, or carrying securities or refinancing margin debt. The majority of these loans are structured as revolving lines of credit. Other primarily includes certain loans originated in the tailored lending business within the Wealth Management business segment.

Loans by Type

	At December 31, 2023								
\$ in millions	F	IFI Loans	Н	FS Loans	Т	otal Loans			
Corporate	\$	6,758	\$	11,862	\$	18,620			
Secured lending									
facilities		39,498		3,161		42,659			
Commercial real estate		8,678		209		8,887			
Residential real estate		60,375		22		60,397			
Securities-based									
lending and Other									
loans		89,245		1		89,246			
Total loans		204,554		15,255		219,809			
ACL		(1,169)				(1,169)			
Total loans, net	\$	203,385	\$	15,255	\$	218,640			
Loans to non-U.S.									
borrowers, net	\$	21,152	\$	5,043	\$	26,195			

Loans by Interest Rate Type

	At Dece	mber 31,	At Dece	At December 31,			
	20	023	20	022			
		Floating or		Floating or			
		Adjustable	Fixed	Adjustable			
\$ in millions	Fixed Rate	Rate	Rate	Rate			
Corporate	\$ —	\$ 18,620	\$ -	\$ 17,223			
Secured lending							
facilities	_	42,659	_	38,782			
Commercial real							
estate	141	8,746	204	9,237			
Residential real							
estate	28,934	31,464	24,903	29,561			
Securities-based							
lending and							
Other loans	23,922	65,323	24,077	70,637			
Total loans,							
before ACL	\$ 52,997	\$166,812	\$ 49,184	\$165,440			

See Note 4 for further information regarding Loans and lending commitments held at fair value. See Note 14 for details of current commitments to lend in the future.

Credit Quality

The CRM evaluates new obligors before credit transactions are initially approved and at least annually thereafter for corporate and commercial real estate loans. For Corporate, Secured lending facilities and Other loans, credit evaluations typically involve the evaluation of financial assessment of leverage, statements, liquidity, capital strength, asset composition and quality, market capitalization and access to capital markets, cash flow projections and debt service requirements, and the adequacy of collateral, applicable. The CRM also evaluates market position, strategy, industry dynamics, obligor's management and other factors that could affect an obligor's risk profile.

For Commercial real estate loans, the credit evaluation is focused on property and transaction metrics, including property type, LTV ratio, occupancy levels, debt service ratio, prevailing capitalization rates and market dynamics.

For Residential real estate and Securities-

Notes to Consolidated Financial Statements

Loans Held for Investment before Allowance by Origination Year

	At Dec	ember 3	1, 2023	At Dec	ember 3	1, 2022
			Corpo	rate		
\$ in						-
millions	IG	NIG	Total	IG	NIG	Total
Revolving		\$3,863	\$6,213	\$2,554	\$3,456	\$6,010
2023	_	88	88			
2022	_	166	166	6	107	113
2021	15	89	104	_	139	139
2020	29	25	54	_	58	58
2019	_	133	133	_	154	154
Prior	_	_	_	115	_	115

At December 31, 2023

		Othe		
	Securities-			
	based	IG	NIG	
\$ in millions	Lending ¹			Total
Revolving	\$ 71,474	\$ 5,230 \$	1,362	\$ 78,066
2023	1,612	627	346	2,585
2022	1,128	816	804	2,748
2021	165	330	377	872
2020	_	435	414	849
2019	13	769	628	1,410
Prior	202	1,327	1,186	2,715
Total	\$ 74,594	\$ 9,534 \$	5,117	\$ 89,245

Total **\$2,394 \$4,364 \$6,758** \$2,675 \$3,914 \$6,589

_	At Dec	cember 3	1, 2023	At De	cember 31	1, 2022 ———— \$ i n r
_		Sed	cured Lend	ing Facilit	ies	Revo
\$ in						Revo
millions	IG	NIG	Total	IG	NIG	202: Total
Revolving						202
	\$ 9,494	\$22,240	\$31,734	\$ 9,445	\$21,243	\$30,688202
2023	1,535	1,459	2,994			2019
2022	392	2,390	2,782	1,135	1,336	2,47 þ _{rior}
2021	_	365	365	254	208	46 7 ota
2020	_	80	80	_	98	98
2019	60	333	393	60	486	IG—I 546 NIG–
Prior	296	854	1,150	215	1,126	1,341 Se
Total						pr
iotui						th.

At December 31, 2022 Other²

2022			based		IG		NIG		
2022	\$ in millions		Lending ¹						Total
	Revolving	\$	77,115	\$	5,760	\$	1,480	\$	84,355
Total	2022		1,425		1,572		269		3,266
1000	2021		725		525		223		1,473
\$30,68	2 020		_		580		418		998
	2019		16		913		644		1,573
2,47	Prior		202		1,849		950		3,001
46	र्वेotal	\$	79,483	\$	11,199	\$	3,984	\$	94,666
9 54			Grade tment Grade						
1,34	1. Securities	s-ba	ised loans a	ire	subject 1	0	collateral	m	aintenance

Securities-

rovisions, and at December 31, 2023 and December 31, 2022, **\$11,777 \$27,721 \$39,498** \$11,109 \$24,497 \$35,606 ^{these} loans are predominantly over-collateralized. For more information on the ACL methodology related to securities-based loans, see Note 2.

> 2. Other loans primarily include tailored lending. For a further discussion of Other loans, see "Quantitative and Qualitative Disclosures about Risk—Credit Risk" herein.

At December 31, 2023 At December 31, 2022

_	Commercial Real Estate							
\$ in								
millions	IG	NIG	Total	IG	NIG	Total		
Revolving	\$ —	\$ 170	\$ 170	\$ -	\$ 204	\$ 204		
2023	261	1,067	1,328					
2022	284	1,900	2,184	379	2,201	2,580		
2021	370	1,494	1,864	239	1,609	1,848		
2020	_	756	756	_	728	728		
2019	195	1,369	1,564	659	1,152	1,811		
Prior	_	812	812	211	1,133	1,344		
Total	\$1,110	\$7,568	\$8,678	\$1,488	\$7,027	\$8,515		

Past Due Loans Held for Investment before Allowance¹

\$ in millions	At D	ecember 31, 2023	At December 31, 2022
Corporate	\$	47 \$	112
Secured lending facilities		_	85
Commercial real estate		185	_
Residential real estate		160	158

At December 31, 2023

Securities-based

Notes to Consolidated Financial Statements

aforementioned modifications. Modified loans are typically evaluated individually for allowance for credit losses. As of December 31, 2023, there were no loans held for investment modified in the current year with subsequent default.

Modified Loans Held for Investment

Modified during the year ended December 31, 20231

	At December 31, 2023								
\$ in millions		Amortized Cost	% of Total Loans ²						
		Term Ex	tension						
Corporate	\$	183	2.7 %						
Commercial real									
estate		199	2.3 %						
Residential real									
estate		1	0.1 %						
Securities-based									
lending and Othe	r								
loans		145	0.2 %						
Total	\$	528							

	Other	Other-than-insignificant Payment							
		Delay							
Securities-bas	sed								
lending and	Other								
loans	\$	71	0.1 %						
Total	\$	71							

		Combination - Multiple Modifications ³	
Commercial real estate	\$	24	0.3 %
Residential real	•	_	
estate Total	\$	25	<u>- %</u>

- 1. Lending commitments to borrowers for which the Firm modified terms of the receivable were \$1,062 million as of December 31, 2023.
- 2. Percentage of total loans represents the percentage of modified loans to total loans held for investment by loan type.
- ${\bf 3. \ \ Combination \ \ Multiple \ Modifications \ primarily \ includes \ loans \ with}$ Term extension and Other-than-insignificant payment delay.

Financial Impact on Modified Loans Held for Investment

Modified during the year ended December 31, 20231

Corporate

Term Extension
Added 1 year, 10 months to the life of
the modified loan(s)

At December 31, 2023

Gross Charge-offs by Origination Year

			Year Ended December 31, 2023										
				Se	cured			Re	esident	ia	l S	BL	
\$	in			Le	nding				Real		а	nd	
millions		Coi	porate	Fac	cilities		CRE		Estate	!	O	ther	Total
Revolvi	ng												
		\$	(34)	\$		\$	_	\$		_	\$	_	\$ (34)
2020			_		_		_			_		(3)	(3)
2019			_		_		(85)			_		(1)	(86)
Prior													
			_		_		(44)			_		_	 (44)
Total													
		\$	(34)	\$	_	\$	(129)	\$		_	\$	(4)	\$ (167)

CRE—Commercial real estate

SBL—Securities-based lending

Allowance for Credit Losses Rollforward and

Allowanc Allocation								
			Year	Ended D	ece	mber 3	1, 2023	
	Secured Residential					ı		
			Lending	g		Real	SBL and	t
\$ in millions	Со	rporate	Facilitie	s CRE		Estate	Other	Total
ACL—								
Loans								
Beginning								
balance	\$	235	\$ 153	\$ 275	\$	87	\$ 89	\$ 839
Gross								
charge-								
offs		(34)	_	(129)		_	(4)	(167)
Recoveries		1	_	_		1	_	2
Net								
(charge-								
offs)								
recoveries		(33)	_	(129)		1	(4)	(165)
Provision								
(release)		37	_	314		13	124	488
Other		2	_	3		(1)	3	7
Ending								
balance	\$	241	\$ 153	\$463	\$	100	\$212	\$1,169
Percent of								
loans to								
total								
loans ¹		3 %	19 %	6 4 9	%	30 %	6 44 %	6 100 %
ACL—Lendi	ing	comm	itments	5				
Beginning								
balance	\$	411	\$ 51	\$ 15	\$	4	\$ 23	\$ 504
Provision								
(release)		16	18	11		_	(1)	44

1

(2)

3

Ending

Other

Notes to Consolidated Financial Statements

	Year Ended December 31, 2021										
			S	ecured			Re	esidential	SBL		
\$ in			L	ending				Real	and		
millions	Co	orporate	Fa	cilities	(CRE		Estate	Other		Total
ACL—											
Loans											
Beginning											
balance	\$	309	\$	198	\$2	211	\$	59	\$58	\$	835
Gross											
charge-											
offs		(23)		(67)	((27)		(1)	(8)		(126)
Provision											
(release)		(119)		34		25		1	11		(48)
Other		(2)		(2)		(3)		1	(1)		(7)
Ending											
balance	\$	165	\$	163	\$2	206	\$	60	\$60	\$	654
Percent of											
loans to											
total											
loans ¹		3 %		18 %		4 %		25 %	50 %		100 %
ACL—Len	di	ng com	m	itment	s						
Beginning											·
balance	\$	323	\$	38	\$	11	\$	1	\$23	\$	396
Provision											
(release)		37		2		10		_	3		52
Other		(4)		1		(1)		_	_		(4)
Ending											
balance	\$	356	\$	41	\$	20	\$	1	\$26	\$	444
Total											
ending											
balance	\$	521	\$	204	\$2	26	\$	61	\$86	\$:	1,098

 Percent of loans to total loans represents loans held for investment by loan type to total loans held for investment.

The allowance for credit losses for loans and lending commitments increased in 2023, primarily related to deteriorating conditions in the commercial real estate sector, including provisions for certain specific loans, mainly in the office portfolio, and modest growth in certain other loan portfolios. Charge-offs in 2023 were primarily related to Commercial real estate and Corporate loans. The base scenario used in our ACL models as of December 31, 2023 was generated using a combination of consensus economic forecasts, forward rates, and internally developed validated models, and assumes economic growth in 2024, followed by a gradual improvement in 2025. Given the nature of our lending portfolio, the most

Employee loans are granted in conjunction with a program established primarily to recruit certain Wealth Management financial advisors, are full recourse and generally require periodic repayments, and are due in full upon termination of employment with the Firm. These loans are recorded in Customer and other receivables in the balance sheet. See Note 2 for a description the CECL of allowance methodology, including credit quality indicators, for employee loans.

10. Goodwill and Intangible Assets

Goodwill Rollforward

\$ in millions	IS	W	M		IM		Total
At December 31, 2021 ¹ \$	475	\$ 10,	.325	\$	6,033	\$	16,833
Foreign currency	(39)		(7)		(12)		(58)
Disposals	(7)	(116)		_		(123)
At December 31, 2022¹ \$	429	\$ 10,	202	\$	6,021	\$	16,652
Foreign currency	(5)		2		7		4
Acquired	_		_		56		56
Disposals	_		(5)		_		(5)
At December 31,							
20231 \$	424	\$10,	199	\$	6,084	\$	16,707
Accumulated							
impairments ² \$	673	\$	_	\$	27	\$	700
1. Balances represent the	amou	ınt of	the	Fir	m's a	າດເ	dwill afte

- Balances represent the amount of the Firm's goodwill after accumulated impairments.
- 2. There were no impairments recorded in 2023, 2022 or 2021.

Intangible Assets Rollforward

\$ in millions	IS	WM	IM	Total
At December 31, 2021	\$ 104	\$ 4,463	\$ 3,793	\$ 8,360
Acquired	23	41	_	64
Disposals	(75)	(106)	_	(181)
Amortization expense	(16)	(483)	(111)	(610)
Other	_	(4)	(11)	(15)
At December 31, 2022	\$ 36	\$ 3,911	\$ 3,671	\$ 7,618
Acquired	_	9	37	46
Disposals	_	(13)	_	(13)
Amortization expense	(10)	(481)	(110)	(601)
Other	_	1	4	5
At December 31, 2023	\$ 26	\$ 3,427	\$ 3,602	\$ 7,055

Intangible Assets by Type

Notes to Consolidated Financial Statements

Intangible Assets Estimated Future Amortization Expense

	At				
	Dece	mber 31,			
\$ in millions	2	2023			
2024	\$	600			
2025		455			
2026		348			
2027		343			
2028		337			

The Firm's annual goodwill and non-amortizable intangible asset impairment testing as of July 1, 2023 did not indicate any impairment. For more information, see Note 2.

11. Other Assets—Equity Method Investments and Leases

Equity Method Investments

	At At
	December December
\$ in millions	31, 2023 31, 2022
Investments	\$ 1,915 \$ 1,927
\$ in millions	2023 2022 2021
Income (loss)	\$ 124 \$ 39 \$ 104

Equity method investments, other than investments in certain fund interests, are summarized above and are included in Other assets in the balance sheet with related income or loss included in Other revenues in the income statement. See "Net Asset Value Measurements—Fund Interests" in Note 4 for the carrying value of certain of the Firm's fund interests, which are composed of general and limited partnership interests, as well as any related carried interest.

Japanese Securities Joint Venture

\$ in millions	2	2023	2022	2021
Income (loss) from investment				
in MUMSS	\$	129	\$ 35	\$ 168

The Firm and Mitsubishi UFJ Financial Group, Inc. ("MUFG") formed a joint venture in Japan comprising their respective investment banking and securities businesses by forming two joint venture

available to unrelated third parties for comparable transactions.

Leases

The Firm's leases are principally noncancelable operating real estate leases.

Balance Sheet Amounts Related to Leases

		At		At
	D	ecember	Dec	ember 31,
\$ in millions	3	31, 2023		2022
Other assets—ROU assets	\$	4,368	\$	4,073
Other liabilities and accrued				
expenses—Lease liabilities		5,417		4,901
Weighted average:				
Remaining lease term, in				
years		8.7		8.6
Discount rate		4.0 %	, D	3.3 %

Lease Liabilities

	At			At	
	De	ecember	[December	
\$ in millions	3	1, 2023		31, 2022	
2023			\$	870	
2024	\$	913		785	
2025		846		673	
2026		774		604	
2027		716		548	
2028		644		462	
Thereafter		2,637		1,747	
Total undiscounted cash flows		6,530		5,689	
Imputed interest		(1,113)		(788)	
Amount on balance sheet	\$	5,417	\$	4,901	
Committed leases not yet					
commenced	\$	248	\$	970	

Lease Costs

\$ in millions	2023	2022	2021
Fixed costs	\$ 938 \$	841 \$	852
Variable costs ¹	206	170	187
Less: Sublease income	(10)	(7)	(6)
Total lease cost, net	\$ 1,134 \$	1,004 \$	1,033

 Includes common area maintenance charges and other variable costs not included in the measurement of ROU assets and lease liabilities.

Cash Flows Statement Supplemental Information

Notes to Consolidated Financial Statements

12. Deposits

Deposits

	At December			At
			-	December
		31,		31,
\$ in millions		2023		2022
Savings and demand deposits	\$	288,252	\$	319,948
Time deposits		63,552		36,698
Total deposits	\$	351,804	\$	356,646
Deposits subject to FDIC				
insurance	\$	276,598	\$	260,420
Deposits not subject to FDIC				
insurance	\$	75,206	\$	96,226

Time Deposit Maturities

		At
	D	ecember
\$ in millions	3	1, 2023
2024	\$	33,649
2025		16,220
2026		5,726
2027		3,757
2028		3,708
Thereafter		492
Total	\$	63,552

Uninsured Non-U.S. Time Deposit Maturities

		At			
	De	December			
\$ in millions	3:	1, 2023			
Less than 3 months	\$	1,602			
3 - 6 months		540			
6 - 12 months		381			
Over 12 months		48			
Total	\$	2,571			

Deposits in U.S. Bank Subsidiaries from Non-U.S. Depositors

	At	December	At December	
\$ in millions	3	1, 2023	31, 2022	
Deposits in U.S. bank				
subsidiaries from non-U.S.				
depositors	\$	880	\$ 1,220)

13. Borrowings and Other Secured Financings

Maturities and Terms of Borrowings

	_ F	Parent Co	mp	oany		Subsidiaries		_		
									At	At
	Fix	ed Rate ¹		ariable	-	Fixed	Variable		ecember	December
\$ in millions				Rate ²	-	Rate ¹	Rate ²		1, 2023	
									1, 2023	31, 2022
Original r	nat	urities	of	one y	ear	or les	5:			
Next 12										
months	\$	_	\$	_	\$	84	\$ 3,104	\$	3,188	\$ 4,191
Original r	nat	urities	are	ater	tha	n one	vear:			
_			•							
2023										\$ 18,910
2024	\$	8,526	\$	389	\$	607	\$10,629	\$	20,151	29,842
2025		18,994	3	3,036		2,655	10,838		35,523	30,235
2026		23,038	1	L,478		3,764	7,143		35,423	28,998
2027		18,935		347		973	5,083		25,338	23,561
2028		11,058		374		622	9,185		21,239	15,698
Thereafter		87,841	2	2,794		9,392	22,843		122,870	86,623
Total										
greater										
than one										
year	\$1	68,392	\$8	3,418	\$1	8,013	\$65,721	\$	260,544	\$233,867
Total	\$1	68,392	\$8	3,418	\$1	8,097	\$68,825	\$	263,732	\$238,058
Weighted										
average										
coupon a	t									
period er	nd ³	3.5 9	%	6.1	%	5.2 %	N/M		3.6 %	3.2 %

- Fixed rate borrowings include instruments with step-up, stepdown and zero coupon features.
- 2. Variable rate borrowings include those that bear interest based on a variety of indices, including SOFR and federal funds rates, in addition to certain notes carried at fair value with various payment provisions, including notes linked to the performance of a specific index, a basket of stocks, a specific equity security, a commodity, a credit exposure or basket of credit exposures.
- 3. Only includes borrowings with original maturities greater than one year. Weighted average coupon is calculated utilizing U.S. and non-U.S. dollar interest rates and excludes financial instruments for which the fair value option was elected. Virtually all of the variable rate notes issued by subsidiaries are carried at fair value so a weighted average coupon is not meaningful.

Borrowings with Original Maturities Greater than One Year

	At	At
	December	December
\$ in millions	31, 2023	31, 2022
Senior	\$ 248,174	\$ 221,667

Notes to Consolidated Financial Statements

revenues. See Notes 2 and 5 for further information on borrowings carried at fair value.

Senior Debt Subject to Put Options or Liquidity Obligations

	At			At	
	December			December	
\$ in millions	3	1, 2023	3	31, 2022	
Put options embedded in debt					
agreements	\$	1,571	\$	496	
Liquidity obligations ¹	\$	3,166	\$	2,423	

1. Includes obligations to support secondary market trading.

Subordinated Debt

	2023	2022
Contractual weighted average		
coupon	4.3 %	4.1 %

Subordinated debt generally is issued to meet the capital requirements of the Firm or its regulated subsidiaries and primarily is U.S. dollar denominated. Maturities of subordinated debt range from 2025 to 2038.

Rates for Borrowings with Original Maturities Greater than One Year

	At December 31,		
	2023	2022	2021
Contractual weighted average			
coupon ¹	3.6 %	3.2 %	2.7 %
Weighted average coupon after			
swaps	6.5 %	5.1 %	1.6 %

 Weighted average coupon was calculated utilizing U.S. and non-U.S. dollar interest rates and excludes financial instruments for which the fair value option was elected.

In general, other than securities inventories and customer balances financed by secured funding sources, the majority of the Firm's assets are financed with a combination of deposits, short-term funding, floating rate long-term debt or fixed rate long-term debt swapped to a floating rate. The Firm uses interest rate swaps to more closely match these borrowings to the duration, holding period and interest rate characteristics of the assets being funded and to manage interest rate risk. These swaps effectively convert certain of the Firm's fixed rate borrowings into floating rate obligations. In

Maturities and Terms of Other Secured Financings¹

	_	At C	ecember	31, 202	3	
						At
					D	ecember
	F	ixed	Variable	!		31,
\$ in millions	F	Rate	Rate ²	Tota	l	2022
Original maturit	ies	of o	ne year o	r less:		
Next 12 months	\$	8	\$ —	\$ 8	3 \$	501
Original maturit	ies	grea	ater than	one yea	r:	
2023					\$	5,200
2024	\$	_	\$ 5,085	\$ 5,085	5	343
2025		_	95	95	5	131
2026		5	87	92	2	2
2027		_	_	_	-	_
2028		_	434	434	1	_
Thereafter		7	1,086	1,093	3	862
Total	\$	12	\$ 6,787	\$ 6,799	\$	6,538
Weighted average	- 					
coupon at						
period-end ³		N/M	5.6	% 5.6	5 %	4.9 %

- Excludes transfers of assets accounted for as secured financings.
 See subsequent table.
- Variable rate other secured financings bear interest based on a variety of indices, including SOFR and federal funds rates.
 Amounts include notes carried at fair value with various payment provisions, including notes linked to equity, credit, commodity or other indices
- 3. Includes only other secured financings with original maturities greater than one year. Weighted average coupon is calculated utilizing U.S. and non-U.S. dollar interest rates and excludes other secured financings that are linked to non-interest indices and for which the fair value option was elected.

Other secured financings include the liabilities related to collateralized notes, transfers of financial assets that are accounted for as financings rather than sales and consolidated VIEs where the Firm is deemed to be the primary beneficiary. These liabilities are generally payable from the cash flows of the related assets accounted for as Trading assets. See Note 15 for further information on other secured financings related to VIEs and securitization activities.

Maturities of Transfers of Assets Accounted for as Secured Financings¹

At At

December December

Notes to Consolidated Financial Statements

14. Commitments, Guarantees and Contingencies

Commitme	nts				to a diverse group of corporate and other institutional clients.	
Years to Maturity at D 2023				nber 31,	Investment Activities. The Firm sponsors	
\$ in millions	Less than 1	1-3	3-5	Over 5	management funds for third-party investors	
Lending: Corporate	\$ 17,036	\$36,214	\$54,411	\$ 1,134	and investment adviser to, these funds and \$108,79\$ ypically commits to invest a minority of the	
Secured lending facilities	8,043	5,936	3,466	2,424	capital of such funds, with subscribing third- party investors contributing the majority. _{19,869} The Firm has contractual capital commitments, guarantees and counterparty	
Commercial and Residential					arrangements with respect to these investment management funds.	
Securities- based lending and Other	217 16,483	3,488	319	352 394	Guarantees. The Firm has outstanding letters of credit and other financial guarantees issued by third-party banks to	
Forward- starting secured financing receivables ¹	60,261				Firm is contingently liable for these letters of credit and other financial guarantees, which are primarily used to provide collateral for securities and commodities 60,261 Traded and to satisfy various margin	
Central counterparty				14,910	requirements in lieu of depositing cash or securities with these counterparties.	
Investment	1 650	110	90	EE1	Guarantees	
Letters of credit and other financial guarantees	1,659 51	119	80	551	Maximum Potential Payout/Notional of Obligations by Years to Maturity	Carrying Amount
Total	\$104,050	\$45,802	\$58,304	\$19,771	1 \$227,927 \$-in millions Less than 1 1-3 3-5 Over 5 (Asset (Liability)
Lending comm	nitments pa	rticipated t	third par	ties	\$ 7.213	(44,539)
Forward-star settled within	_		j receivabl	es are ge	enerally Standby letters of credit and other financial guarantees issued ² 1,495 977 1,322 2,688	(2)

Underwriting

Commitments. The

provides underwriting commitments in connection with its capital raising sources

Firm

Since commitments associated with these instruments may expire unused, the amounts shown do not necessarily reflect the actual future cash funding requirements.

Types of Commitments

Lending Commitments. Lending commitments primarily represent the of notional amount legally binding

guarantees issued² 977 (2) 1,495 2,688 1,322 Market value guarantees 1 Liquidity facilities 2,092 (1) Whole loan sales guarantees 77 10 23,075 Securitization representations and warranties³ - 80,667 (3) General partner

Notes to Consolidated Financial Statements

accounting definition of a guarantee. For the effects of cash collateral and counterparty netting, see Note 6.

In certain situations, collateral may be held by the Firm for those contracts that meet the definition of a guarantee. Generally, the Firm sets collateral requirements by counterparty so that the collateral covers various transactions and products and is not allocated specifically to individual contracts. Also, the Firm may recover amounts related to the underlying asset delivered to the Firm under the derivative contract.

Standby Letters of Credit and Other Financial Guarantees Issued. Generally, in connection with its lending businesses, the Firm provides standby letters of credit and other financial quarantees counterparties. Such arrangements represent obligations to make payments to third parties if the counterparty fails to fulfill obligation under а borrowing arrangement or other contractual obligation. A majority of the Firm's standby letters of credit are provided on behalf of counterparties that are investment grade. If counterparty fails to fulfill contractual obligation, the Firm has access to collateral or recourse that would approximate its obligation.

Market Value Guarantees. Market value guarantees are issued to guarantee timely payment of a specified return to investors in certain affordable housing tax credit funds. These guarantees are designed to return an investor's contribution to a fund and the investor's share of tax losses and tax credits expected to be generated by a fund.

Liquidity Facilities. The Firm has entered into liquidity facilities with SPEs and other counterparties, whereby the Firm required to make certain payments if losses or defaults occur. Primarily, the Firm acts as liquidity provider to municipal securitization SPEs and for stand-alone municipal bonds in which the holders of beneficial interests issued by these SPEs or the holders of the individual bonds, respectively, have the right to tender their interests for purchase by the Firm on specified dates at a specified price. The Firm often may have recourse to the

the current UPB of those loans, and, accordingly, the amount included in the previous table represents the UPB at the time of the whole loan sale or at the time when the Firm last serviced any of those loans. The current UPB balances could be substantially lower than the maximum potential payout amount included in the previous table. The related liability primarily relates to sales of loans to the federal mortgage agencies.

Securitization Representations and part Firm's Warranties. As of the Institutional Securities business segment's securitizations and related activities, the Firm has provided, or otherwise agreed to be responsible for, representations and warranties regarding certain assets transferred in securitization transactions sponsored by the Firm. The extent and nature of the representations and warranties, if any, vary among different securitizations. Under circumstances, the Firm may be required to repurchase certain assets or make other payments related to such assets if such representations and warranties breached. The maximum potential amount of future payments the Firm could be required to make would be equal to the current outstanding balances of, or losses associated with, the assets subject to breaches of such representations and warranties. The amount included in the previous table for the maximum potential payout includes the current UPB historical losses where known and the UPB at the time of sale when the current UPB is not known.

General Partner Guarantees. As a general partner in certain investment management funds, the Firm receives distributions from the partnerships when the return exceeds specified performance targets according to the provisions of the partnership agreements. The Firm may be required to return all or a portion of such distributions to the limited partners in the event the limited partners do not achieve a certain return as specified in the various partnership agreements, subject to certain limitations.

Client Clearing Guarantees. The Firm is a

Notes to Consolidated Financial Statements

amount. The collateral amount in which the Firm has a security interest is approximately equal to the maximum potential payout amount of the guarantee.

Other Guarantees and Indemnities

In the normal course of business, the Firm provides guarantees and indemnifications a variety of transactions. These are provisions generally standard contractual terms. Certain of these guarantees and indemnifications are described below:

- Indemnities. The Firm provides standard indemnities to counterparties for certain contingent exposures and taxes, including U.S. and foreign withholding taxes, on interest and other payments made on derivatives, securities and stock lending transactions, certain annuity products and other financial arrangements. indemnity payments could be required based on a change in the tax laws, a change in interpretation of applicable tax change rulings or a in factual circumstances. Certain contracts contain provisions that enable the Firm to terminate the agreement upon the occurrence of such events. The Firm may also provide indemnities when it sells a business or assets to a third-party, pursuant to which it indemnifies the thirdparty for losses incurred on assets acquired or liabilities assumed or due to actions taken by the Firm prior to the sale of the business or assets. The Firm expects the risk of loss associated with indemnities related to the sale of businesses or assets to be remote. The maximum potential amount of future payments that the Firm could be required to make under these indemnifications cannot be estimated.
- Exchange/Clearinghouse Member Guarantees. The Firm is a member of various exchanges and clearinghouses that trade and clear securities and/or derivative contracts. Associated with its membership, the Firm may be required to pay a certain amount as determined by the exchange or the clearinghouse in case of a default of any of its members or pay a proportionate share of the financial obligations of another member that may

believes that any potential requirement to make payments under these agreements is remote.

 Merger and Acquisition Guarantees. The Firm may, from time to time, in its role as investment banking advisor be required to provide guarantees in connection with certain European merger and acquisition transactions. If required by the regulating authorities, the Firm provides a guarantee that the acquirer in the transaction has or will have sufficient funds to complete the transaction and would then be required to make the acquisition payments in the event the acquirer's funds are insufficient at the completion date of the transaction. These arrangements generally cover the time frame from the transaction offer date to its closing date and, therefore, are generally short term in nature. The Firm believes the likelihood of any payment by the Firm under these arrangements is remote given the level of its due diligence in its role as investment banking advisor.

In addition, in the ordinary course of business, the Firm guarantees the debt and/ or certain trading obligations (including obligations associated with derivatives, foreign exchange contracts and settlement of physical commodities) of subsidiaries. These guarantees generally are entity or product specific and are required by investors or trading counterparties. The activities of the Firm's subsidiaries covered by these guarantees (including any related debt or trading obligations) are included in the financial statements.

Finance Subsidiary

The Parent Company fully and unconditionally guarantees the securities issued by Morgan Stanley Finance LLC, a wholly owned finance subsidiary. No other subsidiary of the Parent Company guarantees these securities.

Contingencies

Legal

In addition to the matters described below, in the normal course of business, the Firm has been named, from time to time, as a

Notes to Consolidated Financial Statements

governmental and self-regulatory agencies regarding the Firm's business, involving, among other matters, sales, trading. financing, prime brokerage, market-making activities, investment banking advisory services, capital markets activities, financial products or offerings sponsored, underwritten or sold by the Firm, wealth and investment management services, and accounting and operational matters, certain of which may result in adverse judgments, settlements, fines, disgorgement, penalties, restitution, forfeiture, injunctions, limitations on our ability to conduct certain business, or other relief.

The Firm contests liability and/or the amount of damages as appropriate in each pending matter. Where available information indicates that it is probable a liability had been incurred at the date of the financial statements and the Firm can reasonably estimate the amount of that loss or the range of loss, the Firm accrues an estimated loss by a charge to income, including with respect to certain of the individual proceedings or investigations described below.

\$ in millions	2	2023	:	2022	2021
Legal expenses	\$	488	\$	443	\$ 157

The Firm's legal expenses can, and may in the future, fluctuate from period to period, given the current environment regarding government or self-regulatory agency investigations and private litigation affecting global financial services firms, including the Firm.

In legal proceedings many and investigations, it is inherently difficult to determine whether any loss is probable or reasonably possible, or to estimate the amount of any loss. In addition, even where the Firm has determined that a loss is probable or reasonably possible or an exposure to loss or range of loss exists in excess of the liability already accrued with respect to a previously recognized loss contingency, the Firm is often unable to reasonably estimate the amount of the loss or range of loss. It is particularly difficult to determine if a loss is probable or reasonably possible, or to estimate the amount of loss.

amount already accrued) to be reasonably possible. In many legal proceedings in which the Firm has determined that a material loss (or where an accrual has occurred, a material loss beyond the amount already accrued) is reasonably possible, the Firm is unable to reasonably estimate the loss or range of loss. There are other matters in which the Firm has determined a loss or range of loss to be reasonably possible, but the Firm does not believe, based on current knowledge and after consultation with counsel, that such losses could have a material adverse effect on the Firm's financial statements as a whole, although the outcome of such proceedings investigations or significantly impact the Firm's business or results of operations for any particular reporting period, or cause significant reputational harm.

While the Firm has identified below certain proceedings or investigations that the Firm believes to be material, individually or collectively, there can be no assurance that material losses will not be incurred from claims that have not yet been asserted or those where potential losses have not yet been determined to be probable or reasonably possible.

Block Trading Matter

On January 12, 2024, the U.S. Attorney's Office for the Southern District of New York ("USAO") and the SEC announced they had reached settlement agreements with the Firm in connection with their investigations into the Firm's blocks business. Specifically, the Firm entered into a three-year nonprosecution agreement ("NPA") with the USAO that included the payment of forfeiture, restitution, and a criminal fine for making false statements in connection with the sale of certain block trades from 2018 through August 2021. The NPA required the Firm to admit responsibility for certain acts of its employees and to continue to cooperate with and provide certain information to the USAO for the term of the agreement. Additionally, the SEC charged the Firm with violations of Section 10(b) of the Exchange Act and Rule 10b-5(b) thereunder for the disclosure of confidential information about block trades and also violations of Costian 15/a) of the F

Notes to Consolidated Financial Statements

Antitrust Related Matters

The Firm and other financial institutions are responding to a number of governmental investigations and civil litigation matters related to allegations of anticompetitive conduct in various aspects of the financial services industry, including the matters described below.

Beginning in February of 2016, the Firm was named as a defendant in multiple purported antitrust class actions now consolidated into a single proceeding in the United States District Court for the Southern District of New York ("SDNY") styled In Re: Interest Rate Swaps Antitrust Litigation. Plaintiffs allege, inter alia, that the Firm, together with a number of other financial institution defendants, violated U.S. and New York state antitrust laws from 2008 through December of 2016 in connection with their alleged efforts to prevent the development of electronic exchange-based platforms for interest rate swaps trading. Complaints were filed both on behalf of a purported class of investors who purchased interest rate swaps from defendants, as well as on behalf of three operators of swap execution facilities that allegedly were thwarted by the defendants in their efforts to develop such platforms. The consolidated complaints seek, among other relief, certification of the investor class of plaintiffs and treble damages. On July 28, 2017, the court granted in part and denied in part the defendants' motion to dismiss the complaints. On December 15, 2023, the court denied the class plaintiffs' motion for class certification. On December 29, 2023, the class plaintiffs petitioned the United States Court of Appeals for the Second Circuit for leave to appeal that decision.

In August of 2017, the Firm was named as a defendant in a purported antitrust class action in the United States District Court for the SDNY styled Iowa Public Employees' Retirement System et al. v. Bank of America Corporation et al. Plaintiffs allege, inter alia, that the Firm, together with a number of other financial institution defendants, violated U.S. antitrust laws and New York state law in connection with their alleged efforts to prevent the development of plactronic exchange based platforms. for

in the United States District Court for the SDNY under the caption City Philadelphia, et al. v. Bank of America Corporation, et al. Plaintiffs allege, inter alia, that the Firm, along with a number of other financial institution defendants, violated U.S. antitrust laws and relevant state laws in connection with alleged efforts to artificially inflate interest rates for Variable Rate Demand **Obligations** ("VRDO"). Plaintiffs seek, among other relief, treble damages. The class action complaint was filed on behalf of a class of municipal issuers of VRDO for which defendants served as remarketing agent. On November 2, 2020, the court granted in part and denied in part the defendants' motion to dismiss the consolidated complaint, dismissing state law claims, but denying dismissal of the U.S. antitrust claims. On September 21, 2023, the court granted plaintiffs' motion for class certification. On October 5, 2023. defendants petitioned the United States Court of Appeals for the Second Circuit for leave to appeal that decision, which was granted on February 5, 2024.

Qui Tam Matters

The Firm and other financial institutions are defending against qui tam litigations brought under various state false claims statutes, including the matter described below. Such matters may involve the same types of claims pursued in multiple jurisdictions and may include claims for treble damages.

On August 18, 2009, Relators Roger Hayes and C. Talbot Heppenstall, Jr., filed a qui tam action in New Jersey state court styled State of New Jersey ex. rel. Hayes v. Bank of America Corp., et al. The complaint, filed under seal pursuant to the New Jersey False Claims Act, alleged that the Firm and several other underwriters of municipal bonds had defrauded New Jersey issuers by misrepresenting that they would achieve the best price or lowest cost of capital in connection with certain municipal bond issuances. On March 17, 2016, the court entered an order unsealing the complaint. On November 17, 2017, Relators filed an amended complaint to allege the Firm mispriced certain bonds issued in twentyhand affarings batura

Notes to Consolidated Financial Statements

of approximately €124 million (approximately \$137 million) plus accrued interest of withholding tax credits against the Firm's corporation tax liabilities for the tax years 2007 to 2012. The Dutch Authority alleges that the Firm was not entitled to receive the withholding tax credits on the basis, inter alia, that a Firm subsidiary did not hold legal title to certain securities subject to withholding tax on the relevant dates. The Dutch Authority has also alleged that the Firm failed to provide certain information to the Dutch Authority and to keep adequate books and records. On April 26, 2018, the District Court in Amsterdam issued a decision dismissing the Dutch Authority's claims with respect to certain of the tax years in dispute. On May 12, 2020, the Court of Appeal in Amsterdam granted the Dutch Authority's appeal in matters re-styled Case number 18/00318 and Case number 18/00319. On January 19, 2024, the Dutch High Court granted the Firm's appeal in matters re-styled Case number 20/01884 and referred the case to the Court of Appeal in The Hague.

June 2021, Dutch criminal On 22, authorities sought various documents in connection with an investigation of the Firm related to the civil claims asserted by the Dutch Authority concerning the accuracy of the Firm subsidiary's tax returns and the maintenance of its books and records for 2007 to 2012. The Dutch criminal authorities have requested additional information, and the Firm is continuing to respond to them in connection with their ongoing investigation.

Danish Underwriting Matter

On October 5, 2017, various institutional investors filed a claim against the Firm and another bank in a matter now styled Case number B-803-18 (previously 99-6998/2017), in the City Court of Copenhagen, Denmark concerning their roles as underwriters of the initial public offering ("IPO") in March 2014 of the Danish company OW Bunker A/S. The claim seeks damages of approximately DKK529 million (approximately \$79 million) plus interest in respect of alleged losses arising from investing in shares in OW Bunker, which entered into bankruptcy in November 2014. February 4, 2019, the Firm filed its defense to the matter now styled Case number B-803-18.

U.K. Government Bond Matter

The Firm is engaging with the UK Competition and Markets Authority in investigation connection with its suspected anti-competitive arrangements in the financial services sector, specifically regarding the Firm's activities concerning certain liquid fixed income products between 2009 and 2012. On May 24, 2023, the U.K. Competition and Markets Authority issued a Statement of Objections setting out its provisional findings that the Firm had breached U.K. competition law by sharing competitively sensitive information connection with gilts and gilt asset swaps between 2009 and 2012. The Firm is contesting the provisional findings. Separately, on June 16, 2023, the Firm was named as a defendant in a purported antitrust class action in the United States District Court for the SDNY styled Oklahoma Firefighters Pension and Retirement System v. Deutsche Bank Aktiengesellschaft, et al., alleging, inter alia, that the Firm, together with a number of other financial institution defendants, violated U.S. antitrust laws in connection with their alleged effort to fix prices of gilts traded in the United States between 2009 and 2013. On September 28, 2023, the defendants filed a joint motion to dismiss the complaint, which has been fully briefed.

Other

On August 13, 2021, the plaintiff in Camelot Event Driven Fund, a Series of Frank Funds Trust v. Morgan Stanley & Co. LLC, et al. filed in the Supreme Court of the State of New York, New York County ("Supreme Court of NY") a purported class action complaint alleging violations of the federal securities laws against ViacomCBS ("Viacom"), certain of its officers and directors, and the underwriters, including the Firm, of two March 2021 Viacom offerings: a \$1.7 billion Viacom Class B Common Stock offering and a \$1 billion offering of 5.75% Series A Mandatory Convertible Preferred Stock (collectively, the "Offerings"). The complaint alleges, inter alia. that the Viacom offering

Notes to Consolidated Financial Statements

Firm and the other underwriters, but granted the motion to dismiss as to Viacom and the Viacom individual defendants. On February 15, 2023, the underwriters, including the Firm, filed their notices of appeal of the denial of their motions to dismiss. On March 10, 2023, the plaintiff appealed the dismissal of Viacom and the individual Viacom defendants. On January 4, 2024, the court granted the plaintiff's motion for class certification. On February 14, 2024, the defendants filed their notice of appeal.

On May 17, 2013, the plaintiff in IKB International S.A. in Liquidation, et al. v. Morgan Stanley, et al. filed a complaint against the Firm and certain affiliates in the Supreme Court of NY. The complaint alleges defendants made material misrepresentations and omissions in the sale to plaintiff of certain mortgage passthrough certificates backed securitization trusts containing residential mortgage loans. The total amount of allegedly certificates sponsored, underwritten and/or sold by the Firm to plaintiffs was approximately \$133 million. The complaint alleges causes of action against the Firm for common law fraud, fraudulent concealment, aiding and abetting fraud, negligent and misrepresentation, and seeks, among other compensatory and damages. On October 29, 2014, the court granted in part and denied in part the Firm's motion to dismiss. All claims regarding four certificates were dismissed. After these dismissals, the remaining amount of certificates allegedly issued by the Firm or sold to plaintiffs by the Firm was approximately \$116 million. On August 11, 2016, Appellate Division, the First Department affirmed the trial court's order denying in part the Firm's motion to dismiss the complaint. On July 15, 2022, the Firm filed a motion for summary judgment on all remaining claims. On March 1, 2023, the court granted in part and denied in part the Firm's motion for summary judgment, narrowing the alleged misrepresentations at issue in the case. On March 14, 2023, the Firm filed its notice of appeal, and on March 21, 2023, plaintiffs filed their notice of cross appeal.

Variable Interest

m's motion to dismiss. All claims

Garding four certificates were dismissed.

CDOs for which it does not act as the consolidate securitizations or consolid

- Guarantees issued and residual interests retained in connection with municipal bond securitizations.
- Loans made to and investments in VIEs that hold debt, equity, real estate or other assets.
- Derivatives entered into with VIEs.
- Structuring of CLNs or other assetrepackaging notes designed to meet the investment objectives of clients.
- Other structured transactions designed to provide tax-efficient yields to the Firm or its clients.

The Firm determines whether it is the primary beneficiary of a VIE upon its initial involvement with the VIE and reassesses whether it is the primary beneficiary on an ongoing basis as long as it has any continuing involvement with the VIE. This determination is based upon an analysis of the design of the VIE, including the VIE's structure and activities, the power to make significant economic decisions held by the Firm and by other parties, and the variable interests owned by the Firm and other parties.

The power to make the most significant economic decisions may take a number of different forms in different types of VIEs. The Firm considers servicing or collateral management decisions as representing the power to make the most significant economic decisions in transactions such as securitizations or CDOs. As a result, the servicer or collateral manager unless it holds certain other rights to replace the servicer or collateral manager or to require the liquidation of the entity. If the Firm serves as servicer or collateral manager, or has certain other rights described in the previous sentence, the Firm analyzes the interests in the VIE that it holds and consolidates only those VIEs for which it holds a potentially significant interest in the VIE.

For many transactions, such as resecuritization transactions, CLNs and other asset-repackaging notes, there are no significant economic decisions made on an ongoing basis. In these cases, the Firm focuses its analysis on decisions made prior to the initial closing of the transaction and

Notes to Consolidated Financial Statements

Consolidated VIE Assets and Liabilities by **Type of Activity**

At December 31,

		202	3	Αt	t Decem	ber 31, 2022	<u>.</u>
\$ in millions	VI	E Assets VIE	Liabilities	VII	E Assets	VIE Liabilitie	s
MABS ¹	\$	597 \$	256	\$	1,153	\$ 520)
Investment vehicles ²		753	502		638	272	2
МТОВ		582	520		371	322	<u>, </u>
Other		378	97		519	199)
Total	\$	2,310 \$	1,375	\$	2,681	\$ 1,313	3

MTOB—Municipal tender option bonds

- 1. Amounts include transactions backed by residential mortgage loans, commercial mortgage loans and other types of assets, including consumer or commercial assets and may be in loan or security form. The value of assets is determined based on the fair value of the liabilities and the interests owned by the Firm in such VIEs as the fair values for the liabilities and interests owned are more observable.
- 2. Amounts include investment funds and CLOs.

Consolidated VIE Assets and Liabilities by **Balance Sheet Caption**

		At	At
	D	ecember	December
\$ in millions	3	1, 2023	31, 2022
Assets			
Cash and cash equivalents	\$	164	\$ 142
Trading assets at fair value		1,557	2,066
Investment securities		492	255
Securities purchased under			
agreements to resell		67	 200
Customer and other receivables		26	16
Other assets		4	2
Total	\$	2,310	\$ 2,681
Liabilities			
Other secured financings	\$	1,222	\$ 1,185
Other liabilities and accrued			
expenses		121	124
Borrowings		32	4
Total	\$	1,375	\$ 1,313
Noncontrolling interests	\$	54	\$ 71

Consolidated VIE assets and liabilities are presented in the previous tables after intercompany eliminations. Generally, most assets owned by consolidated VIEs cannot be removed unilaterally by the Firm and are

Non-conso	lid	lated V	ΙE	s				
			A	t Dece	emb	oer 3	1, 2023	
\$ in millions		MABS ¹		CDO	M	ТОВ	OSF	Othe
VIE assets								
(UPB)	\$	144,906	\$	1,526	\$3	,152	\$3,102	\$50,0
Maximum ex	ро	sure to l	os	ss ³				
Debt and								
equity								
interests	\$	21,203	\$	52	\$	_	\$2,049	\$ 9,0
Derivative and	ı							
other								
contracts		_		_	2	,092	_	4,4
Commitments	,							
guarantees								
and other		3,439		_		_	_	
Total	\$	24,642	\$	52	\$2	,092	\$2,049	\$13,5
Carrying valu	ıe	of varial	ole	inter	est	s–	1	
Assets								
Debt and								
equity								
interests	\$	21,203	\$	52	\$	_	\$1,682	\$ 9,0
Derivative and	ı							
other								
contracts		_		_		2	_	1,3
Total	\$	21,203	\$	52	\$	2	\$1,682	\$10,4
Additional VIE	_		_		_			\$15,0
Carrying values Liabilities Derivative and other		of varial	ole	inter	est	s—		
contracts	\$		\$		\$	3	\$ —	\$ 4
				At Dec	em	ber 3	1, 2022	
\$ in millions		MABS ¹	-	CDO	1	чтов	OSF	Other
VIE assets (UP	B)	\$123,60	1	\$3,162	2 \$	4,632	\$2,403	\$50,17
Maximum ex	ро	sure to I	os	ss³				
Dobt and aqui	ty							
Debt and edim								
interests	•	\$ 13,10	4	\$ 274	\$	_	\$1,694	\$11,59
interests		\$ 13,10	4	\$ 274	! \$	_	\$1,694	\$11,59
Debt and equifinterests Derivative and other contract	l	\$ 13,10	4	\$ 274		_ 3,200		\$11,59 5,21

Carrying value of variable interests—

674

Assets

Total

other

Debt and equity

interests \$ 13,104 \$ 274 \$ — \$1,577 \$11,596

\$ 13,778 \$ 274 \$3,200 \$1,694 \$18,217

1,410

Derivative and

Notes to Consolidated Financial Statements

part of a transaction with the VIE or any party to the VIE directly against a specific exposure to loss.

Liabilities issued by VIEs generally are nonrecourse to the Firm.

Detail of Mortgage- and Asset-Backed Securitization Assets

		At December 31,			At December 31,			
		20	23	3		20)22	2
				Debt and			D	ebt and
				Equity				Equity
\$ in millions		UPB	١	nterests		UPB	ıl	nterests
Residential								
mortgages	\$	17,346	\$	3,355	\$	20,428	\$	2,570
Commercial								
mortgages		74,590		8,342		67,540		4,236
U.S. agency								
collateralized								
mortgage								
obligations		42,917		6,675		32,567		4,729
Other consumer								
or commercial								
loans		10,053		2,831		3,066		1,569
Total	\$1	L44,906	\$	21,203	\$1	.23,601	\$	13,104

Securitization Activities

In a securitization transaction, the Firm transfers assets (generally commercial or residential mortgage loans or securities) to an SPE; sells to investors most of the beneficial interests, such as notes or certificates, issued by the SPE; and, in many cases, retains other beneficial interests. The purchase of the transferred assets by the SPE is financed through the sale of these interests.

In many securitization transactions involving commercial mortgage loans, the Firm transfers a portion of the assets to the SPE with unrelated parties transferring the remaining assets. In addition, mainly in securitization transactions involving residential mortgage loans, the Firm may also enter into derivative transactions, primarily interest rate swaps or interest rate caps, with the SPE.

Although not obligated, the Firm generally makes a market in the securities issued by SPEs in securitization transactions. As a

securities issued by VIEs backed by student loans and commercial mortgage loans. Transactions sponsored by the federal mortgage agencies include an explicit or implicit guarantee provided by the U.S. government. Additionally, the Firm holds certain commercial mortgage-backed securities issued by VIEs retained as a result of the Firm's securitization activities. See Note 7 for further information on the Investment securities portfolio.

Municipal Tender Option Bond Trusts

In a municipal tender option bond trust transaction, the client transfers a municipal bond to a trust. The trust issues short-term securities that the Firm, as the remarketing agent, sells to investors. The client generally retains a residual interest. The short-term securities are supported by a liquidity facility pursuant to which the investors may put their short-term interests. In most programs, a third-party provider will provide such liquidity facility; in some programs, the Firm provides this liquidity facility.

The Firm may, in lieu of purchasing shortterm securities for remarketing, decide to extend a temporary loan to the trust. The client can generally terminate the transaction at any time. The liquidity provider can generally terminate the transaction upon the occurrence of certain events. When the transaction is terminated, the municipal bond is generally sold or returned to the client. Any losses suffered by the liquidity provider upon the sale of the bond are the responsibility of the client. This obligation is generally collateralized. Liquidity facilities provided to municipal tender option bond trusts are classified as derivatives. The Firm consolidates any municipal tender option bond trusts in which it holds the residual interest.

Credit Protection Purchased through Credit-Linked Notes

CLN transactions are designed to provide investors with exposure to certain credit risk on referenced assets. In these transactions, the Firm transfers assets (generally high-quality securities or moneymarket investments) to an SPE, enters into a derivative transaction in which the SPE

Notes to Consolidated Financial Statements

Other Structured Financings

The Firm invests in interests issued by entities that develop and own low-income communities (including low-income housing projects) and entities that construct and own facilities that will generate energy from renewable resources. The interests entitle the Firm to a share of tax credits and tax losses generated by these projects. In addition, the Firm has issued guarantees to investors in certain low-income housing funds. The guarantees are designed to return an investor's contribution to a fund and the investor's share of tax losses and tax credits expected to be generated by the fund. The Firm is also involved with entities designed to provide tax-efficient yields to the Firm or its clients.

Collateralized Loan and Debt Obligations

CLOs and CDOs are SPEs that purchase a pool of assets consisting of corporate loans, corporate bonds, ABS or synthetic similar assets through exposures on derivatives and issue multiple tranches of debt and equity securities to investors. The Firm underwrites the securities issued in certain CLO transactions on behalf of unaffiliated sponsors and provides advisory services to these unaffiliated sponsors. The Firm sells corporate loans to many of these SPEs, in some cases representing a significant portion of the total assets purchased. Although not obligated, the Firm generally makes a market in the securities issued by SPEs in these transactions and retain unsold securities. may beneficial interests are included in Trading assets and are measured at fair value.

Equity-Linked Notes

ELN transactions are designed to provide investors with exposure to certain risks related to the specific equity security, equity index or other index. In an ELN transaction, the Firm typically transfers to an SPE either a note issued by the Firm, the payments on which are linked to the performance of a specific equity security, equity index or other index, or debt securities issued by other companies and a derivative contract, the terms of which will relate to the performance of a specific

Transferred Assets with Continuing Involvement

			Αt	Decen	ıbe	er 31, 202	23	
					U	S. Agency	C	LN and
\$ in millions	ı	RML		CML		СМО		Other ¹
SPE assets (UPB) ^{2,}								
3	\$4	,333	\$7	3,818	\$	12,083	\$:	12,438
Retained interest	ts							
Investment grade	\$	149	\$	653	\$	460	\$	_
Non-investment								
grade		83		788		_		69
Total	\$	232	\$	1,441	\$	460	\$	69
Interests purchas	sec	l in th	ie s	second	ar	y market³	;	
Investment grade	\$	20	\$	22	\$	42	\$	_
Non-investment								
grade		_		16		_		_
Total	\$	20	\$	38	\$	42	\$	_
Derivative assets	\$	_	\$	_	\$	_	\$	1,073
Derivative								
liabilities				_		_		426
			_	At Dece	mh	er 31, 202	2	
	-	-		ii Dece		.S. Agency		I N and
\$ in millions		RML		CML	U	CMO		Other ¹
SPE assets (UPB) ^{2, 3}	\$	3,732	2 \$	73,069	\$	6,448	\$	10,928
Retained interest	s							
Investment grade	\$	137	7 \$	927	\$	367	\$	_
Non-investment								
grade		26	5	465		11		44
Total	\$	163	3 \$	1,392	\$	378	\$	44
Interests purchas	sec	l in th	ne s	second	ar	y market ⁵	;	
Investment grade	\$	82	2 \$	51	\$	10	\$	_
Non-investment								
grade		35	5	23				
Total	\$	117	7 \$	74	\$	10	\$	
Derivative assets	\$	_	- \$	_	\$	_	\$	1,114
Derivative liabilities	5	_	-	_		_		201

2023 Level 2 \$ in millions Level 3 Total **Retained interests** Investment grade 576 \$ 576 **- \$** Non-investment grade 10 56 66 Total 586 \$ 56 \$ 642

Fair Value at December 31,

Interests purchased i	in the s	econdary n	narket³	
Investment grade	\$	77 \$	7 \$	84

Notes to Consolidated Financial Statements

continuing involvement and received sales treatment. The transferred assets carried at fair value prior to securitization, and any changes in fair value recognized in the income statement. The Firm may act as underwriter of beneficial interests issued by these securitization vehicles, for which Investment banking revenues are recognized. The Firm may retain interests in the securitized financial assets as one or more tranches of the securitization. Certain retained interests are carried at fair value in the balance sheet with changes in fair value recognized in the income statement. Fair value for these interests is measured using techniques that are consistent with the valuation techniques applied to the Firm's major categories of assets and liabilities as described in Notes 2 and 4. Further, as permitted by applicable guidance, certain transfers of assets where the Firm's only continuing involvement is a derivative are only reported in the following Assets Sold with Retained Exposure table.

Proceeds from New Securitization Transactions and Sales of Loans

\$ in millions	2023	2022	2021
New transactions ¹	\$21,051	\$ 22,136	\$ 57,528
Retained interests	4,311	4,862	8,822
Sales of corporate loans to			
CLO SPEs ^{1, 2}	24	62	169

- Net gains on new transactions and sales of corporate loans to CLO entities at the time of the sale were not material for all periods presented.
- 2. Sponsored by non-affiliates.

The Firm has provided, or otherwise agreed to be responsible for, representations and warranties regarding certain assets transferred in securitization transactions sponsored by the Firm (see Note 14).

Assets Sold with Retained Exposure

		At		At
	D	ecember	Dec	ember
		31,		31,
\$ in millions		2023	2	2022
Gross cash proceeds from sale				
of assets ¹	\$	60,766	\$	49,059
Fair value				
Assets sold	\$	62,221	\$	47,281

16. Regulatory Requirements

Regulatory Capital Framework

The Firm is an FHC under the Bank Holding Company Act of 1956, as amended, and is subject to the regulation and oversight of the Board of Governors of the Federal Reserve System ("Federal Reserve"). The Federal Reserve establishes capital requirements for the Firm, including "wellcapitalized" standards, and evaluates the compliance with such capital requirements. The OCC establishes similar capital requirements and standards for the Firm's U.S. bank subsidiaries, including, among others, **MSBNA** and **MSPBNA** (together, "U.S. Bank Subsidiaries"). The regulatory capital requirements are largely based on the Basel III capital standards established by the Basel Committee on Banking Supervision and also implement certain provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act. In addition, many of the Firm's regulated subsidiaries are subject to regulatory capital requirements, including regulated subsidiaries registered as swap dealers with the CFTC or conditionally registered as security-based swap dealers with the SEC or registered as broker-dealers or futures commission merchants.

Regulatory Capital Requirements

The Firm is required to maintain minimum risk-based and leverage-based capital ratios under regulatory capital requirements. A summary of the calculations of regulatory capital and RWA follows.

Risk-Based Regulatory Capital. Risk-based capital ratio requirements apply to Common Equity Tier 1 capital, Tier 1 capital and Total capital (which includes Tier 2 capital), each as a percentage of RWA, and consist of regulatory minimum required ratios plus the Firm's capital buffer requirement. Capital requirements require certain adjustments to, and deductions from, capital for purposes of determining these ratios.

CECL Deferral. Beginning on January 1, 2020, the Firm elected to defer the effect of the adoption of CECL on its risk-based and leverage-based capital amounts and ratios,

Notes to Consolidated Financial Statements

Capital Buffer Requirements

		At
		December
At	At	31, 2023
December	December	and
31,	31,	December
2023	2022	31, 2022

Standardized Standardized Advanced

Capital buffers			
Capital conservation			
buffer	_	_	2.5%
SCB	5.4%	5.8%	N/A
G-SIB capital			
surcharge	3.0%	3.0%	3.0%
CCyB ¹	0%	0%	0%
Capital buffer			
requirement	8.4%	8.8%	5.5%

 The CCyB can be set up to 2.5% but is currently set by the Federal Reserve at zero.

The capital buffer requirement represents the amount of Common Equity Tier 1 capital the Firm must maintain above the minimum risk-based capital requirements in order to avoid restrictions on the Firm's ability to make capital distributions, including the payment of dividends and the repurchase of stock, and to pay discretionary bonuses to executive officers. The Firm's capital buffer computed requirement under the standardized approaches for calculating RWA credit risk and market risk ("Standardized Approach") is equal to the sum of the SCB, G-SIB capital surcharge and CCyB, and the capital buffer requirement computed under the applicable advanced approaches for calculating credit risk, market risk and operational risk RWA ("Advanced Approach") is equal to the sum of the 2.5% capital conservation buffer, G-SIB capital surcharge and CCyB.

Risk-Based Regulatory Capital Ratio Requirements

		At
		December
At	At	31, 2023
December	December	and
31,	31,	December
2023	2022	31, 2022

The Firm's risk-based capital ratios are computed under both (i) the Standardized Approach and (ii) the Advanced Approach. The credit risk RWA calculations between the two approaches differ in that the Standardized Approach requires calculation of RWA using prescribed risk weights, whereas the Advanced Approach utilizes models to calculate exposure amounts and risk weights. At December 31, 2023 and December 31, 2022, the differences between the actual and required ratio were lower under the Standardized Approach.

Leverage-Based Regulatory Capital. Leverage-based capital requirements include a minimum Tier 1 leverage ratio of 4%, a minimum SLR of 3% and an enhanced SLR capital buffer of at least 2%.

The Firm's Regulatory Capital and Capital Ratios

		At		At
	Required	December	Required	December
\$ in millions	Ratio ¹	31, 2023	Ratio ¹	31, 2022
Risk-based ca	apital			
Common Equit	y Tier 1			
capital		\$ 69,448		\$ 68,670
Tier 1 capital		78,183		77,191
Total capital		88,874		86,575
Total RWA		456,053		447,849
Common				
Equity Tier 1				
capital ratio	12.9 %	15.2 %	13.3 %	15.3 %
Tier 1 capital				
ratio	14.4 %	17.1 %	14.8 %	17.2 %
Total capital				
ratio	16.4 %	19.5 %	16.8 %	19.3 %
	Requir	ed At Dece	mber At	December
\$ in millions	Ratio	¹ 31, 20	023	31, 2022
Leverage-				
based capita	al			
Adjusted avera	ge			
assets ²		\$ 1,159,	626 \$	1,150,772
Tier 1 leverage	!			
ratio	4.0	%	6.7 %	6.7 %
Supplementary	leverage			
exposure ³		\$ 1,429,	552 \$	1,399,403
SLR	5.0	%	5.5 %	5.5 %

1. Required ratios are inclusive of any buffers applicable as of the

Notes to Consolidated Financial Statements

FHC, its U.S. Bank Subsidiaries must remain well-capitalized in accordance with the OCC's PCA standards. In addition, failure by the U.S. Bank Subsidiaries to meet minimum capital requirements may result in certain mandatory and discretionary actions by regulators that, if undertaken, could have a direct material effect on the U.S. Bank Subsidiaries' and the Firm's financial statements.

At December 31, 2023 and December 31, 2022, MSBNA and MSPBNA risk-based capital ratios are based on the Standardized Approach rules. Beginning on January 1, 2020, MSBNA and MSPBNA elected to defer the effect of the adoption of CECL on riskbased capital amounts and ratios, as well as RWA, adjusted assets average and supplementary leverage exposure calculations, over a five-year transition period. The deferral impacts began to phase in at 25% per year from January 1, 2022 and are phased-in at 50% from January 1, 2023. The deferral impacts will become fully phased-in beginning January 1, 2025.

MSBNA's Regulatory Capital

At D	ecember	At December
31	, 2023	31, 2022

Ratio

Amount

Well-

\$ in millions Requirement Ratio¹

Capitalized Required

Risk-based capital Common Equity Tier 1 capital 6.5 % Tier 1 **8.5** % **21,925 21.7** % ^{20,043} ^{20.5} December 31, 2022, as applicable: capital 8.0 % Total **10.0 % 10.5 % 22,833 22.6 %** 20,694 21.1 % capital Leverage-based capital Tier 1 **4.0 % \$21,925 10.6 %** \$20,043 10.1 % leverage 5.0 %

MSPBNA's Regulatory Capital

SLR

At December At December 31, 2023 31, 2022

Other Regulatory Capital Requirements

MS&Co. Regulatory Capital

	At		At	
	December 31,		December 31,	
\$ in millions	2023		2022	
Net capital	\$	18,121 \$ 17,		
Excess net capital		13,676	12,861	

MS&Co. is registered as a broker-dealer and a futures commission merchant with the SEC and the CFTC, respectively, and is registered as a swap dealer with the CFTC.

As an Alternative Net Capital broker-dealer, and in accordance with Securities Exchange Act of 1934 ("Exchange Act") Rule 15c3-1, Appendix E, MS&Co. is subject to minimum net capital and tentative net capital requirements and operates with capital in of its regulatory requirements. As a futures commission merchant and registered swap dealer, is subject to **CFTC** capital requirements. In addition, MS&Co. must notify the SEC if its tentative net capital falls below certain levels. At December 31, , 2023 and December 31, 2022, MS&Co. exceeded its net capital requirement and Thad tentative net capital in excess of the minimum and notification requirements.

Amount Ratio Other Regulated Subsidiaries

Certain other subsidiaries are also subject to various regulatory capital requirements. Such subsidiaries include the following, **7.0** % \$21,925 21.7 % \$20,043 20.5 % each of which operated with capital in excess of their respective regulatory capital requirements as of December 31, 2023 and

> MSSB, a registered U.S. broker-dealer and broker for introducing the futures business, is subject to, respectively, the minimum net capital requirements of the SEC and CFTC.

MSIP, а London-based broker-dealer 3.0 % 21,925 8.2 % 20,043 8.1 % subsidiary, is subject to the capital requirements of the Prudential Regulation ("PRA"). Authority MSIP is also conditionally registered with the SEC as a security-based swap dealer and registered with the CFTC as a swap dealer. It

Notes to Consolidated Financial Statements

Agency. MSMS is also registered with the CFTC as a swap dealer but is currently complying with home-country capital requirements in lieu of CFTC capital requirements pursuant to interim no-action relief.

- MSCS, a U.S. entity and the Firm's primary non-bank security-based swap dealer, is conditionally registered with the SEC as a security-based swap dealer, registered with the SEC as an OTC derivatives dealer and registered with the CFTC as a swap dealer. MSCS is subject to the capital requirements of both regulators.
- MSCG, a U.S. entity, is registered with the CFTC as a swap dealer and is subject to its capital requirements.

Certain other U.S. and non-U.S. subsidiaries of the Firm are subject to various securities, commodities and banking regulations, and capital adequacy requirements promulgated by the regulatory and exchange authorities of the countries in which they operate. These subsidiaries have also consistently operated with capital in excess of their local capital adequacy requirements.

Restrictions on Payments

The regulatory capital requirements referred to above, and certain covenants contained in various agreements governing indebtedness of the Firm, may restrict the Firm's ability to withdraw capital from its subsidiaries. The following table represents net assets of consolidated subsidiaries that may be restricted as to the payment of cash dividends and advances to the Parent Company.

	At	At
	December	December
	31,	31,
\$ in millions	2023	2022
Restricted net assets	\$ 49,008	\$ 45,896

17. Total Equity

Morgan Stanley Shareholders' Equity

Preferred Stock

	Shares			
	Outstanding	_	Carryir	ng Value
\$ in	At		At	
millions,	December		December	At
except	31,	Liquidation	31,	December
per share	2023	Preference	2023	31,
data		per Share		2022
Series				
Α	44,000	\$ 25,000	\$ 1,100	\$ 1,100
C ¹	519,882	1,000	408	408
Е	34,500	25,000	862	862
F	34,000	25,000	850	850
1	40,000	25,000	1,000	1,000
K	40,000	25,000	1,000	1,000
L	20,000	25,000	500	500
М	400,000	1,000	430	430
N	3,000	100,000	300	300
0	52,000	25,000	1,300	1,300
Р	40,000	25,000	1,000	1,000
Total			\$ 8,750	\$ 8,750
Shares au	thorized			30,000,000

^{1.} Series C preferred stock is held by MUFG.

The Firm's preferred stock has a preference over its common stock upon liquidation. The Firm's preferred stock qualifies as and is included in Tier 1 capital in accordance with regulatory capital requirements (see Note 16).

Description of Preferred Stock as of December 31, 2023

				Redemption		
		Depositary				
	Shares	Shares		Price		
Series ^{1, 2}	Issued	per Share	ре	er Share³	Date ⁴	
Α					Currently	
	44,000	1,000	\$	25,000	redeemable	
					Currently	
C ⁵	1,160,791	N/A		1,100	redeemable	
E					Currently	
	34,500	1,000		25,000	redeemable	
F					January 15,	
	34,000	1,000		25,000	2024	

Notes to Consolidated Financial Statements

Common Stock

Rollforward of Common Stock Outstanding

in millions	2023	2022
Shares outstanding at beginning of		
period	1,675	1,772
Treasury stock purchases ¹	(71)	(124)
Other ²	23	27
Shares outstanding at end of period	1,627	1,675

- The Firm's Board of Directors has authorized the repurchase of the Firm's outstanding stock under a share repurchase program ("Share Repurchase Program"). In addition to the Firm's Share Repurchase Program, Treasury stock purchases include repurchases of common stock for employee tax withholding.
- Other includes net shares issued to and forfeited from employee stock trusts and issued for RSU conversions.

Share Repurchases

\$ in millions	2023	:	2022
Repurchases of common stock under			
the Firm's			
Share Repurchase Program	\$ 5,300	\$	9,865

On June 30, 2023, the Firm announced that its Board of Directors reauthorized a multiyear repurchase program of up to \$20 billion of outstanding common stock, without a set expiration date, beginning in the third quarter of 2023, which will be exercised from time to time as conditions warrant.

Pursuant to the Share Repurchase Program, the Firm considers, among other things, business segment capital needs, as well as stock-based compensation and benefit plan requirements. Share repurchases under the program will be exercised from time to time at prices the Firm deems appropriate subject to various factors, including the Firm's capital position and market conditions. The share repurchases may be effected through open market purchases or privately negotiated transactions, including through Rule 10b5-1 plans, and may be suspended at any time.

Common Shares Outstanding for Basic and Diluted EPS

in millions	2023	2022	2021
Weighted average common shares			
outstanding, basic	1,628	1,691	1,785

Dividends

	2023		2022		2021	
\$ in						
millions,						
except						
per share	Per		Per		Per	
data	Share ¹	Total	Share ¹	Total	Share ¹	Total
Preferre	d Stock					
Series						
Α	\$1,522	\$ 67	\$1,061	\$ 47	\$1,022	\$ 44
С	100	52	100	52	100	52
E	1,791	62	1,781	60	1,781	60
F	1,719	58	1,719	59	1,719	60
H ²	_	_	_	_	719	38
I	1,594	64	1,594	64	1,594	64
J	_	_	_	_	253	15
K	1,463	59	1,463	59	1,463	59
L	1,219	24	1,219	24	1,219	24
M ³	59	24	59	24	59	24
N ⁴	9,160	27	5,300	16	5,300	16
0	1,063	55	1,063	55	236	12
P	1,625	65	736	29		_
Total						
Preferred						
stock		\$ 557		\$ 489		\$ 468
Common		\$5,393	\$ 2.95	\$5,108	\$ 2.10	\$3,818

- Common and Preferred Stock dividends are payable quarterly unless otherwise noted.
- A notice of redemption was issued for Series H preferred stock on November 19, 2021. Dividends declared on Series H following the issuance of the notice of redemption were recognized as Interest expense and are excluded from the 2021 amounts.
- Series M is payable semiannually until September 15, 2026 and thereafter will be payable quarterly.
- Series N was payable semiannually until March 15, 2023 and thereafter is payable quarterly.

Accumulated Other Comprehensive Income $(Loss)^1$

		AFS	Pension and		Cash Flow	
\$ in millions	CTA S	Securities	Other	DVA	Hedges	Total
December 31, 2020 \$	(795) \$	5 1,787	\$ (498) \$	(2,456)	\$ - \$	(1,962)
OCI during the						
period	(207)	(1,542)	(53)	662		(1,140)

December

Notes to Consolidated Financial Statements

						2023			
	F	re-tax		Income	Α	fter-tax		Non-	
		Gain	Ta	x Benefit		Gain	cc	ontrolling	
\$ in millions		(Loss)	(P	rovision)		(Loss)	h	nterests	Net
СТА									
OCI activity	\$	(73)	\$	53	\$	(20)	\$	(71) \$	51
Reclassified									
to earnings		_		_		_		_	
Net OCI	\$	(73)	\$	53	\$	(20)	\$	(71) \$	51
Change in	ne	t unrea	ali	zed gain	s	(losses)) o	n AFS	
securities									
OCI activity	\$	1,488	\$	(353)	\$	1,135	\$	- \$	1,135
Reclassified									
to earnings		(49)		12		(37)		_	(37)
Net OCI	\$	1,439	\$	(341)	\$	1,098	\$	– \$	1,098
Pension an	d	other							-
OCI activity	\$	(96)	\$	24	\$	(72)	\$	- \$	(72)
Reclassified									
to earnings		(18)		3		(15)		_	(15)
Net OCI	\$	(114)	\$	27	\$	(87)	\$	– \$	(87)
Change in	ne	t DVA							
OCI activity	\$(1,728)	\$	424	\$	(1,304)	\$	(40) \$	(1,264)
Reclassified									
to earnings		19		(5)		14		_	14
Net OCI	\$(1,709)	\$	419	\$	(1,290)	\$	(40) \$	(1,250)
Change in	fa	ir value	9 0	f cash fl	οv	v hedge	d	erivatives	5
OCI activity	\$	9	\$	(1)	\$	8	\$	- \$	8
Reclassified									
to earnings		16		(4)		12		– \$	12
Net OCI	\$	25	\$	(5)	\$	20	\$	– \$	20
					2	.022			
				ncome					

						2022			
			In	come					
	Ρ	re-tax		Tax	Αſ	ter-tax		Non-	
		Gain	В	enefit		Gain	C	ontrolling	
\$ in millions	(Loss)	(Pro	ovision)	(Loss)	ı	nterests	Net
СТА									
OCI activity	\$	(179)	\$	(217)	\$	(396)	\$	(135) \$	(261)
Reclassified									
to earnings		_		59		59			59
Net OCI	\$	(179)	\$	(158)	\$	(337)	\$	(135) \$	(202)
Change in net unrealized gains (losses) on AFS									
securities									

16

(54)

— \$(4,383)

(54)

OCI activity \$(5,720) \$ 1,337 \$(4,383) \$

(70)

Reclassified

to earnings

						2021				
				Income						
	Р	re-tax		Tax	A	fter-tax		Non-		
		Gain		Benefit		Gain	cc	ontrolling		
\$ in millions	(Loss)	(F	Provision)		(Loss)	lı	nterests		Net
СТА										
OCI activity	\$	(140)	\$	(191)	\$	(331)	\$	(124)	\$	(207)
Reclassified										
to earnings		_				_		_		_
Net OCI	\$	(140)	\$	(191)	\$	(331)	\$	(124)	\$	(207)
Change in	ne	t unre	al	ized gai	ns	(losse	es)	on AFS		
securities										
OCI activity	\$(1,803)	\$	422	\$	(1,381)	\$		\$(1,381)
Reclassified										
to earnings		(210)		49		(161)		_		(161)
Net OCI	\$(2,013)	\$	471	\$	(1,542)	\$		\$(1,542)
Pension an	d (other								
OCI activity	\$	(101)	\$	26	\$	(75)	\$	_	\$	(75)
Reclassified										
to earnings		31		(9)		22		_		22
Net OCI	\$	(70)	\$	17	\$	(53)	\$		\$	(53)
Change in	ne	t DVA								
OCI activity	\$	882	\$	(213)	\$	669	\$	34	\$	635
Reclassified										
to earnings		36		(9)		27				27
Net OCI	\$	918	\$	(222)	\$	696	\$	34	\$	662

Cumulative Foreign Currency Translation Adjustments

		At		At	
	D	ecember	December		
		31,		31,	
\$ in millions		2023		2022	
Associated with net investments	;				
in subsidiaries with a non-U.S.					
dollar functional currency	\$	(2,917)	\$	(3,136)	
Hedges, net of tax		1,764		1,932	
Total	\$	(1,153)	\$	(1,204)	
Carrying value of net					
investments in non-U.S. dollar					
functional currency subsidiaries	S				
subject to hedges	\$	18,761	\$	17,023	

Cumulative foreign currency translation adjustments include gains or losses resulting from translating foreign currency financial statements from their respective functional currencies to U.S. dollars, net of hedge gains or losses and related tax

Notes to Consolidated Financial Statements

18. Interest Income and Interest Expense

\$ in millions	2023	2022	2021
Interest income			
Cash and cash equivalents ¹	\$ 3,408	\$ 914	\$ 7
Investment securities	3,992	3,066	2,759
Loans	12,424	6,988	4,209
Securities purchased under agreements to resell ²	7,762	2,188	(181)
Securities borrowed ³	5,191	1,020	(1,017)
Trading assets, net of Trading liabilities	4,488	2,484	2,038
Customer receivables and Other ¹	13,016	4,935	1,596
Total interest income	\$50,281	\$ 21,595	\$ 9,411
Interest expense			
Deposits	\$ 8,216	\$ 1,825	\$ 409
Borrowings	11,437	5,054	2,725
Securities sold under agreements to repurchase ⁴	6,737	1,760	93
Securities loaned ⁵	784	503	401
Customer payables and Other ⁶	14,877	3,126	(2,262)
Total interest expense	\$42,051	\$ 12,268	\$ 1,366
Net interest	\$ 8,230	\$ 9,327	\$ 8,045

- In the fourth quarter of 2023, interest bearing Cash and cash equivalents and related interest were presented separately for the first time. The prior period amounts for Customer receivables and Other have been disaggregated to exclude Cash and cash equivalents to align with the current presentation.
- 2. Includes interest paid on Securities purchased under agreements to resell.
- 3. Includes fees paid on Securities borrowed.
- Includes interest received on Securities sold under agreements to repurchase.
- 5. Includes fees received on Securities loaned.

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Includes fees received from Equity Financing customers related to their short transactions, which can be under either margin or securities lending arrangements.

Interest income and Interest expense are classified in the income statement based on the nature of the instrument and related market conventions. When included as a component of the instrument's fair value, interest is included within Trading revenues or Investments revenues. Otherwise, it is included within Interest income or Interest expense.

Stock-Based Compensation Expense

\$ in millions	2023	2022	2021
RSUs	\$ 1,607	\$ 1,827	\$ 1,834
PSUs	91	40	251
ESPP	11	8	
Total	\$ 1,709	\$ 1,875	\$ 2,085
Retirement-eligible awards ¹	\$ 178	\$ 176	\$ 192

 Total expense includes stock-based compensation anticipated to be awarded in January of the following year that does not contain a future service requirement.

Tax Benefit Related to Stock-Based Compensation Expense

\$ in millions	2	023	2	2022	2021
Tax benefit ¹	\$	382	\$	427	\$ 432

 Excludes income tax consequences related to employee sharebased award conversions.

Unrecognized Compensation Cost Related to Stock-Based Awards Granted

		At	
	Dece	mber 31,	
\$ in millions	2	023¹	
To be recognized in:			
2024	\$	560	
2025		238	
Thereafter		66	
Total	\$	864	

 Amounts do not include forfeitures or 2023 performance year compensation awarded in January 2024, which will begin to be amortized in 2024.

In connection with awards under its stockbased compensation plans, the Firm is authorized to issue shares of common stock held in treasury or newly issued shares.

The Firm generally uses treasury shares, if available, to deliver shares to employees or employee stock trusts and has an ongoing repurchase authorization that includes repurchases in connection with awards under its stock-based compensation plans.

Common Shares Available for Future Awards under Stock-Based Compensation Plans

December 31,

in millions 2023

Notes to Consolidated Financial Statements

Vested and Unvested RSU Activity

	202	3
	V	Veighted
		Average
	Number of Av	ward Date
shares in millions	Shares F	air Value
RSUs at beginning of period	63 \$	76.31
Awarded	19	93.55
Conversions to common stock	(21)	61.23
Forfeited	(2)	88.02
RSUs at end of period ¹	59 \$	86.92
Aggregate intrinsic value of RSUs at	end of	
period		
(dollars in millions)	\$	5,523
Weighted average award date fa	ir value	
RSUs awarded in 2022		96.61
RSUs awarded in 2021		77.28

 At December 31, 2023, the weighted average remaining term until delivery for the outstanding RSUs was approximately 1.1 years.

Unvested RSU Activity

	2023					
	Weighted					
	Average					
	Number of	Award Date				
shares in millions	Shares	Fair Value				
Unvested RSUs at beginning of						
period	35	\$ 83.41				
Awarded	19	93.55				
Vested	(25)	84.28				
Forfeited	(1)	89.44				
Unvested RSUs at end of period ¹	28	\$ 89.16				

 Unvested RSUs represent awards where recipients have yet to satisfy either the explicit vesting terms or retirement-eligible requirements.

Fair Value of RSU Activity¹

\$ in millions	2023	2022	2021
Conversions to common stock	\$ 2,019	\$ 2,301	\$ 1,539
Vested	2,260	2,433	1,647

 Fair value of converted stock is based on the share price at conversion. Fair value of vested stock is based on the share price at date of vesting.

Performance-Based Stock Units

PSUs vest and convert to shares of common

PSU Awards - Fair Value on Award Date

	2023	2022	2021
MS Average ROTCE/ Relative			
ROTCE ¹	\$ 85.76	\$ 100.12	\$ 74.87
MS Relative TSR		102.17	83.70

1. Weighted average price on award date

The MS Relative TSR fair values on the award date were estimated using a Monte Carlo simulation and the following assumptions.

Monte Carlo Simulation Assumptions

	Expected				
	Risk-Free Stock Price		Risk-Free Stock Pri		Correlation
	Interest Rate	Volatility	Coefficient		
Award year					
2022	1.3 %	38.9 %	0.91		
2021	0.2 %	39.0 %	0.92		

The risk-free interest rate was determined based on the yields available on U.S. Treasury zero-coupon issues. The expected stock price volatility was determined using historical volatility. The correlation coefficient was developed based on historical price data of the Firm and the S&P 500 Financials Sector Index. The model uses an expected dividend yield equivalent to reinvesting dividends.

Deferred Cash-Based Compensation Plans

DCP generally provide a return to the plan participants based upon the performance of each participant's referenced investments.

Deferred Cash-Based Compensation Expense

\$ in millions	2023	2022	2021
Deferred cash-based awards	\$ 693	\$ 761	\$ 810
Return on referenced			
investments	668	(716)	526
Total	\$ 1,361	\$ 45	\$ 1,336
Retirement-eligible awards ¹	\$ 259	\$ 264	\$ 253

 Total expense includes deferred cash-based compensation anticipated to be awarded in January of the following year that does not contain a future service requirement.

Carried Interest Compensation

The Firm generally recognizes

Notes to Consolidated Financial Statements

20. Employee Benefit Plans

Pension Plans

Net Periodic Benefit Expense (Income)

		Pension Plans				
\$ in millions	2	023	2022	2021		
Service cost, benefits earned						
during the period	\$	20 \$	19 \$	19		
Interest cost on projected benefit						
obligation		140	111	104		
Expected return on plan assets		(99)	(56)	(48)		
Net amortization of prior service						
cost		1	1	1		
Amortization of net gains and						
losses		(9)	25	34		
Plan settlements	\$	2 \$	- \$			
Net periodic benefit expense	\$	55 \$	100 \$	110		

Certain current and former U.S. employees of the Firm and its U.S. affiliates who were hired before July 1, 2007 are covered by the U.S. pension plan, a non-contributory defined benefit pension plan that is qualified under Section 401(a) of the Internal Revenue Code ("U.S. Qualified Plan"). The U.S. Qualified Plan has ceased future benefit accruals.

Unfunded supplementary plans ("Supplemental Plans") cover certain executives. Liabilities for benefits payable under the Supplemental Plans are accrued by the Firm and are funded when paid. The Morgan Stanley Supplemental Executive Retirement and Excess Plan ("SEREP"), a non-contributory defined benefit plan that is not qualified under Section 401(a) of the Internal Revenue Code, has ceased future benefit accruals.

Certain of the Firm's non-U.S. subsidiaries also have defined benefit pension plans covering their eligible current and former employees.

The Firm's pension plans generally provide pension benefits that are based on each employee's years of credited service and on compensation levels specified in the plans.

Rollforward of Pre-tax AOCI

gains and losses and prior service credit over the average remaining service period of active participants.

Weighted Average Assumptions Used to Determine Net Periodic Benefit Expense (Income)

	Pension Plans					
	2023	2022	2021			
Discount rate	4.93 %	2.80 %	2.43 %			
Expected long-term rate of						
return on plan assets	3.54 %	1.71 %	1.42 %			

The accounting for pension plans involves certain assumptions and estimates. The expected long-term rate of return for the U.S. Qualified Plan was estimated by computing a weighted average of the underlying long-term expected returns based on the investment managers' target allocations.

Benefit Obligation and Funded Status

Rollforward of the Projected Benefit Obligation and Fair Value of Plan Assets

	Pension Plans				
\$ in millions		2023 2022			
Rollforward of projected bene	fit ok	oligation			
Benefit obligation at beginning of					
year	\$	2,907 \$	4,081		
Service cost		20	19		
Interest cost		140	111		
Actuarial (gain) loss ¹		79	(1,064)		
Plan settlements		(13)	(2)		
Benefits paid		(164)	(196)		
Other ²		6	(42)		
Projected benefit obligation at	t		-		
end of year	\$	2,975 \$	2,907		
Rollforward of fair value of pla	n as	sets			
Fair value of plan assets at					
beginning of year	\$	2,416 \$	3,605		
Actual return on plan assets		78	(982)		
Employer contributions		89	37		
Benefits paid		(164)	(196)		
Plan settlements		(13)	(2)		
Other ²		16	(46)		
Fair value of plan assets at					
end of year	\$	2,422 \$	2,416		
Funded (unfunded) status	\$	(553) \$	(491)		

Notes to Consolidated Financial Statements

Pension Plans with Projected Benefit Obligations in Excess of the Fair Value of Plan Assets

	At		At
	De	ecember	December
	31,		31,
\$ in millions	2023		2022
Projected benefit obligation	\$	2,821	\$ 2,746
Accumulated benefit obligation		2,803	2,731
Fair value of plan assets		2,184	2,180

The pension plans included in the table above may differ based on their funding status as of December 31 of each year.

Weighted Average Assumptions Used to Determine Projected Benefit Obligation

	Pensior	n Plans
	At	At
	December 31,	December 31,
	2023	2022
Discount rate	4.75 %	4.93 %

The discount rates used to determine the benefit obligation were selected by the Firm, in consultation with its independent actuary. The U.S. pension plans use a pension discount yield curve based on the characteristics of the plans, determined independently. The pension discount yield curve represents spot discount yields based on duration implicit in representative broad-based Aa-rated corporate bond universe of high-quality fixed income investments. For all non-U.S. pension plans, the assumed discount rates are based on the nature of liabilities, local economic environments and available bond indices.

Plan Assets

Fair Value of Plan Assets

	At December 31, 2023						
\$ in millions	Level 1	Level 2	Level 3	Total			
Assets							
Cash and cash equivalents	\$ 6	\$ —	\$ —	\$ 6			
U.S. government and agency securities	1,800	230	_	2,030			
Corporate and other debt—CDO	_	_	_	_			

	At December 31, 2022					
\$ in millions	Level 1	Level 2	Level 3	Total		
Assets						
Cash and cash						
equivalents	\$ 4	\$ —	\$ —	\$ 4		
U.S. government and agency securities	1,788	267	_	2,055		
Corporate and other debt—CDO	_	_	_	_		
Derivative contracts	_	(2)	_	(2)		
Other investments	_	_	64	64		
Other receivables ¹	_	21	_	21		
Total	\$ 1,792	\$ 286	\$ 64	\$ 2,142		

Assets Measured at

NAV

Commingled trust

funds:

runus.				
Money market				44
Foreign funds:				
Fixed income				55
Liquidity				20
Targeted cash flow				158
Total			\$	277
Liabilities				
Other payables ¹		(3)		(3)
Total liabilities	\$ - \$	(3) \$	- \$	(3)
Fair value of plan				
assets			\$	2,416

 Other receivables and other payables are valued at their carrying value, which approximates fair value.

Rollforward of Level 3 Plan Assets

\$ in millions	2	023	2022
Balance at beginning of period	\$	64 \$	65
Realized and unrealized gains		2	_
Purchases, sales and settlements,			
net		5	(1)
Balance at end of period	\$	71 \$	64

There were no transfers between levels during 2023 and 2022.

The U.S. Qualified Plan assets represent 87% and 88% of the Firm's total pension plan assets at December 31, 2023 and December 2022, respectively. The U.S. Qualified Plan uses a combination of active and risk-controlled fixed income investment strategies. The fixed income asset

Notes to Consolidated Financial Statements

investment returns in the underlying assets and not to circumvent portfolio restrictions.

Plan assets are measured at fair value using valuation techniques that are consistent with the valuation techniques applied to the Firm's major categories of assets and liabilities as described in Notes 2 and 4. OTC derivative contracts consist investments in interest rate swaps and total return swaps. Other investments consist of insurance contracts held by non-U.S.-based plans. The insurance contracts are valued based on the premium reserve of the insurer for a guarantee that the insurer has given to the employee benefit plan that approximates fair value. The insurance contracts are categorized in Level 3 of the fair value hierarchy.

Commingled trust funds are privately offered funds regulated, supervised and subject to periodic examination by a U.S. federal or state agency and available to institutional clients. The trust must be maintained for the collective investment or reinvestment of assets contributed to it from U.S. tax-qualified employee benefit plans maintained by more than employer or controlled group of corporations. The sponsor of the commingled trust funds values the funds based on the fair value of the underlying securities. Commingled trust funds are redeemable at NAV at the measurement date or in the near future.

Some non-U.S.-based plans hold foreign funds that consist of investments in fixed income funds and liquidity funds. Fixed income funds are designed to provide a series of fixed annual cash flows achieved by investing in government and corporate bonds. Liquidity funds place a high priority on capital preservation, stable value and a high liquidity of assets. Foreign funds are readily redeemable at NAV.

The Firm generally considers the NAV of commingled trust funds and foreign funds provided by the fund manager to be the best estimate of fair value.

Expected Contributions

The Firm's policy is to fund at least the amount sufficient to meet minimum funding

401(k) Plans

\$ in millions	2	2023		2023		2023		2022	2021	
Expense	\$	397	\$	355	\$	357				

U.S. employees meeting certain eligibility requirements may participate in the Firm's 401(k) plan.

Eligible employees receive discretionary 401(k) matching cash contributions as determined annually by the Firm. The Firm generally matched eligible employee contributions up to the IRS limit at 4%, or 5% up to a certain compensation level, in 2023 and 2022. Eligible employees with eligible pay less than or equal to \$100,000 also received a fixed contribution equal to 2% of eligible pay. Contributions are invested among available funds according to each participant's investment direction and are included in the Firm's 401(k) expense.

Non-U.S. Defined Contribution Pension Plans

\$ in millions	2023		2022		2021	
Expense	\$	173	\$	163	\$	149

The Firm maintains separate defined contribution pension plans that cover eligible employees of certain non-U.S. subsidiaries. Under such plans, contributions are generally determined based on a fixed rate of base salary with certain vesting requirements.

Notes to Consolidated Financial Statements

21. Income Taxes

Components of Provision for Income Taxes

\$ in millions	:	2023	2022	2021
Current				
U.S.:				
Federal	\$	1,190	\$ 2,518	2,554
State and local		542	442	475
Non-U.S.:				
Brazil ¹		437	24	197
U.K.		267	405	551
Japan		139	105	105
Hong Kong		39	29	192
Other ²		432	236	470
Total	\$	3,046	\$ 3,759	4,544
Deferred				
U.S.:				
Federal	\$	(295)	\$ (803)	(11)
State and local		(59)	(142)	33
Non-U.S.:				
11011-0.5				
Brazil ¹		(43)	25	38
		(43) 12	25 55	38 (37)
Brazil ¹				
Brazil ¹ U.K.		12	55	(37)
Brazil ¹ U.K. Japan		12 (13)	55 20	(37)

 In 2023, Brazil was presented separately for the first time. The prior period amounts for Other have been disaggregated to exclude Brazil to align with the current presentation.

\$ 2,583 \$ 2,910 \$ 4,548

Provision for income taxes

Other Non-U.S. tax provisions for 2023, 2022 and 2021 primarily include, Singapore and Germany.

Reconciliation of the U.S. Federal Statutory Income Tax Rate to the Effective Income Tax Rate

	2023	2022	2021
U.S. federal statutory income			
tax rate	21.0 %	21.0 %	21.0 %
U.S. state and local income			
taxes, net of			
U.S. federal income tax			
benefits	3.4	1.8	2.1
Domestic tax credits and tax			
exempt income	(1.3)	(0.9)	(0.6)

Deferred Tax Assets and Liabilities

		At	At			
	D	ecember	December			
		31,	31,			
\$ in millions		2023	2022			
Gross deferred tax assets						
Net operating loss and tax credit						
carryforwards	\$	255	\$ 288			
Employee compensation and						
benefit plans		2,636	2,487			
Allowance for credit losses and						
other reserves		755	595			
Valuation of net trading						
inventory, investments and						
receivables		1,897	1,743			
Other		78	35			
Total deferred tax assets		5,621	5,148			
Less: Deferred tax assets						
valuation allowance		211	205			
Deferred tax assets after						
valuation allowance	\$	5,410	\$ 4,943			
Gross deferred tax liabilities						
Fixed assets		772	807			
Intangibles and goodwill		2,003	2,019			
Total deferred tax liabilities	\$	2,775	\$ 2,826			
Net deferred tax assets	\$	2,635	\$ 2,117			

Deferred income taxes reflect the net tax effects of temporary differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when such differences are expected to reverse.

The Firm believes the recognized net deferred tax assets (after valuation allowance) at December 31, 2023 are more likely than not to be realized based on expectations as to future taxable income in the jurisdictions in which it operates.

The earnings of certain foreign subsidiaries and affiliates are indefinitely reinvested due to regulatory and other capital requirements in foreign jurisdictions. As of December 31, 2023 and December 31, 2022, the unrecognized deferred tax liability attributable to indefinitely reinvested earnings is \$302 million and \$429 million, respectively.

Notes to Consolidated Financial Statements

of unrecognized tax benefits and the impact on the Firm's effective tax rate over the next 12 months.

Interest Expense (Benefit) Associated with Unrecognized Tax Benefits, Net of Federal and State Income Tax Benefits

\$ in millions	2023	2022	2021
Recognized in income statement \$	65	\$ 39	\$ 14
Accrued at end of period	237	175	142

Interest and penalties related to unrecognized tax benefits are recognized as a component of the provision for income taxes. Penalties related to unrecognized tax benefits for the years mentioned above were immaterial.

Earliest Tax Year Subject to Examination in Major Tax Jurisdictions

Jurisdiction	Tax Year
U.S.	2017
New York State and New York City	2010
U.K.	2014
Japan	2019
Hong Kong	2017

The Firm is routinely under examination by the IRS and other tax authorities in certain countries, such as Japan and the U.K., and in states and localities in which it has significant business operations, such as New York.

The Firm believes that the resolution of these tax examinations will not have a material effect on the annual financial statements, although a resolution could have a material impact in the income statement and on the effective tax rate for any period in which such resolutions occur.

22. Segment, Geographic and Revenue Information

The Firm structures its segments primarily based upon the nature of the financial products and services provided to customers and its management organization. The Firm provides a wide range of financial products and services to its customers in each of its business segments: Institutional Securities Wealth

Selected Financial Information by Business Segment

					2	023				
\$ in millions		IS		WM		IM		I/E		Total
Investment										
banking	\$	4,578	\$	454	\$	_	\$	(84)	\$	4,948
Trading	1	14,468		823		(59)		31	1	L5,263
Investments		177		62		334		_		573
Commissions										
and fees ¹		2,540		2,279		_		(282)		4,537
Asset										
$management^{1,}\\$										
2		596	:	14,019	5	5,231		(229)	1	L9,617
Other		480		513		(7)		(11)		975
Total non-										
interest										
revenues	2	22,839	:	18,150	5	5,499		(575)	_	15,913
Interest										
income	3	36,815		15,015		135	(1	L,684)	5	50,281
Interest										
expense	3	36,594		6,897		264	(1	L,704)	_	12,051
Net interest		221		8,118		(129)		20		8,230
Net revenues	\$2	23,060	\$2	26,268	\$5	5,370	\$	(555)	\$5	54,143
Provision for										
credit losses	\$	401	\$	131	\$	_	\$	_	\$	532
Compensation										
and benefits		8,369	:	13,972	2	2,217		_	2	24,558
Non-										
compensation										
expenses		9,814		5,635	2	2,311		(520)	_1	L7,240
Total non-										
interest										
expenses	\$1	18,183	\$:	19,607	\$4	1,528	\$	(520)	\$4	11,798
Income before										
provision for										
income taxes	\$	4,476	\$	6,530	\$	842	\$	(35)	\$1	11,813
Provision for										
income taxes		884		1,508		199		(8)		2,583
Net income		3,592		5,022		643	_	(27)		9,230
Net income										
applicable to										
noncontrolling										
interests		139		_		4		_		143
Net income										
applicable										
to Morgan										
Stanley	\$	3,453	\$	5,022	\$	639	\$	(27)	\$	9,087

2022

Notes to Consolidated Financial Statements

			2021		
\$ in millions	IS	WM	IM	I/E	Total
Investment					
banking	\$10,272	\$ 822	\$ —	\$(100)	\$10,994
Trading	12,353	418	(53)	92	12,810
Investments	607	48	721	_	1,376
Commissions and					
fees ¹	2,878	3,019	1	(377)	5,521
Asset					
management ^{1,2}	583	13,966	5,576	(158)	19,967
Other	495	577	(20)	(10)	1,042
Total non-interest					
revenues	27,188	18,850	6,225	(553)	51,710
Interest income	3,752	5,821	31	(193)	9,411
Interest expense	1,107	428	36	(205)	1,366
Net interest	2,645	5,393	(5)	12	8,045
Net revenues	\$29,833	\$24,243	\$6,220	\$(541)	\$59,755
Provision for					
credit losses	\$ (7)	\$ 11	\$ -	\$ —	\$ 4
Compensation					
and benefits	9,165	13,090	2,373	_	24,628
Non-					
compensation					
expenses	8,861	4,961	2,169	(536)	15,455
Total non-					
interest					
expenses	\$18,026	\$18,051	\$4,542	\$(536)	\$40,083
Income before					
provision for					
income taxes	\$11,814	\$ 6,181	\$1,678	\$ (5)	\$19,668
Provision for					
income taxes	2,746	1,447	356	(1)	4,548
Net income	9,068	4,734	1,322	(4)	15,120
Net income					
applicable to					
noncontrolling					
interests	111		(25)		86
Net income					
applicable to					
Morgan	+ o c==	4 4 == :	412:-		415.001
Stanley	\$ 8,957	\$ 4,734	\$1,347	\$ (4)	\$15,034

- ${\bf 1.} \ \ {\bf Substantially \ all \ revenues \ are \ from \ contracts \ with \ customers.}$
- Includes certain fees that may relate to services performed in prior periods.

Detail of Investment Banking Revenues

\$ in millions	2023	2022	2021
Institutional Securities—			
Advisory	¢ 2 244	¢ 2 0.46	¢ 2 /07

Investment Management Investments Revenues—Net Cumulative Unrealized Carried Interest

	At			At
	December			December
	31,			31,
\$ in millions		2023		2022
Net cumulative unrealized				
performance-based fees at				
risk of reversing	\$	787	\$	819

The Firm's portion of net cumulative performance-based fees in the form of unrealized carried interest, for which the Firm is not obligated to pay compensation, is at risk of reversing when the return in certain funds fall below specified performance targets. See Note 14 for information regarding general partner guarantees, which include potential obligations to return performance fee distributions previously received.

Investment Management Asset Management Revenues—Reduction of Fees Due to Fee Waivers

\$ in millions	20	2023		2022		2021	
Fee waivers	\$	93	\$	211	\$	516	

The Firm waives a portion of its fees in the Investment Management business segment from certain registered money market funds that comply with the requirements of Rule 2a-7 of the Investment Company Act of 1940.

Certain Other Fee Waivers

Separately, the Firm's employees, including its senior officers, may participate on the same terms and conditions as other investors in certain funds that the Firm sponsors primarily for client investment, and the Firm may waive or lower applicable fees and charges for its employees.

Other Expenses—Transaction Taxes

\$ in millions	2	2023		2022		2021
Transaction taxes	\$	866	\$	910	\$	969

Transaction taxes are composed of securities transaction taxes and stamp duties, which are levied on the sale or

Notes to Consolidated Financial Statements

Net Revenues by Region

\$ in millions	2023	2022	2021
Americas	\$41,651	\$ 40,117	\$ 44,605
EMEA	6,058	6,811	7,699
Asia	6,434	6,740	7,451
Total	\$54,143	\$ 53,668	\$ 59,755

Income before Provision for Income Taxes

\$ in millions	2023	2022	2021
U.S.	\$ 8,334	\$ 9,363	\$ 14,082
Non-U.S. ¹	3,479	4,726	5,586
Total	\$11,813	\$ 14,089	\$ 19,668

 Non-U.S. income is defined as income generated from operations located outside the U.S.

The Firm operates in both U.S. and non-U.S. markets. The Firm's non-U.S. business activities are principally conducted and managed through EMEA and Asia locations. The net revenues disclosed in the previous table reflect the regional view of the Firm's consolidated net revenues on a managed basis, based on the following methodology:

Institutional Securities: Client location for advisory and equity underwriting, syndicate desk location for debt underwriting, trading desk location for sales and trading.

Wealth Management: Americas, where representatives operate.

Investment Management: Client location, except certain closed-end funds, which are based on asset location.

Revenues Recognized from Prior Services

\$ in millions	2023	2022	2021
Non-interest revenues	\$ 1,778	\$ 2,538	\$ 2,391

The previous table includes revenues from contracts with customers recognized where some or all services were performed in prior periods. These revenues primarily include investment banking advisory fees.

Receivables from Contracts with Customers

	At	At
	December	December
	31,	31,
\$ in millions	2023	2022

Assets by Business Segment

	At	At
	December	December
	31,	31,
\$ in millions	2023	2022
Institutional Securities	\$ 810,506	\$ 789,837
Wealth Management	365,168	373,305
Investment Management	18,019	17,089
Total ¹	\$ 1,193,693	\$ 1,180,231

 Parent assets have been fully allocated to the business segments.

Total Assets by Region

		At		
	ı	December		At
		31,	De	ecember 31,
\$ in millions		2023		2022
Americas	\$	832,714	\$	853,228
EMEA		218,923		197,397
Asia		142,056		129,606
Total	\$	1,193,693	\$	1,180,231

23. Parent Company

Parent Company Only—Condensed Income Statement and Comprehensive Income Statement

A 1 90	2022	2022	2021
\$ in millions	2023	2022	2021
Revenues			
Dividends from bank subsidiaries	\$5,770	\$ 2,875	\$ -
Dividends from BHC and non-			
bank subsidiaries	6,812	8,661	8,898
Total dividends from subsidiaries	12,582	11,536	8,898
Trading	(775)	(1,143)	229
Other	(31)	170	4
Total non-interest revenues	11,776	10,563	9,131
Interest income	13,596	5,805	2,648
Interest expense	13,618	6,162	2,822
Net interest	(22)	(357)	(174)
Net revenues	11,754	10,206	8,957
Non-interest expenses	287	252	443
Income before income taxes	11,467	9,954	8,514
Provision for (benefit from)			
income taxes	(520)	(456)	(203)
Net income before undistributed			
gain of subsidiaries	11 007	10 410	0 717

Notes to Consolidated Financial Statements

Parent Company Only—Condensed Balance Sheet

		At	At
	D	ecember	December
		31,	31,
\$ in millions, except share data		2023	2022
Assets			
Cash and cash equivalents	\$	16,881	\$ 25,333
Trading assets at fair value		4,160	10,391
Investment securities:			
Available-for-sale at fair value			
(amortized cost of \$22,164			
and \$18,488; \$10,179 and			
\$14,278 were pledged to			
various parties)		21,515	17,409
Held-to-maturity (fair value of			
\$14,093 and \$17,698;			
\$10,010 and \$12,948 were			
pledged to various parties)		15,284	19,267
		13,204	13,207
Securities purchased under			
agreement to resell to affiliates		24,693	22,987
Advances to subsidiaries:			
Bank and BHC		38,550	76,232
Non-bank		139,250	93,593
Equity investments in			
subsidiaries:			
Bank and BHC		58,949	59,676
Non-bank		50,291	50,366
Other assets		2,595	2,071
Total assets	\$	372,168	\$ 377,325
Liabilities			'
Trading liabilities at fair value	\$	44	\$ 262
Securities sold under agreements	•		
to repurchase from affiliates		20,293	20 602
		20,293	28,682
Payables to and advances from			
subsidiaries		73,370	76,170
Other liabilities and accrued			
expenses		2,539	2,282
Borrowings (includes \$13,404			
and \$12,122 at fair value)		176,884	 169,788
Total liabilities		273,130	277,184
Commitments and contingent	liak	oilities	
(see Note 14)			
Equity			
Preferred stock		8,750	8,750
Common stock, \$0.01 par value:			
Shares authorized	:		
3 500 000 000 61			

3,500,000,000; Shares issued:

Parent Company Only—Condensed Cash Flow Statement

\$ in millions	2023	2022	2021
Net cash provided by (used			
for) operating			
activities	\$24,914	\$(13,064)	\$ 4,257
Cash flows from investing			
activities			
Proceeds from (payments for):			
AFS securities:			
Purchases	(9,362)	(1,855)	(6,275)
Proceeds from sales	300	676	2,611
Proceeds from paydowns			
and maturities	5,479	3,814	1,940
HTM securities:			
Purchases		(4 220)	(2.022)
		(4,228)	(3,022)
Proceeds from paydowns and maturities	4,003	3.434	3,696
una matanass	+,003	J,434	3,090
Securities purchased under agreements to resell with			
affiliates	(1,706)	(1,871)	13,581
Securities sold under	(=,: 00,	(2,0,2)	25,502
agreements to repurchase			
with affiliates	(8,389)	11,755	(7,422)
Advances to and investments			
in subsidiaries	(10,097)	(10,574)	(17,083)
Net cash provided by (used			
for) investing activities	(19,772)	1,151	(11,974)
Cash flows from financing			
activities			
Proceeds from:			
Issuance of preferred stock,			
net of issuance costs	_	994	1,275
Issuance of Borrowings	23,783	34,431	42,098
Payments for:		3 ., .52	.2,000
	(22.554)	(3.4.4.4.3.)	(20.502)
Borrowings	(22,554)	(14,441)	(28,592)
Repurchases of common			
stock and employee tax	(6,178)	(10.971)	(12.075)
withholdings			
Cash dividends	(5,763)	(5,401)	(4,171)
Net change in advances from	(2.020)	10 707	17.040
subsidiaries	(3,029)	16,707	17,042
Net cash provided by (used	(12 741)	21 410	16 677
for) financing activities	(13,741)	21,419	15,577
Effect of exchange rate			
changes on cash and cash equivalents	147	485	380
Net increase (decrease) in		+63	360

Notes to Consolidated Financial Statements

Parent Company's Borrowings with Original Maturities Greater than One Year

	At At
	December December
	31, 31,
\$ in millions	2023 2022
Senior	\$ 164,514 \$ 157,585
Subordinated	12,370 12,203
Total	\$ 176,884 \$ 169,788

Transactions with Subsidiaries

The Parent Company has transactions with its consolidated subsidiaries determined on an agreed-upon basis and has guaranteed certain unsecured lines of credit and contractual obligations on certain of its consolidated subsidiaries.

Guarantees

In the normal course of its business, the Parent Company guarantees certain of its subsidiaries' obligations on a transactionby-transaction basis under various financial arrangements. The Parent Company has issued guarantees on behalf of subsidiaries to various U.S. and non-U.S. exchanges and clearinghouses that trade and clear securities and/or futures Under contracts. these guarantee arrangements, the Parent Company may be required to pay the financial obligations of subsidiaries related to business transacted on or with the exchanges and clearinghouses in the event subsidiary's default on its obligations to the exchange or the clearinghouse. The Parent Company has not recorded any contingent liability its condensed financial in statements for these arrangements and believes that any potential requirements to make payments under these arrangements are remote.

The Parent Company also, in the normal course of business, provides standard indemnities to counterparties on behalf of its subsidiaries for taxes, including U.S. and foreign withholding taxes, on interest and other payments made on derivatives, securities and stock lending transactions, and certain annuity products, and may also provide indemnities to or on behalf of affiliates from time to time for other

Guarantees of Debt Instruments and Warrants Issued by Subsidiaries

	At	At
	December	December
	31,	31,
\$ in millions	2023	2022
Aggregate balance	\$ 60,942	\$ 51,136

Guarantees	under	Subsidiary	Lease
Obligations			

	At		At
	December		December
	3	31,	31,
\$ in millions	2023		2022
Aggregate balance ¹	\$	632	\$ 615

1. Amounts primarily relate to the U.K.

Finance Subsidiary

The Parent Company fully and unconditionally guarantees the securities issued by Morgan Stanley Finance LLC, a wholly owned finance subsidiary. No other subsidiary of the Parent Company guarantees these securities.

Resolution and Recovery Planning

As indicated in the Firm's 2023 resolution plan submitted to the Federal Reserve and the FDIC, the Parent Company has entered into an amended and restated support agreement with its entities material (including its wholly owned, direct subsidiary Morgan Stanley Holdings LLC (the "Funding IHC")) and certain other subsidiaries. Under the amended and restated secured support agreement, in the event of a resolution scenario, the Parent Company would be obligated to contribute all of its contributable assets to its supported entities and/or the Funding IHC. The Funding IHC would be obligated to provide capital and liquidity, as applicable, to its supported entities. The obligations of the Parent Company and the Funding IHC under the amended and restated support agreement are in most cases secured on a senior basis by the assets of the Parent Company (other than shares in subsidiaries of the Parent Company and certain other assets) and the assets of the Funding IHC.

Financial Data Supplement (Unaudited)

Average Balances and Interest Rates and Net Interest Income

Effect of Volume and Rate Changes on Net Interest Income

		2023			2022				2023	versus 2	2022
	Average			Average				_	Increase (De	ecrease)	-
	Daily		Average	Daily		Ave			Due to Cha		
\$ in millions	Balance	Interest	Rate	Balance	Interest		in millions	_	Volume	Rate	Net Change
Interest ea	rning asse	ets				_	nterest earning	n assets			
Cash and ca	sh equivale	nts¹:						_			
U.S.	\$ 56,920	\$ 2,386	4.2 %	\$ 57,889	\$ 692	1	Cash and cash ed	•		1 706	+ 1.004
Non-U.S.	48,373	1,022	2.1 %	58,052	222	С	U.S.	\$		1,706	
Investment							Non-U.S.		(37)	837	800
securities ²	153,307	3,992	2.6 %	167,494	3,066	1	nvestment		()		
Loans ²	215,628	12,424	5.8 %	205,069	6,988	3	securities ²		(260)	1,186	926
Securities pu	urchased un	nder agreer	ments to r	esell³:		L	.oans²		360	5,076	5,436
U.S.	47,604	_	9.9 %	57,565	1,643	2	Securities purcha	sed under	agreements	to resell ³	:
Non-U.S.	61,766	· ·	4.9 %	62,585	545		U.S.		(284)	3,355	3,071
		3,046	4.5 %	02,363	545		Non-U.S.		(7)	2,510	2,503
Securities bo							Securities borrow	ed ⁴ :			
U.S.	115,279	4,794	4.2 %	123,288	1,039	C	U.S.		(67)	3,822	3,755
Non-U.S.	18,514	397	2.1 %	19,345	(19)	(0	Non-U.S.		1	415	416
Trading asse	ets, net of Tr	ading liabi	lities ⁵ :			-	rading assets, ne	et of Tradin			
U.S.	93,409	3,792	4.1 %	74,932	2,068	2		et of fraum	•		1 724
Non-U.S.	12,788	696	5.4 %	14,748	416	2	U.S.		510	1,214	1,724
Customer re	ceivables a	nd Other¹:					Non-U.S.		(55)	335	280
U.S.	45,815	9,585	20.9 %	56,040	3,798	6	Customer receiva	bles and C	ther¹:		
Non-U.S.	14,485	3.431	23.7 %	15,891	1,137	7	U.S.		(693)	6,480	5,787
Total	\$883,888			\$912,898		 2_	Non-U.S.		(101)	2,395	2,294
			3.7 70	ψ 312,030	Ψ <u></u> Ζ1,333		Change in interes	t income \$	(645) \$	29,331	\$ 28,686
Interest be	_						nterest bearing	g liabilitie	s		
Deposits ²	\$342,583	\$ 8,216	2.4 %	\$340,741	\$ 1,825	C	Deposits ²	\$	10 \$	6,381	\$ 6,391
Borrowings ^{2,}						_ E	Borrowings ^{2,6}		196	6,187	6,383
6	238,164	, , , , , , , , , , , , , , , , , , ,		229,255	5,054		Securities sold ur	ider agreei		-	·
Securities so	old under ag		•	nase ^{7,9} :			U.S.	ider agreei	63	2,442	2,505
U.S.	22,718	3,591	15.8 %	21,481	1,086	5				•	
Non-U.S.	46,392	3,146	6.8 %	39,631	674	1_	Non-U.S.		115	2,357	2,472
Securities lo	aned ^{8,9} :					S	Securities loaned	8,9:			
U.S.	4,244	67	1.6 %	6,277	37	C	U.S.		(12)	42	30
Non-U.S.	9,470	717	7.6 %	7,669	466	6_	Non-U.S.		109	142	251
Customer pa	ayables and	Other ¹⁰ :				(Customer payabl	es and Oth	er ¹⁰ :		
U.S.	133,069	10,225	7.7 %	143,448	1,991	1_	U.S.		(144)	8,378	8,234
Non-U.S.	63,916			73,291	1,135	1_	Non-U.S.		(145)	3,662	3,517
Total	\$860,556			\$861,793			Change in interes	st			
-		⊅ 42,U31	→. J 70	φυυτ,/35	Ψ12,200	-	expense	\$	192 \$	29,591	\$ 29,783
Net interes						•	Change in net i	nterest			
rate sprea		\$ 8,230	0.8 %		\$ 9,327	₁ i	ncome	\$	(837) \$	(260)	\$ (1,097)
		Ψ 0,230			- 3,321			**	*******	'	

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Financial Data Supplement (Unaudited)

Image22.jpg

Average Balances and Interest Rates and Net Interest Income

		2021	
	Average		
	Daily		Average
\$ in millions	Balance	Interest	Rate
Interest earning assets			
Cash and cash equivalents	s ¹ :		
U.S.	\$ 62,340	\$ 44	0.1 %
Non-U.S.	52,106	(37)	(0.1)%
Investment securities ²	182,896	2,759	1.5 %
Loans ²	166,675	4,209	2.5 %
Securities purchased unde	r agreements	to resell³:	
U.S.	55,274	86	0.2 %
Non-U.S.	53,323	(267)	(0.5)%
Securities borrowed ⁴ :			
U.S.	99,667	(825)	(0.8)%
Non-U.S.	17,387	(192)	(1.1)%
Trading assets, net of Trad	ing liabilities ⁵ :		
U.S.	77,916	1,644	2.1 %
Non-U.S.	19,559	394	2.0 %
Customer receivables and	Other ¹ :		
U.S.	72,665	1,365	1.9 %
Non-U.S.	21,962	231	1.1 %
Total	\$881,770	\$ 9,411	1.1 %
Interest bearing liabilit	ies		
Deposits ²	\$325,500	\$ 409	0.1 %
Borrowings ^{2,6}	224,657	2,725	1.2 %
Securities sold under agree	ements to rep	urchase ^{7,9} :	
U.S.	29,383	157	0.5 %
Non-U.S.	27,374	(64)	(0.2)%
Securities loaned ^{8,9} :			
U.S.	4,816	29	0.6 %
Non-U.S.	5,514	372	6.7 %
Customer payables and Ot	ther ¹⁰ :		
U.S.	132,899	(1,825)	(1.4)%
Non-U.S.	76,185	(437)	(0.6)%
Total	\$826,328	\$ 1,366	0.2 %
Net interest income and	d net		
interest rate spread		\$ 8,045	0.9 %

Effect of Volume and Rate Changes on Net Interest Income

	2022 versus 2021					
	Incr	ease (De				
	Due to Change in:			_		
\$ in millions	Volu	ume	Rate	Net	Change	
Interest earning assets						
Cash and cash equivalents	5 ¹ :					
U.S.	\$	(3) \$	651	\$	648	
Non-U.S.		(4)	263		259	
Investment securities ²		(232)	539		307	
Loans ²		970	1,809		2,779	
Securities purchased unde	r agre	ements	to resell ³	:		
U.S.		4	1,553		1,557	
Non-U.S.		(46)	858		812	
Securities borrowed ⁴ :						
U.S.		(196)	2,060		1,864	
Non-U.S.		(22)	195		173	
Trading assets, net of Trad	ing lia	bilities ⁵ :				
U.S.		(63)	487		424	
Non-U.S.		(97)	119		22	
Customer receivables and						
Other ¹ :						
U.S.		(312)	2,745		2,433	
Non-U.S.		(64)	970		906	
Change in interest income	\$	(65) \$	12,249	\$	12,184	
Interest bearing liabilities	ies					
Deposits ²	\$	19 \$	1,397	\$	1,416	
Borrowings ^{2,6}		56	2,273		2,329	
Securities sold under agree	emen	ts to rep	urchase ^{7,}	⁹ :		
U.S.		(42)	971		929	
Non-U.S.		(29)	767		738	
Securities loaned ^{8,9} :						
U.S.		9	(1)		8	
Non-U.S.		145	(51)		94	
Customer payables and Other ¹⁰ :						
U.S.		(145)	3,961		3,816	
Non-U.S.		17	1,555		1,572	
Change in interest						
expense	\$	30 \$	10,872	\$	10,902	
Change in net interest						
income	\$	(95) \$	1,377	\$	1,282	

 In the fourth quarter of 2023, interest bearing Cash and cash equivalents and related interest were presented separately for the first time. The prior period amounts for Customer

Financial Data Supplement (Unaudited)

Image22.jpg

Deposits

	Average Daily Deposits						
	202	23	202	22	2021		
\$ in	Average	Average	Average	Average	Average	Average	
millions	Amount	Rate	Amount	Rate	Amount	Rate	
Deposits	5 ¹ :						
Savings and							
demand	\$286,513	2.0 %	\$321,316	0.4 %	\$304,664	- %	
Time	56,070	4.3 %	19,425	2.7 %	20,836	1.7 %	
Total	\$342,583	2.4 %	\$340,741	0.5 %	\$325,500	0.1 %	

^{1.} The Firm's deposits were primarily held in U.S. offices.

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Glossary of Common Terms and Acronyms

Image23.jpg

ABS	Asset-backed securities	IS	Institutional Securities
ACL	Allowance for credit losses	LCR	Liquidity coverage ratio, as
AFS	Available-for-sale		adopted by the U.S. banking agencies
AML	Anti-money laundering	LIBOR	London Interbank Offered Rate
AOCI	Accumulated other	LTV	Loan-to-value
AUM	comprehensive income (loss) Assets under management or	M&A	Merger, acquisition and
AUM	supervision	-	restructuring transaction
Balance	Consolidated balance sheet	MSBNA	Morgan Stanley Bank, N.A.
sheet		MS&Co.	Morgan Stanley & Co. LLC
внс	Bank holding company	MSCG	Morgan Stanley Capital Group
bps	Basis points; one basis point		Inc.
	equals 1/100th of 1%	MSCS	Morgan Stanley Capital Services
Cash flow	Consolidated cash flow		LLC
statement	statement	MSEHSE	Morgan Stanley Europe Holdings SE
CCAR	Comprehensive Capital Analysis and Review	MSESE	Morgan Stanley Europe SE
ССуВ	Countercyclical capital buffer	MSIP	Morgan Stanley & Co.
CDO	Collateralized debt obligation(s),	- 1011	International plc
	including Collateralized loan	MSMS	Morgan Stanley MUFG Securities
	obligation(s)		Co., Ltd.
CDS	Credit default swaps	MSPBNA	Morgan Stanley Private Bank,
CECL	Current Expected Credit Losses,		National Association
	as calculated under the Financial Instruments—Credit	MSSB	Morgan Stanley Smith Barney LLC
	Losses accounting update	MUFG	Mitsubishi UFJ Financial Group,
CFTC	U.S. Commodity Futures Trading	More	Inc.
	Commission	MUMSS	Mitsubishi UFJ Morgan Stanley
CLN	Credit-linked note(s)		Securities Co., Ltd.
CLO	Collateralized loan obligation(s)	MWh	Megawatt hour
CMBS	Commercial mortgage-backed	N/A	Not Applicable
	securities	N/M	Not Meaningful
СМО	Collateralized mortgage	NAV	Net asset value
CRM	obligation(s) Credit Risk Management	Non-GAAP	Non-generally accepted
CKM	Department		accounting principles
СТА	Cumulative foreign currency	NSFR	Net stable funding ratio, as adopted by the U.S. banking
	translation adjustments		agencies
DCP	Employee deferred cash-based	осс	Office of the Comptroller of the
	compensation plans linked to		Currency
	investment performance	OCI	Other comprehensive income
DCP investment	Investments associated with s certain DCP		(loss)
DVA	Debt valuation adjustment	OIS	Overnight index swap
EBITDA	Earnings before interest, taxes,	ОТС	Over-the-counter
-5.15A	depreciation and amortization	PRA	Prudential Regulation Authority
ELN	Equity-linked note(s)	PSU	Performance-based stock unit
EMEA	Europe, Middle East and Africa	RMBS	Residential mortgage-backed securities
EPS	Earnings per common share	ROE	
		NUE	Return on average common

E.U. Furopean Union

Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Controls and Procedures

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of the Firm's management, including the Chief Executive Officer and Chief Financial Officer, the Firm conducted an evaluation of the effectiveness of the Firm's disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")). Based on this evaluation, the Chief Executive Officer and Chief Financial Officer concluded that Firm's disclosure the controls and procedures were effective as of the end of the period covered by this annual report.

Management's Report on Internal Control Over Financial Reporting

The Firm's management is responsible for establishing and maintaining adequate internal control over financial reporting. The Firm's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States of America ("U.S. GAAP").

The internal control over financial reporting includes those policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Firm:
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP and that receipts and expenditures are being made only in accordance with authorizations of the Firm's management and directors; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of Firm assets that could have a material effect on the Firm's financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of anv evaluation effectiveness to future periods are subject to the risk that controls may become inadequate because of changes conditions or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the Firm's internal control over financial reporting as of December 31, 2023. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control—Integrated Framework (2013). Based on management's assessment and those criteria, management believes that the Firm maintained effective internal control over financial reporting as of December 31, 2023.

The Firm's independent registered public accounting firm has audited and issued a report on the Firm's internal control over financial reporting, which appears below.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Morgan Stanley:

Opinion on Internal Control over Financial Reporting

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

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the financial statements of the Firm as of and for the year ended December 31, 2023 and our report dated February 22, 2024 expressed an unqualified opinion on those financial statements.

Basis for Opinion

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

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

Definition and Limitations of Internal Control over Financial Reporting

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

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation effectiveness to future periods are subject to the risk that controls may become inadequate because of changes conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Changes in Internal Control Over Financial Reporting

No change in the Firm's internal control over financial reporting (as such term is defined in Exchange Act Rule 13a-15(f)) occurred during the quarter ended December 31, 2023 that materially affected, or is reasonably likely to materially affect, the Firm's internal control over financial reporting.

Other Information

On February 20, 2024 the Compensation, Management Development and Succession Committee of the Board of Directors ("CMDS Committee") of Morgan Stanley approved amendments to each of the award certificates ("Award Certificates") covering all outstanding performance stock units granted under the Morgan Stanley Equity Incentive Compensation including to executive officers of the Firm. Under the original terms of the Award Certificates, upon termination employment due to death or disability, the participant vests in a prorated portion of the shares earned by applying the performance multiplier based on service during the performance period. The CMDS Committee amended each Award Certificate to provide that, upon termination of employment due to death or disability, the participant vests in the full number of shares earned by applying the performance multiplier. Providing for full vesting of performance stock units upon termination of employment due to death or disability is consistent with the provisions of Morgan Stanley's restricted stock units.

This description of the Award Certificates is qualified in its entirety by reference to the full text of the Award Certificates, a form of which is filed hereto as Exhibit 10.22.

Disclosure Regarding Foreign Jurisdictions That Prevent Inspections

Not applicable.

Unresolved Staff Comments

The Firm from time to time receives written comments from the staff of the SEC

segments, although we may add offices, depending upon our future operations.

Legal Proceedings

See "Contingencies—Legal" in Note 14 to the Financial Statements for information about our material legal proceedings.

Mine Safety Disclosures

Not applicable.

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

Morgan Stanley's common stock trades under the symbol "MS" on the New York Stock Exchange. As of January 31, 2024, the Firm had 46,887 holders of record; however, the Firm believes the number of beneficial owners of the Firm's common stock exceeds this number.

The table below sets forth the information with respect to purchases made by or on behalf of the Firm of its common stock during the fourth quarter of the year ended December 31, 2023.

Issuer Purchases of Equity Securities

				Total Shares		
				Purchased		Dollar
	Total			as Part of	٧	alue of
\$ in millions,	Number of			Share	Re	maining
except per	Shares	Average	e Price	Repurchase	Au	thorized
share data	Purchased ¹	Paid per	Share ²	Program ^{3, 4}	Rep	ourchase
October	1,948,722	\$	71.77	1,911,600	\$	18,363
November	15,673,256	\$	75.59	15,368,757	\$	17,200
December	201,759	\$	86.45	_	\$	17,200

Three

Months

Ended

December

31, 2023 17,823,737 \$

75.30 17,280,357

- Includes 543,380 shares acquired by the Firm in satisfaction of the tax withholding obligations on stock-based awards granted under the Firm's stock-based compensation plans during the three months ended December 31, 2023.
- Excludes excise tax of \$12 million levied on share repurchases, net of issuances, payable in April 2024.
- Share purchases under publicly announced authorizations are made pursuant to open-market purchases, Rule 10b5-1 plans or

Stock Performance Graph

The following graph compares the cumulative total shareholder return (rounded to the nearest whole dollar) of the Firm's common stock, the S&P 500 Stock Index and the S&P 500 Financials Sector Index for the last five years. The graph assumes a \$100 investment at the closing price December 31, 2018 on reinvestment of dividends on the respective dividend payment dates without commissions. This graph does not forecast future performance of the Firm's common stock.

Cumulative Total Return

December 31, 2018 - December 31, 2023 2909

	2018	2019	2020	2021	2022	2023 Direct
Morgan Stanley	\$100.00	\$132.66	\$183.14	\$268.50	\$240.57	\$274.03 and re
S&P 500 Stock Index	100.00	131.21	155.34	199.89	163.65	Stanley' by refer
S&P 500 Financials Sector Index	100.00	132.09	129.77	175.02	156.52	Informa indepen stateme _{175.46} herein.

At December 31.

Directors, Executive Officers and Corporate Governance

Information relating to the Firm's directors and nominees in the Firm's definitive proxy statement for its 2024 annual meeting of shareholders ("Morgan Stanley's proxy statement") is incorporated by reference herein.

Information relating to the Firm's executive officers is contained in the "Business" section of this report under "Information about Our Executive Officers."

Morgan Stanley's Code of Ethics and Business Conduct applies to all directors, officers and employees, including its Chief Executive Officer, Chief Financial Officer and Deputy Chief Financial Officer. You can find the Code of Ethics and Business Conduct on the webpage, www.morganstanley.com/

Exchange Commission or the New York Stock Exchange LLC, on the webpage.

Executive Compensation

Information relating to director and executive officer compensation in Morgan Stanley's proxy statement is incorporated by reference herein.

Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information relating to equity compensation plans and security ownership of certain beneficial owners and management in Morgan Stanley's proxy statement is incorporated by reference herein.

Certain Relationships and Related Transactions and Director Independence

Information regarding certain relationships and related transactions in Morgan Stanley's proxy statement is incorporated by reference herein.

Information regarding director independence in Morgan Stanley's proxy statement is incorporated by reference herein.

Principal Accountant Fees and Services

Information regarding principal accountant fees and services in Morgan Stanley's proxy statement is incorporated by reference herein.

Exhibits and Financial Statement Schedules

Documents filed as part of this report

 The financial statements required to be filed in this annual report on Form 10-K are included in the section titled "Financial Statements and Supplementary Data."

Exhibit Index¹

Certain of the following exhibits, as indicated parenthetically, were previously filed as exhibits to registration statements

- 3.1 Amended and Restated Certificate of Incorporation of Morgan Stanley, as amended to date (Exhibit 3.1 to Morgan Stanley's quarterly report on Form 10-Q for the quarter ended June 30, 2022).
- 3.2 Amended and Restated Bylaws of Morgan Stanley, as amended to date (Exhibit 3.1 to Morgan Stanley's current report on Form 8-K dated December 8, 2023).
- 4.1* Description of Securities
 Registered Pursuant to Section
 12 of the Securities Exchange
 Act of 1934.
- 4.2 Amended and Restated Senior Indenture dated as of May 1, 1999 between Morgan Stanley and The Bank of New York, as trustee (Exhibit 4e to Morgan Stanlev's Registration Statement on Form S-3/A (No. 333-75289) as amended by Fourth Supplemental Senior Indenture dated as of October 8, 2007 (<u>Exhibit 4.3</u> to Morgan Stanley's annual report on Form 10-K for the fiscal year ended November 30, 2007).
- 4.3 Senior Indenture dated as of November 1. 2004 between Morgan Stanley and The Bank of New York, as trustee (Exhibit 4-f to Morgan Registration Stanley's Statement on Form S-3/A (No. 333-117752), as amended by First Supplemental Senior Indenture dated of as September 4, 2007 (Exhibit 4.5 to Morgan Stanley's annual report on Form 10-K for the fiscal year ended November 30, 2007), Second Supplemental Senior Indenture dated as of January 4, 2008 (Exhibit 4.1 to Morgan Stanley's current report on Form 8-K dated January 4, 2008), Third Supplemental Senior Indenture dated as of September 10, 2008 (Exhibit 4

- 4.4 The Unit Agreement Without Holders' Obligations, dated as of August 29, 2008, between Morgan Stanley and The Bank of New York Mellon, as Unit Agent, as Trustee and Paying Agent under the Senior Indenture referred to therein and as Warrant Agent under the Warrant Agreement referred to therein (Exhibit 4.1 to Morgan Stanley's current report on Form 8-K dated August 29, 2008).
- 4.5 Subordinated Indenture dated as of October 1, 2004 between Morgan Stanley and The Bank of New York, as trustee (Exhibit 4-g to Morgan Stanley's Registration Statement on Form S-3/A (No. 333-117752)).
- 4.6 Junior Subordinated Indenture dated as of October 12, 2006 between Morgan Stanley and The Bank of New York, as trustee (Exhibit 4.1 to Morgan Stanley's current report on Form 8-K dated October 12, 2006).
- 4.7 Deposit Agreement dated as of July 6, 2006 among Morgan Stanley, JPMorgan Chase Bank, N.A. and the holders from time to time of the depositary receipts described therein 4.3 (Exhibit to Morgan Stanley's quarterly report on Form 10-Q for the quarter ended May 31, 2006).
- 4.8 Form of Deposit Agreement Morgan among Stanley, JPMorgan Chase Bank, N.A. and the holders from time to time of the depositary receipts representing interests in the A Preferred Series Stock described therein (Exhibit 2.4 to Morgan Stanley's Registration Statement Form 8-A dated July 5, 2006).
- 4.9 Depositary Receipt for Depositary Shares,

- 4.14 Form of Deposit Agreement among Morgan Stanley, The Bank of New York Mellon and the holders from time to time the depositary receipts representing interests in the Series 1 Preferred stock described therein (Exhibit 2.4 to Morgan Stanley's Registration Statement on Form 8-A dated September 17, 2014).
- 4.15 Depositary Receipt for Depositary Shares, representing Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series I (included in Exhibit 4.14 hereto).
- 4.16 Form of Deposit Agreement among Morgan Stanley, The Bank of New York Mellon and the holders from time to time the depositary receipts representing interests in the Κ Preferred Series Stock described therein (Exhibit 2.4 to Morgan Stanley's Registration Statement Form 8-A dated January 30, 2017).
- 4.17 Depositary Receipt for Depositary Shares, representing Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series K (included in Exhibit 4.16 hereto).
- 4.18 Form of Deposit Agreement among Morgan Stanley, The Bank of New York Mellon and the holders from time to time the depositary receipts representing interests in the L Preferred Series Stock described therein (Exhibit 2.4 to Morgan Stanley's Registration Statement on Form 8-A dated November 22, 2019).
- 4.19 Depositary Receipt for Depositary Shares, representing 4.875% Non-Cumulative Preferred Stock, Series L (included in Exhibit 4.

- 10.1 Amended and Restated Trust Agreement dated of ลร January 1, 2018 by and between Morgan Stanley and State Street Bank and Trust Company (Exhibit <u>10.1</u> to Morgan Stanley's quarterly report on Form 10-Q for the ended March 31. quarter 2018).
- 10.2 Amended and Restated Investor Agreement dated as of June 30, 2011 by and between Morgan Stanley and Mitsubishi UFJ Financial Group, Inc. (Exhibit 10.1 to Morgan Stanley's current report on Form 8-K dated lune 30, 2011), as amended by Third Amendment, dated October 3, 2013 (Exhibit 10.1 to Morgan Stanley's quarterly report on Form 10-Q for the quarter ended September 30, 2013), Fourth Amendment. dated April 6, 2016 (Exhibit 10.1 to Morgan Stanley's quarterly report on Form 10-Q for the quarter ended March 31, 2016), Fifth Amendment, dated October 4, 2018 (Exhibit 10.3 to Morgan Stanley's annual report on Form 10-K for the year ended December 31, 2020), Sixth Amendment, dated April 13, 2021 (Exhibit to Morgan Stanley's 10.1 quarterly report on Form 10-Q for the quarter ended June 30, 2021) and Seventh Amendment, dated October 13, 2023 (Exhibit 10.1 to Morgan Stanley's quarterly report on Form 10-Q for the quarter ended September 30, 2023).
- 10.3† Morgan Stanley 401(k) Plan, amended and restated as of January 1, 2018 (Exhibit 10.4 to Morgan Stanley's annual report on Form 10-K for the year ended December 31, 2018), as amended by Amendment (Exhibit 10.4 to

Exhibit No. Description

- 10.9† Morgan Stanley Supplemental Executive Retirement Excess Plan, amended and restated effective December 31, 2008 (Exhibit to Morgan Stanley's quarterly report on Form 10-Q the quarter for ended March 31, 2009) as amended by Amendment (Exhibit 10.5 to Morgan Stanley's quarterly report on Form 10-Q for the quarter ended June 30, 2009), Amendment (Exhibit 10.19 to Stanley's Morgan annual report on Form 10-K for the ended December 31, 2010), Amendment (Exhibit to Morgan Stanley's quarterly report on Form 10-Q for the quarter ended June 30, Amendment 2011) and (Exhibit 10.1 to Morgan Stanley's quarterly report on Form 10-Q for the quarter ended September 30, 2014).
- 10.10† Form of Deferred Compensation Agreement under the Pre-Tax Incentive Program 2 (Exhibit 10.12 to MSG's annual report for the fiscal year ended November 30, 1996).
- 10.11† Morgan Stanley UK Share Ownership Plan (Exhibit 4.1 to Morgan Stanley's Registration Statement on Form S-8 (No. 333-146954)).
- 10.12† Supplementary Deed of Participation for the Morgan Stanley UK Share Ownership Plan, dated as of November 5, 2009 (Exhibit 10.36 to Morgan Stanley's annual report on Form 10-K for the year ended December 31, 2009).
- 10.13† Aircraft Time-Sharing Agreement, dated as of 2010, January 1, by and between Corporate Services Support Corp. and James P. Gorman (Exhibit 10.1 Morgan Stanley's quarterly report on Form 10-Q for the

Exhibit No. Description

- 10.21†* Form of Award Certificate for Discretionary Retention Awards under the Morgan Stanley Compensation Incentive Plan.
- 10.22†* Form of Award Certificate for Long-Term Incentive Program Awards.
- 10.23† Form of Aircraft Time-Sharing Agreement (Exhibit 10.1 to Morgan Stanley's quarterly report on Form 10-Q for the quarter ended September 30, 2020).
 - 21* <u>Subsidiaries of Morgan</u> <u>Stanley.</u>
 - 22* <u>Guarantor and Subsidiary</u> <u>Issuer of Registered</u> <u>Guaranteed Securities.</u>
- 23.1* Consent of Deloitte & Touche LLP.
- 24 <u>Powers of Attorney (included on signature page).</u>
- 31.1* Rule 13a-14(a) Certification of Chief Executive Officer.
- 31.2* Rule 13a-14(a) Certification of Chief Financial Officer.
- 32.1** Section 1350 Certification of Chief Executive Officer.
- 32.2** Section 1350 Certification of Chief Financial Officer.
- 97* Morgan Stanley Compensation Recoupment Policy.
- 101 Interactive Data Files pursuant to Rule 405 of Regulation S-T formatted in Inline eXtensible Business Reporting Language ("Inline XBRL").
- 104 Cover Page Interactive Data File (formatted in Inline XBRL and contained in Exhibit 101).
- 1. For purposes of this Exhibit Index, references to "The Bank of New York" mean in some instances the entity successor to JPMorgan Chase Bank, N.A. or J.P. Morgan Trust Company, National Association; references to "JPMorgan Chase Bank, N.A." mean the entity formerly known as The Chase Manhattan Bank, in some instances as the successor to Chemical Bank; references to "J.P. Morgan Trust Company, N.A." mean the entity formerly known as Bank One Trust Company, N.A., as successor to The First National Bank of Chicago.

* Filed herewith

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 22, 2024.

MORGAN STANLEY

(REGISTRANT)

By: /s/ EDWARD PICK

(Edward Pick)
Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned, hereby severally constitute Sharon Yeshaya, Eric F. Grossman and Martin M. Cohen, and each of them singly, our true and lawful attorneys with full power to them and each of them to sign for us, and in our names in the capacities indicated below, any and all amendments to the annual report on Form 10-K filed with the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys to any and all amendments to said annual report on Form 10-K.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on the 22nd day of February, 2024.

Signature	Title
/s/ EDWARD PICK	Chief Executive Officer
(Edward Pick)	(Principal Executive Officer)
/s/ SHARON YESHAYA	Executive Vice President and Chief Financial Officer
(Sharon Yeshaya)	(Principal Financial Officer)
/s/ RAJA J. AKRAM	Deputy Chief Financial Officer

(Raja J. Akram)

(Chief Accounting

Officer and

/s/ ERIKA H. JAMES	Director
(Erika H. James)	
/s/ HIRONORI KAMEZAWA	Director
(Hironori Kamezawa)	
/s/ SHELLEY B. LEIBOWITZ	Director
(Shelley B. Leibowitz)	
/s/ STEPHEN J. LUCZO	Director
(Stephen J. Luczo)	
/s/ JAMI MISCIK	Director
(Jami Miscik)	
/s/ MASATO MIYACHI	Director
(Masato Miyachi)	
/s/ DENNIS M. NALLY	Director
(Dennis M. Nally)	
/s/ MARY L. SCHAPIRO	Director
(Mary L. Schapiro)	
/s/ PERRY M. TRAQUINA	Director
(Perry M. Traquina)	
/s/ RAYFORD WILKINS, JR.	Director
(Rayford Wilkins, Jr.)	

Signature

Title