

# **STATE STREET CORPORATION**

SUPPLEMENTAL PUBLIC DISCLOSURE  
BASEL III REGULATORY CAPITAL

AS OF DECEMBER 31, 2023

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## GLOSSARY

<b>Advanced approaches<sup>(1)</sup></b>	The advanced internal ratings-based approach to calculating risk-based capital requirements for credit risk and the advanced measurement approach to calculating risk-based capital requirements for operational risk under the Basel III final rule	<b>HTM</b>	Held-to-Maturity
<b>Advanced approaches banking organization<sup>(1)</sup></b>	A banking organization subject to the advanced approaches requirements of the Basel III final rule	<b>ICAMS</b>	Incident Capture and Management System
<b>AFS</b>	Available-for-Sale	<b>IMM</b>	Internal Model Methodology
<b>AIRB<sup>(1)</sup></b>	Advanced Internal Ratings-Based	<b>LCR</b>	Liquidity Coverage Ratio
<b>AMA<sup>(1)</sup></b>	Advanced Measurement Approach	<b>LDA</b>	Loss Distribution Approach
<b>AOCI</b>	Accumulated Other Comprehensive Income	<b>LGD<sup>(1)</sup></b>	Loss Given Default
<b>BCBS</b>	Basel Committee on Banking Supervision	<b>LIBOR</b>	London Inter-Bank Offered Rate
<b>BHC</b>	Bank Holding Company	<b>LTD</b>	Long-Term Debt
<b>Board</b>	Board of Directors	<b>MRAC</b>	Management Risk and Capital Committee
<b>BOLI</b>	Bank-Owned Life Insurance	<b>MRC</b>	Model Risk Committee
<b>bps</b>	Basis points	<b>MRM</b>	Model Risk Management
<b>CAP</b>	Capital Adequacy Process	<b>MRRS</b>	Model Risk Rating System
<b>CCAR</b>	Comprehensive Capital Analysis and Review	<b>MVG</b>	Model Validation Group
<b>CCB</b>	Capital Conservation Buffer	<b>NII</b>	Net interest income
<b>CCF<sup>(1)</sup></b>	Credit Conversion Factor	<b>ORCC</b>	Operational Risk and Controls Committee
<b>CECL</b>	Current Expected Credit Loss	<b>OTC derivative</b>	Over-the-counter derivative contract
<b>CET1</b>	Common Equity Tier 1	<b>Parent Company</b>	State Street Corporation without consolidation of its subsidiaries
<b>CLO</b>	Collateralized Loans Obligations	<b>PD<sup>(1)</sup></b>	Probability of Default
<b>CMRC</b>	Credit and Market Risk Committee	<b>P&amp;L</b>	Profit-and-loss
<b>CVA</b>	Credit Valuation Adjustment	<b>RC</b>	Risk Committee
<b>Deposit beta</b>	A measure of how much of an interest rate increase is expected to be passed on to client interest-bearing accounts, on average	<b>RCSA</b>	Risk and Control Self Assessment
<b>Dodd-Frank Act</b>	Dodd-Frank Wall Street Reform and Consumer Protection Act	<b>RWA<sup>(1)</sup></b>	Risk-Weighted Assets
<b>E&amp;A Committee</b>	Examining & Audit Committee of the Board	<b>SA-CCR</b>	Standardized Approach for Counterparty Credit Risk
<b>EAD<sup>(1)</sup></b>	Exposure at Default	<b>SCB</b>	Stress Capital Buffer
<b>ECB</b>	European Central Bank	<b>SEC</b>	Securities and Exchange Commission
<b>EGRRCPA</b>	Economic Growth, Regulatory Relief, and Consumer Protection Act	<b>SIFI</b>	Systematically Important Financial Institution
<b>ERM</b>	Enterprise Risk Management	<b>SLR<sup>(1)</sup></b>	Supplementary Leverage Ratio
<b>EVE</b>	Economic Value of Equity	<b>SPV</b>	Special Purpose Vehicle
<b>FDIC</b>	Federal Deposit Insurance Corporation	<b>SRWA<sup>(1)</sup></b>	Simple Risk-Weight Approach
<b>Federal Reserve</b>	Board of Governors of the Federal Reserve System	<b>SSFA<sup>(1)</sup></b>	Simplified Supervisory Formula Approach in the Basel III final rule
<b>FFELP</b>	Federal Family Education Loan Program	<b>State Street</b>	State Street Corporation and its subsidiaries on a consolidated basis
<b>FSB</b>	Financial Stability Board	<b>State Street Bank</b>	State Street Bank and Trust Company
<b>FX</b>	Foreign Exchange	<b>Stressed VaR</b>	Stressed Value-at-Risk
<b>GAAP</b>	Generally Accepted Accounting Principles	<b>TLAC</b>	Total Loss-Absorbing Activity
<b>GCR</b>	Global Credit Review group	<b>TMC</b>	Trading Methodology Committee
<b>GCF</b>	Global Credit Finance	<b>UOM</b>	Unit of Measure
<b>G-SIB</b>	Global Systemically Important Bank	<b>VaR</b>	Value-at-Risk
<b>HRC</b>	Human Resources Committee		

<sup>(1)</sup> As defined by the applicable U.S. regulations.

**STATE STREET CORPORATION  
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**BASEL III DISCLOSURE MAP**

The table below highlights where sections of this Public Disclosure can be referenced to in State Street's December 31, 2023 Form 10-K.

Section	Description	December 31, 2023 Public Disclosure Page Reference	2023 Form 10-K Page Reference
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	Forward-Looking Statements	6-7	4
Regulation and Supervision	Overview	7	11-12
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## GENERAL

State Street Corporation, referred to as the Parent Company, was organized in 1969 under the laws of the Commonwealth of Massachusetts, and is a financial holding company. For purposes of this Public Disclosure, unless the context requires otherwise, references to “State Street,” “we,” “us,” “our” or similar terms mean State Street Corporation and its subsidiaries on a consolidated basis. The Parent Company is a source of financial and managerial strength to our subsidiaries. Through our subsidiaries, including our principal banking subsidiary, State Street Bank and Trust Company, referred to as State Street Bank, we operate in more than 100 geographic markets worldwide, including the United States, Canada, Latin America, Europe, the Middle East and Asia. We provide a broad range of financial products and services to institutional investors worldwide.

The Public Disclosure provided herein is required by the Basel III regulatory capital rules issued by the Board of Governors of the Federal Reserve System, referred to as the Federal Reserve, which we refer to as the Basel III final rule. This Public Disclosure provides qualitative and quantitative information about regulatory capital, calculated in conformity with the advanced approaches provisions (and the standardized approach provisions, as applicable) of the Basel III final rule, for State Street and, where applicable, State Street Bank, as of December 31, 2023.

We expect to update this Public Disclosure on a quarterly basis and make it available on the "Investor Relations" section of our corporate website, [www.statestreet.com](http://www.statestreet.com). The information presented in this Public Disclosure may not be consistent with Generally Accepted Accounting Principles (GAAP), and may differ, in presentation, form or otherwise, from similar information, or disclosures on similar topics, provided in our Securities and Exchange Commission (SEC) filings. In addition, the information provided in this Public Disclosure may also differ from, and may not be comparable to, similar disclosures made by other banking organizations. The information provided in this Public Disclosure is not required to be, and has not been, audited by our independent registered public accounting firm.

The regulatory capital ratios as of December 31, 2023 presented in this Public Disclosure were calculated in conformity with the advanced approaches provisions (and the standardized approach provisions as applicable) of the Basel III final rule as well as the final rules implementing the Supplementary Leverage Ratio (SLR). These ratios reflect calculations and determinations with respect to our capital and related matters as of December 31, 2023, based on State Street and external data,

quantitative formulae, statistical models, historical correlations and assumptions, collectively referred to as “advanced systems,” in effect and used by State Street for those purposes as of the time we made this Public Disclosure available on our corporate website. Significant components of these advanced systems involve the exercise of judgment by us and our regulators, and our advanced systems may not accurately represent or calculate the scenarios, circumstances, outputs or other results for which they are designed or intended.

Due to the influence of changes in these advanced systems, whether resulting from changes in data inputs, regulation or regulatory supervision or interpretation, State Street-specific or market activities or experiences or other updates or factors, we expect that our advanced systems and our capital ratios calculated in conformity with the Basel III final rule will change and may be volatile over time, and that those latter changes or volatility could be material as calculated and measured from period to period.

Models implemented under the Basel III final rule, particularly those implementing the advanced approaches, remain subject to regulatory review and approval. The full effects of the Basel III final rule on State Street and State Street Bank are therefore subject to further evaluation and also to further regulatory guidance, action or rule-making.

We use acronyms and other defined terms for certain business terms and abbreviations which are defined in the Glossary of this Public Disclosure.

The disclosures provided within this document should be read in conjunction with our 2023 Form 10-K, which can be found on our corporate website at [www.statestreet.com](http://www.statestreet.com).

## FORWARD-LOOKING STATEMENTS

This Public Disclosure, as well as other reports and proxy materials submitted by us under the Securities Exchange Act of 1934, registration statements filed by us under the Securities Act of 1933, our annual report to shareholders and other public statements we may make, may contain statements (including statements in our Management's Discussion and Analysis included in such reports, as applicable) that are considered “forward-looking statements” within the meaning of U.S. securities laws, including statements about our goals and expectations regarding our business, financial and capital condition, results of operations, strategies, cost savings and transformation initiatives, investment portfolio performance, climate, dividend and stock purchase programs, acquisitions, outcomes of legal proceedings, market growth, joint ventures and divestitures, client growth, new technologies, services and opportunities, sustainability and impact, human capital, as well as industry, governmental,

regulatory, economic and market trends, initiatives and developments, the business environment and other matters that do not relate strictly to historical facts. For more information about the risks and uncertainties to which forward-looking statements are subject, refer to our 2023 Form 10-K.

## **REGULATION AND SUPERVISION**

### **Overview**

The Basel III final rule provides for two frameworks: the standardized approach, which replaced Basel I, and the advanced approaches, applicable to advanced approaches banking organizations, like State Street, as originally defined under Basel II.

As required by the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) enacted in 2010, we and State Street Bank, as advanced approaches banking organizations, are subject to a "capital floor," also referred to as the Collins Amendment, in the assessment of our regulatory capital adequacy, such that our risk-based capital ratios for regulatory assessment purposes are the lower of each ratio calculated under the advanced approaches and the standardized approach.

Under the advanced approaches, State Street and State Street Bank are subject to a 2.5% Capital Conservation Buffer (CCB) requirement, plus any applicable countercyclical capital buffer requirement, which is currently set at 0%. Under the standardized approach, State Street Bank is subject to the same CCB and countercyclical capital buffer requirements, but for State Street, the 2.5% CCB requirement is replaced by the Stress Capital Buffer (SCB) requirement according to the SCB rule issued in 2020. In addition, State Street is subject to a Global Systemically Important Bank (G-SIB) surcharge. Our current G-SIB surcharge, through December 31, 2024, is 1.0%. Based upon preliminary calculations using data as of December 31, 2023, we currently anticipate that our surcharge will remain at 1% through December 31, 2025; however, that calculation has not yet been finalized and is subject to many financial, balance sheet, market and other factors, and consequently there is a risk that a higher G-SIB surcharge of 1.5% will result from the final calculation.

Together with the other capital requirements for us, this results in minimum risk-based ratios of 8.0% for the Common Equity Tier 1 (CET1) capital ratio, 9.5% for the Tier 1 capital ratio, and 11.5% for the total capital ratio.

Failure to meet these minimum requirements would result in restriction on capital distributions and certain discretionary bonus payments based on a percentage of State Street's eligible retained income. We calculate eligible retained income as the greater of (i) net income for the four preceding quarters, net of any distributions and associated tax effects not

already reflected in net income, and (ii) the average of net income over the four preceding quarters. As of December 31, 2023, the eligible retained income for State Street was \$486 million. For more information on regulation and supervision, refer to our 2023 Form 10-K.

### **Regulatory Developments**

Our SCB requirement was 2.5% for the period from October 1, 2022 through September 30, 2023. On June 28, 2023, we were notified by the Federal Reserve of the results from the 2023 supervisory stress test. Our SCB calculated under the 2023 supervisory stress test was well below the 2.5% minimum, resulting in an SCB at that floor, which went into effect starting October 1, 2023 and will remain effective through September 30, 2024.

On July 27, 2023, the U.S. Agencies issued a proposed rule to implement the Basel III endgame (Basel III Endgame Proposal) for large banks, and separately proposed revisions to the U.S. G-SIB capital surcharge framework (G-SIB Surcharge Proposal). The Basel III Endgame Proposal would, among other things, eliminate the advanced approaches for monitoring capital adequacy in favor of a new standardized expanded risk-based approach that would include, unlike the current standardized approach, operational risk and Credit Valuation Adjustment (CVA) risk RWA components, and would also replace the existing market risk rule with the new fundamental review of the trading book (FRTB) framework. The G-SIB Surcharge Proposal would, among other things, measure the G-SIB surcharge in more granular 0.1% increments as opposed to the 0.5% increments that currently apply.

For additional information about regulatory developments, refer to the "Regulatory Developments" section of "Capital" in Management's Discussion and Analysis of Financial Condition and Results of Operations in our 2023 Form 10-K.

### **Restrictions on Transfer of Capital**

Our and State Street Bank's primary federal banking regulator in the U.S. is the Federal Reserve. Federal banking regulations place certain restrictions on dividend payments by banking subsidiaries to their parent company. The Federal Reserve has the authority to prohibit or to limit dividend payments by the banking organizations it supervises, including us and State Street Bank, if, in the Federal Reserve's opinion, the payment of such a dividend would constitute an unsafe or unsound practice in light of the financial condition of the banking organization. All of these policies and other requirements could affect our ability to declare dividend payments and repurchase our common stock, or require us to provide capital assistance to State Street Bank and/or any other banking subsidiary. For more information, refer to our 2023 Form 10-K.

## REGULATORY CAPITAL

Our objective with respect to regulatory capital management is to maintain a capital base and structure that is sized to support our unique business model and material risks. Our strong capital position provides us the financial flexibility to meet our business needs, including maintaining access to financial markets to support our clients' activity and to fund corporate growth, and to provide protection against loss to depositors and creditors. We strive to maintain an appropriate level of capital, commensurate with our risk profile, on which an appropriate return to shareholders is expected to be realized over both the short- and long-term, while protecting our obligations to depositors and creditors and complying with regulatory capital adequacy requirements. For more information, refer to our 2023 Form 10-K.

### Regulatory Capital Requirements

Under the Basel III rule, our total regulatory capital is composed of three tiers: CET1 capital, Tier 1 capital (which includes CET1 capital), and Tier 2 capital. The total of Tier 1 and Tier 2 capital, adjusted as applicable, is referred to as total regulatory capital.

CET1 capital is composed of core capital elements, such as qualifying common shareholders' equity and related surplus plus retained earnings and the cumulative effect of foreign currency translation plus net unrealized gains (losses) on debt and equity securities classified as AFS, less treasury stock and less goodwill and other intangible assets, net of related deferred tax liabilities. Tier 1 capital is composed of CET1 capital plus additional Tier 1 capital instruments which, for us, includes four series of preferred equity outstanding as of December 31, 2023. Tier 2 capital includes certain eligible subordinated long-term debt instruments. Total regulatory capital consists of Tier 1 capital and Tier 2 capital.

Certain other items, if applicable, must be deducted from Tier 1 and Tier 2 capital, including certain investments in the capital of unconsolidated banking, financial and insurance entities and the amount of expected credit losses that exceeds recorded allowances for loan and other credit losses. Expected credit losses are calculated for wholesale credit exposures by formula in conformity with the Basel III rule.

The CET1 risk-based capital ratio is a principal measure of capital adequacy for internationally active banking organizations. Under the Basel III framework, the ratio compares a banking organization's CET1 capital with the sum of its total risk-weighted assets (RWA) associated with credit risk, operational risk and market risk. In conformity with the Basel III final rule, we calculate our required capital and total RWA associated with credit risk, operational risk and

market risk primarily through the use of internal models.

As an advanced approaches banking organization in the U.S., we are required by the Basel III final rule to apply the Advanced Internal Ratings-Based (AIRB) approach in the calculation of our RWA related to credit risk. We calculate RWA for over 90% of our on- and off-balance sheet exposures associated with credit risk using internal risk-rating models under the AIRB approach.

The AIRB approach categorizes credit exposures into five types for the calculation of RWA:

- Wholesale
- Securitizations
- Equity
- Retail
- All Other

Our credit exposures fall predominantly into the "wholesale" categories. We have no credit exposures in the "retail" category. The "all other" category consists of exposures not categorized as any of the other types listed above, as well as any credit exposures defined by us as "not material," where we do not apply the AIRB approach to calculate related RWA. As required by the Basel III final rule, RWA for the above-described categories are aggregated and multiplied by a scaling factor of 1.06.

As an advanced approaches banking organization in the U.S., we are required by the Basel III final rule to apply the Advanced Measurement Approach (AMA) in the calculation of our RWA related to operational risk. Additional information about our process to manage operational risk and quantify required operational risk capital and RWA is provided under "Operational Risk" in this Public Disclosure.

We calculate our RWA related to market risk associated with our trading activities based on our measures of Value-at-Risk (VaR) and stressed VaR in conformity with the requirements of the final market risk capital rule. Additional information about the market risk associated with our trading activities and our related VaR and stressed-VaR measures is provided under "Market Risk" in this Public Disclosure.

The following table presents the regulatory capital structure, total RWA and related risk-based capital ratios for State Street and State Street Bank, calculated under the advanced approach and the standardized approach provisions of the Basel III final rule as of the date indicated:

**TABLE 1: REGULATORY CAPITAL STRUCTURE AND RELATED REGULATORY CAPITAL RATIOS**

	State Street		State Street Bank	
	Basel III Advanced Approach	Basel III Standardized Approach	Basel III Advanced Approach	Basel III Standardized Approach
	December 31, 2023	December 31, 2023	December 31, 2023	December 31, 2023
<b>(Dollars in millions)</b>				
<b>Common shareholders' equity:</b>				
Common Stock and related surplus	\$ 11,245	\$ 11,245	\$ 13,033	\$ 13,033
Retained earnings	27,957	27,957	14,454	14,454
Accumulated other comprehensive income (loss)	(2,354)	(2,354)	(2,097)	(2,097)
Treasury stock, at cost	(15,025)	(15,025)	—	—
<b>Total</b>	<b>21,823</b>	<b>21,823</b>	<b>25,390</b>	<b>25,390</b>
Regulatory capital adjustments:				
Goodwill and other intangible assets, net of associated deferred tax liabilities	(8,470)	(8,470)	(8,208)	(8,208)
Other adjustments	(382)	(382)	(298)	(298)
<b>Common equity tier 1 capital</b>	<b>12,971</b>	<b>12,971</b>	<b>16,884</b>	<b>16,884</b>
Preferred stock	1,976	1,976	—	—
<b>Tier 1 capital</b>	<b>14,947</b>	<b>14,947</b>	<b>16,884</b>	<b>16,884</b>
Qualifying subordinated long-term debt	1,870	1,870	536	536
Adjusted Allowance for Credit Losses	—	150	—	150
<b>Total capital<sup>(1)</sup></b>	<b>\$ 16,817</b>	<b>\$ 16,967</b>	<b>\$ 17,420</b>	<b>\$ 17,570</b>
<b>Risk-weighted assets<sup>(2)</sup></b>				
Credit risk <sup>(3)</sup>	\$ 61,210	\$ 109,228	\$ 54,942	\$ 107,067
Operational risk	43,768	NA	42,297	NA
Market risk	2,475	2,475	2,475	2,475
<b>Total</b>	<b>\$ 107,453</b>	<b>\$ 111,703</b>	<b>\$ 99,714</b>	<b>\$ 109,542</b>
<b>Capital Ratios:</b>				
	Minimum Requirement <sup>(4)</sup>			
Common equity tier 1 capital	8.0 %	12.1 %	11.6 %	15.4 %
Tier 1 capital	9.5	13.9	13.4	15.4
Total capital	11.5	15.7	15.2	16.0

<sup>(1)</sup> As of December 31, 2023, State Street has one insurance subsidiary, which has a surplus capital of \$350 million that is included in the total capital of the consolidated group.

<sup>(2)</sup> Refer to "Table 6: Components of Total Risk-Weighted Assets" for details

<sup>(3)</sup> Under the advanced approaches, credit risk RWA includes a CVA which reflects the risk of potential fair value adjustments for credit risk in our valuation of OTC derivative contracts. We use the simple CVA approach in conformity with the Basel III advanced approaches.

<sup>(4)</sup> Minimum requirements include a CCB of 2.5% and a SCB of 2.5% for the advanced approaches and the standardized approach, respectively, a G-SIB surcharge of 1.0%, and a countercyclical buffer of 0%. On June 28, 2023, we were notified by the Federal Reserve of the results from the 2023 supervisory stress test. Our SCB calculated under the 2023 supervisory stress test was well below the 2.5% minimum, resulting in an SCB at that floor, which will be in effect from October 1, 2023 through September 30, 2024.

<sup>NA</sup> Not applicable

## Supplementary Leverage Ratio

The following table presents the SLR for State Street using Tier 1 capital as calculated under the SLR provisions of the Basel III final rule as of the date indicated:

**TABLE 2: SUPPLEMENTARY LEVERAGE RATIO**

	<b>State Street</b>
	<b>December 31, 2023</b>
<b>(In millions)</b>	
<b>Part 1: Summary comparison of accounting assets and total leverage exposure</b>	
Total consolidated assets as reported in published financial statements <sup>(1)</sup>	297,258
Derivative exposure adjustments	17,339
Repo-Style exposure adjustments	(200,561)
Other off-balance sheet exposures adjustments	13,246
Other Adjustments <sup>(2)</sup>	(8,852)
Adjustments for frequency calculations <sup>(1)</sup>	190,668
Adjustments for deductions of qualifying central bank deposits for custodial banking organizations	(69,579)
Total Leverage Exposure	<b>239,519</b>
<b>Part 2: Supplementary Leverage Ratio<sup>(3)</sup></b>	
<b>On-balance sheet exposures</b>	
On-balance sheet assets (excluding on-balance sheet assets for repo-style transactions and derivative exposures, but including collateral)	245,229
LESS: Amounts deducted from tier 1 capital	8,852
LESS: Deductions of qualifying central bank deposits from total on-balance sheet exposures for custodial banking organizations	69,579
Total on-balance sheet exposures	<b>166,798</b>
<b>Derivative exposures</b>	
Replacement cost for derivative exposures	10,077
Add-on amounts for potential future exposure (PFE) for derivative exposures	16,620
Gross-up for collateral posted if deducted from the on-balance sheet assets	993
LESS: Deductions of receivable assets for cash variation margin posted in derivative transactions, if included in on-balance sheet assets	627
Total derivative exposures	<b>27,063</b>
<b>Repo-style transactions</b>	
On-balance sheet assets for repo-style transactions	195,665
LESS: Reduction of the gross value of receivables in reverse repurchase transactions by cash payables in repurchase transactions under netting agreements	170,739
Counterparty credit risk for all repo-style transactions	7,486
Total exposures for repo-style transactions	<b>32,412</b>
<b>Other off-balance sheet exposures</b>	
Off-balance sheet exposures at gross notional amounts	36,034
LESS: Adjustments for conversion to credit equivalent amounts <sup>(4)</sup>	22,788
Off-balance sheet exposures	<b>13,246</b>
<b>Capital and total leverage exposure</b>	
Total leverage exposure	<b>239,519</b>
Tier 1 capital	<b>14,947</b>
<b>Supplementary leverage ratio<sup>(3)</sup></b>	<b>6.2 %</b>

<sup>(1)</sup> In accordance with the SLR rule, total consolidated assets are reported as quarter-end balances, whereas certain other line items in Part 1 are reported as average balances for the quarter. To account for this timing difference, a frequency adjustment has been included.

<sup>(2)</sup> "Other Adjustments" primarily includes goodwill and other intangible assets, net of associated deferred tax liabilities, with all such adjustments applied in conformity with the Basel III final rule as well as other applicable regulatory adjustments.

<sup>(3)</sup> Supplementary Leverage Ratio is calculated by dividing tier 1 capital (numerator) by total leverage exposure for SLR (denominator). Total leverage exposure is calculated as the quarterly average of total on-balance sheet assets plus the average of each of the three month's period-end balances for specified off-balance sheet amounts.

<sup>(4)</sup> Credit equivalent amounts are calculated using the credit conversion factors in accordance with the Basel III standardized approach.

### Global Systemically Important Bank

We are designated as a large BHC subject to enhanced supervision and prudential standards, commonly referred to as a Systematically Important Financial Institution (SIFI). We have been identified by the Financial Stability Board (FSB) and the Basel Committee on Banking Supervision (BCBS) as a G-SIB. Our designation as a G-SIB requires us to maintain an additional capital buffer above the Basel III final rule minimum CET1 capital ratio of 4.5%, based on a number of factors, as evaluated by banking regulators.

Our current G-SIB surcharge, through December 31, 2024, is 1.0%. Based upon preliminary calculations using data as of December 31, 2023, we currently anticipate that our surcharge will remain at 1% through December 31, 2025; however, that calculation has not yet been finalized and is subject to many financial, balance sheet, market and other factors, and consequently there is a risk that a higher G-SIB surcharge of 1.5% will result from the final calculation.

Further, like all other U.S. G-SIBs, we are also subject to a 2.0% leverage buffer under the SLR final rule. If we fail to exceed the 2.0% leverage buffer, we will be subject to increased restrictions (depending upon the extent of the shortfall) regarding capital distributions and discretionary executive bonus payments.

### Total Loss-Absorbing Capacity

The Federal Reserve's final rule on TLAC, LTD and clean holding company requirements for U.S. domiciled G-SIBs, such as us, is intended to improve the resiliency and resolvability of certain U.S. banking organizations through enhanced prudential standards, and requires us, among other things, to comply with minimum requirements for external TLAC (combined eligible Tier 1 regulatory capital and LTD) and LTD. Specifically, we must hold:

#### Amount equal to:

External TLAC	<p>Greater of:</p> <ul style="list-style-type: none"> <li>• 21.5% of total RWA (18.0% minimum plus 2.5% plus a G-SIB surcharge calculated for these purposes under Method 1 of 1.0% plus any applicable countercyclical buffer, which is currently 0%); and</li> <li>• 9.5% of total leverage exposure (7.5% minimum plus the SLR buffer of 2.0%), as defined by the SLR final rule.</li> </ul>
Qualifying external LTD	<p>Greater of:</p> <ul style="list-style-type: none"> <li>• 7.0% of RWA (6.0% minimum plus a G-SIB surcharge calculated for these purposes under method 2 of 1.0%); and</li> <li>• 4.5% of total leverage exposure, as defined by the SLR final rule.</li> </ul>

The following table presents external TLAC and external LTD as of December 31, 2023

**TABLE 3: TOTAL LOSS-ABSORBING CAPACITY**

(Dollars in millions)	As of December 31, 2023			
	Actual		Requirement	
<b>Total loss-absorbing capacity:</b>				
Risk-weighted assets	32,850	29.4	24,016	21.5
Total leverage exposure	32,850	13.7	22,754	9.5
Long-term debt:				
Risk-weighted assets	16,753	15.0	7,819	7.0
<b>Total leverage exposure</b>	<b>16,753</b>	<b>7.0</b>	<b>10,778</b>	<b>4.5</b>

## Regulatory Capital Instruments

Instruments issued and included in our regulatory capital include common stock, preferred stock and tier 2 qualifying subordinated long-term debt. The following table presents summary information about the capital instruments included as of December 31, 2023:

**TABLE 4: REGULATORY CAPITAL INSTRUMENTS**

December 31, 2023

(Dollars in millions)

Description	Amount Issued	Capital Amount	Capital Category	Type	Maturity	Dividend/Coupon
<b>Equity:</b>						
Common stock <sup>(1)</sup>	(3,780)	(3,780)	CET1	NA	NA	NA <sup>(4)</sup>
Series D preferred stock <sup>(2)</sup>	742	742	Tier 1	Fixed to Float	NA	5.900 % <sup>(5)</sup>
Series F Preferred stock <sup>(2)</sup>	247	247	Tier 1	Float	NA	9.243 <sup>(5)</sup>
Series G Preferred stock <sup>(2)</sup>	493	493	Tier 1	Fixed to Float	NA	5.350 <sup>(5)</sup>
Series H Preferred stock <sup>(2)</sup>	494	494	Tier 1	Fixed to Float	NA	8.185 <sup>(5)</sup>
<b>Qualifying subordinated long-term debt:</b>						
Subordinated debt <sup>(3)</sup>	500	528	Tier 2	Fixed to Float	November 1, 2034	3.031
Subordinated debt	850	845	Tier 2	Fixed	March 3, 2031	2.200
Subordinated debt	500	497	Tier 2	Fixed to Float	November 21, 2034	6.123

<sup>(1)</sup> Amount consists of common stock issued and related surplus, net of common stock held in treasury.

<sup>(2)</sup> Amount issued is net of related issuance costs. Dividends payable on preferred stock are non-cumulative and are payable if, as and when declared by the Board.

<sup>(3)</sup> This issuance has a November 1, 2029 call date.

<sup>(4)</sup> Common Stock dividends are payable if, as and when declared quarterly by the Board with no contractual obligation or stated coupon rate.

<sup>(5)</sup> For more details related to preferred stock dividends, refer to Table 5 below.

<sup>NA</sup> Not applicable

### Common Stock

Our common stock consists of 750 million shares authorized for issuance, \$1.00 par value per share, of which 503,879,642 shares were issued, 201,935,599 shares were held in treasury, and 301,944,043 shares were outstanding as of December 31, 2023. Our common stock is listed on the New York Stock Exchange under the ticker symbol STT. Outstanding shares of our common stock are validly issued, fully paid and non-assessable. Holders of our common stock are not, and will not be, subject to any liability as shareholders.

Holders of our common stock are entitled to receive dividends if, as and when declared by the Board out of any funds legally available for dividends. Holders of our common stock are also entitled, upon our liquidation, and after claims of creditors and the preferences of any class or series of preferred stock outstanding at the time of liquidation, to receive our net assets on a pro-rata basis. Currently, the payment of future common stock dividends by the Parent Company to its shareholders, or the purchase by the Parent Company of shares of its common stock, is subject to the review of our capital plan by the Federal Reserve in connection with its annual CCAR process. We are generally not permitted to purchase shares of our common stock unless full dividends are paid (or declared, with funds set aside for payment) on all outstanding shares of preferred stock.

Holders of our common stock are entitled to one vote for each share that they hold and are vested with all of the voting power except as the Board has provided, or may provide in the future, with respect to preferred stock or any other class or series of preferred stock that the Board may hereafter authorize.

## Preferred Stock

Our preferred stock has, and any other series of preferred stock upon issuance will have, preference over our common stock with respect to the payment of dividends and the distribution of assets in the event of our liquidation, winding up or dissolution. Our preferred stock also has such other preferences as may be fixed by the Board.

The following table presents the details on each of the series of the preferred stock issued and outstanding as of December 31, 2023:

**TABLE 5: PREFERRED STOCK**

Preferred Stock <sup>(1)</sup> :	Issuance Date	Depository Shares Issued	Amount outstanding (in millions)	Ownership Interest Per Depository Share	Liquidation Preference Per Share	Liquidation Preference Per Depository Share	Per Annum Dividend Rate	Dividend Payment Frequency	Carrying Value as of December 31, 2023 (In millions)	Redemption Date <sup>(2)</sup>
Series D	February 2014	30,000,000	750	1/4,000th	100,000	25	5.90% to but excluding March 15, 2024, then 9.008% <sup>(3)</sup>	Quarterly: March, June, September and December	742	March 15, 2024
Series F	May 2015	250,000	250	1/100th	100,000	1,000	Floating rate equal to the three-month CME term SOFR plus 3.859%, or 9.243% effective December 15, 2023	Quarterly: March, June, September and December	247	September 15, 2020
Series G	April 2016	20,000,000	500	1/4,000th	100,000	25	5.35% <sup>(4)</sup>	Quarterly: March, June, September and December	493	March 15, 2026
Series H	September 2018	500,000	500	1/100th	100,000	1,000	Floating rate equal to the three-month CME term SOFR plus 2.801%, or 8.185% effective December 15, 2023	Quarterly: March, June, September and December	494	December 15, 2023

<sup>(1)</sup> The preferred stock and corresponding depository shares may be redeemed at our option in whole, but not in part, prior to the redemption date upon the occurrence of a regulatory capital treatment event, as defined in the certificate of designation, at a redemption price equal to the liquidation price per share and liquidation price per depository share plus any declared and unpaid dividends, without accumulation of any undeclared dividends.

<sup>(2)</sup> On the redemption date, or any dividend payment date thereafter, the preferred stock and corresponding depository shares may be redeemed by us, in whole or in part, at the liquidation price per share and liquidation price per depository share plus any declared and unpaid dividends, without accumulation of any undeclared dividends.

<sup>(3)</sup> The dividend rate for the floating rate period of the Series D preferred stock that begins on March 15, 2024 and all subsequent floating rate periods will transition to a new, fixed rate in accordance with the LIBOR Act and the contractual terms of the Series D preferred stock.

<sup>(4)</sup> The dividend rate for the floating rate period of the Series G preferred stock that begins on March 15, 2026 and all subsequent floating rate periods will remain at the current fixed rate in accordance with the LIBOR Act and the contractual terms of the Series G preferred stock.

In January 2024, we issued 1.5 million depository shares, each representing 1/100th ownership interest in shares of fixed-to-floating rate, non-cumulative perpetual preferred stock, Series I, without par value per share, with a liquidation preference of \$100,000 per share (equivalent to \$1,000 per depository share), in a public offering. The aggregate proceeds, net of underwriting discounts, commissions and other issuance costs, were approximately \$1.5 billion. Dividends on the Series I Preferred Stock will be payable quarterly at an initial rate of 6.700% per annum commencing on June 15, 2024, with the first dividend payable on a pro-rata basis. Our preferred stock dividends, including the declaration, timing and amount thereof, are subject to consideration and approval by the Board at the relevant times.

In addition, on February 8, 2024, we announced that we will redeem on March 15, 2024 an aggregate \$1.0 billion, or all 7,500 outstanding shares, of our non-cumulative perpetual preferred stock, Series D (represented by 30,000,000 depository shares), for a cash redemption price of \$100,000 per share (equivalent to \$25 per depository share), plus all declared and unpaid dividends and all 2,500 of the outstanding shares of our non-cumulative perpetual preferred stock, Series F (represented by 250,000 depository shares), for a cash redemption price of \$100,000 per share (equivalent to \$1,000 per depository share) plus all declared and unpaid dividends. Cash dividends on the Series D and F Preferred Stock, of approximately \$1,475 and \$2,336, respectively, per share, or approximately \$0.37 and \$23.36, respectively per depository share have been declared for the period from December 15, 2023 up to but not including March 15, 2024 (together, the "March Dividends"). The March Dividends will be paid separately to the holders of record of the Series D Preferred Stock and the Series F Preferred Stock as of February 29, 2024 in the customary manner. Accordingly, there will not be any declared and unpaid dividends included in the Series D and Series F redemption price.

## Qualifying Subordinated Long-Term Debt

Subordinated debt included in our tier 2 capital is comprised of three issuances; \$500 million maturing on November 1, 2034 with a November 1, 2029 call date, \$850 million maturing on March 3, 2031 and a new subordinate debt issued in Q4 2023 with a \$500 million maturing on November 21, 2034. As is necessary to qualify for inclusion in tier 2 capital, among other things, these issuances each have a minimum original maturity of at least five years. As required by Basel III, in the last five years before its maturity, the amount of an issuance included in tier 2 capital is discounted downward by cumulative increments of 20% per year until its maturity. When the remaining maturity is less than one year, the amount is excluded from tier 2 capital.

## Total Risk-Weighted Assets

The following table presents the components of our total RWA and, where applicable, sub-components, related to credit risk, operational risk and market risk for State Street and State Street Bank, calculated under the advanced approaches provisions of the Basel III final rule as of the date indicated:

**TABLE 6: COMPONENTS OF TOTAL RISK-WEIGHTED ASSETS**

December 31, 2023 (In millions)	State Street		State Street Bank	
	RWA	EAD <sup>(1)</sup>	RWA	EAD <sup>(1)</sup>
<b>Credit risk:</b>				
Wholesale	\$ 37,268	\$ 294,476	\$ 36,767	\$ 293,439
Securitizations <sup>(2)</sup>	3,836	17,849	3,836	17,849
Equity <sup>(2)</sup>	9,595	6,688	4,140	5,091
All other <sup>(3)</sup>	7,766	5,876	7,211	5,518
Credit valuation adjustment <sup>(4)</sup>	2,745	NA	2,988	NA
<b>Total credit risk<sup>(5)</sup></b>	<b>61,210</b>	<b>\$ 324,889</b>	<b>54,942</b>	<b>\$ 321,897</b>
<b>Operational risk<sup>(6)</sup></b>	<b>43,768</b>	NA	<b>42,297</b>	NA
<b>Market risk:</b>		<b>Sixty-Day Average VaR</b>		<b>Sixty-Day Average VaR</b>
Value-at-risk <sup>(7)</sup>	563	15	563	15
Stressed value-at-risk <sup>(7)</sup>	1,912	51	1,912	51
<b>Total market risk</b>	<b>2,475</b>		<b>2,475</b>	
<b>Total risk-weighted assets</b>	<b>\$ 107,453</b>		<b>\$ 99,714</b>	

<sup>(1)</sup> Exposure at Default (EAD) represents our estimated exposure to a counterparty if that counterparty defaults; EAD is more fully described under "Advanced Internal Ratings-Based Approach" in this Public Disclosure.

<sup>(2)</sup> Additional detail with respect to the RWA and EAD of securitizations and equity exposures is provided under "Securitizations" and "Equity Exposures Not Subject to Market Risk Rule," respectively, in this Public Disclosure.

<sup>(3)</sup> "All Other" consists of assets not assigned to an exposure category and exposures defined as "non material".

<sup>(4)</sup> CVA reflects the risk of potential fair-value adjustments for credit risk reflected in our valuation of OTC derivative contracts. We use the simple CVA approach in conformity with the Basel III Final rule.

<sup>(5)</sup> RWA reflects 1.06 supervisory scaling factor described earlier in this Public Disclosure under "Regulatory Capital Requirements."

<sup>(6)</sup> RWA for operational risk are calculated using required capital measured by an internally developed loss distribution model; refer to "Operational Risk" in this Public Disclosure.

<sup>(7)</sup> RWA for market risk associated with trading activities are calculated based on respective 60-day moving averages of VaR and stressed-VaR measures; refer to "Market Risk" in this Public Disclosure.

<sup>NA</sup> Not applicable

## RISK MANAGEMENT

### General

In the normal course of our global business activities, we are exposed to a variety of risks, some inherent in the financial services industry, others more specific to our business activities. Our risk management framework focuses on material risks, which include the following:

- credit and counterparty risk;
- liquidity risk, funding and management;
- operational risk;
- information technology risk;
- market risk associated with our trading activities;
- market risk associated with our non-trading activities, which we refer to as asset-and-liability management, and which consists primarily of interest rate risk;
- model risk;
- strategic risk; and
- reputational, fiduciary and business conduct risk.

For more information on our risk management framework, refer to our 2023 Form 10-K.

### Governance and Structure

We have an approach to risk management that involves all levels of management, from the Board and its committees, including its Examining & Audit Committee of the Board (E&A Committee), Risk Committee (RC), Human Resources Committee (HRC), and Technology and Operations Committee, to each business unit and each employee. We allocate responsibility for risk oversight so that risk/return decisions are made at an appropriate level, and are subject to robust and effective review and challenge. While we believe that our risk management program is effective in managing the risks in our businesses, internal and external factors may create risks that cannot always be identified or anticipated.

## Agency Credit Ratings

Our ability to maintain consistent access to liquidity is fostered by the maintenance of high investment grade ratings as measured by the major independent credit rating agencies. Factors essential to maintaining high credit ratings include:

- diverse and stable core earnings;
- relative market position;
- strong risk management;
- strong capital ratios;
- diverse liquidity sources, including the global capital markets and client deposits;
- strong liquidity monitoring procedures; and
- preparedness for current or future regulatory developments.

High ratings limit borrowing costs and enhance our liquidity by:

- providing assurance for unsecured funding and depositors;
- increasing the potential market for our debt and improving our ability to offer products;
- serving markets; and
- engaging in transactions in which clients value high credit ratings.

A downgrade or reduction of our credit ratings could have a material adverse effect on our liquidity by restricting our ability to access the capital markets, which could increase the related cost of funds. In turn, this could cause the sudden and large-scale withdrawal of unsecured deposits by our clients, which could lead to draw-downs of unfunded commitments to extend credit or trigger requirements under securities purchase commitments; or require additional collateral or force terminations of certain trading derivative contracts. For more information, refer to our 2023 Form 10-K.

## MODEL RISK MANAGEMENT

The use of models is widespread throughout the financial services industry, with large and complex organizations relying on sophisticated models to support numerous aspects of their financial decision making. The models contemporaneously represent both a significant advancement in financial management and a source of risk. In large banking organizations like us, model results influence business decisions, and model failure could have a harmful effect on our financial performance. As a result, the Model Risk Management (MRM) Framework seeks to mitigate our model risk.

Our MRM program has three principal components:

- A model risk governance program that defines roles and responsibilities, including the authority to restrict model usage, provides policies and guidance, monitors compliance, and reports regularly to the Board on the

overall degree of model risk across the corporation;

- A model development process that focuses on sound design and computational accuracy, and includes activities designed to test for robustness, stability, and sensitivity to assumptions; and
- An independent model validation function designed to verify that models are conceptually sound, computationally accurate, are performing as expected, and are in line with their intended use.

The MRM Framework, highlighted above, also provides insight and guidance into addressing key model risks that arise.

### **Governance**

Models used in the regulatory capital calculation can only be deployed for use after undergoing a model validation by Enterprise Risk Management's (ERM) MRM group. The model validation results and/or a decision by the Model Risk Committee (MRC) must permit model usage or the model may not be used.

The MRM group is responsible for defining the corporate-wide model risk governance framework and maintaining policies that achieve the framework's objectives. All regulatory capital calculation models, including Artificial Intelligence and Machine Learning models must comply with the model risk governance framework and corresponding policies. The team is responsible for overall model risk governance capabilities, with particular emphasis in the areas of model validation, model risk reporting, model performance monitoring, tracking of new model development status, and committee-level review and challenge.

The MRC, which is composed of senior managers responsible for representing functional areas and business units with key models across the organization, reports to Management Risk and Capital Committee (MRAC), and provides guidance and oversight to the MRM function.

### **Model Development, Usage and Ongoing Monitoring**

Models are developed under standards governing data sourcing, methodology selection and model integrity testing. Model development includes a statement of purpose to align development with intended use. It also includes a comparison of alternative approaches to promote a sound modeling approach.

Model developers conduct an assessment of data quality and relevance. The development teams conduct a variety of tests of the accuracy, robustness and stability of each model.

Model owners submit models to the Model Validation Group (MVG) for validation on a regular

basis, as per the existing policy. The model owners also conduct ongoing monitoring of each model.

### **Model Validation**

MVG is part of the MRM group within ERM and performs model validations and reviews. MVG is independent, as required by applicable bank regulatory requirements, of both the developers and users of the models. MVG validates models through a sophisticated evaluation process that assesses the appropriateness, accuracy, and suitability of data inputs, methodologies, documentation, assumptions, and processing code. Model validation also encompasses an assessment of model performance, sensitivity, and robustness, as well as a model's potential limitations given its particular assumptions or deficiencies. Based on the results of its review, MVG issues a model use decision and may require remedial actions and/or compensating controls. MVG also maintains a model risk-rating system, which assigns a risk rating to each model based on an assessment of a model's inherent and residual risks. These ratings aid in the understanding and reporting of model risk across the model portfolio, and enable the triaging of needs for remediation.

Although model validation is the primary method of subjecting models to independent review and challenge, in practice, a multi-step governance process provides the opportunity for challenge by multiple parties. First, MVG conducts a model validation and issues a model use decision that may be accompanied by remedial actions and/or compensating controls. MVG communicates its results as one of the following three outcomes: "Approved", "Approved with Conditions", or "Not Approved for Use". There are three ways in which a model can be deemed "Not Approved for Use" given a validation: (1) the aggregation of the model scoring within MRM's Model Risk Rating System (MRRS) model is poor enough to result in a "high" rating, (2) the scoring of one or more MRRS model element(s) is deemed "critical" resulting in an automatic "high" rating irrespective of the other elements as the "critical" element(s) undermines the model, or (3) the remediation action is not properly taken by the due date resulting in a severe compliance breach that undercuts the model rating. Second, these decisions may be reviewed, challenged, and confirmed by the MRC. Finally, model use decisions, risk ratings, and overall levels of model risk may be reported to and reviewed by MRAC. MVG also reports regularly on model risk issues to the Board.

## WHOLESALE CREDIT RISK

### *Core Policies and Principles*

We define credit risk as the risk of financial loss if a counterparty, borrower or obligor, collectively referred to as a counterparty, is either unable or unwilling to repay borrowings or settle a transaction in accordance with underlying contractual terms. We assume credit risk in our traditional lending activities, such as loans and contingent commitments, in our investment securities portfolio, where recourse to a counterparty exists, and in our direct and indirect trading activities, such as securities purchased under a resale agreement, principal securities lending and FX and indemnified agency securities lending. We also assume credit risk in our day-to-day treasury and securities and other settlement operations, in the form of deposit placements and other cash balances, with central banks or private sector institutions and fees receivables.

We distinguish between three major types of credit risk:

- Default risk - the risk that a counterparty fails to meet its contractual payment obligations;
- Country risk - the risk that we may suffer a loss, in any given country, due to any of the following reasons: deterioration of economic conditions, political and social upheaval, nationalization and appropriation of assets, government repudiation of indebtedness, exchange controls, and disruptive currency depreciation or devaluation; and
- Settlement risk - the risk that the settlement or clearance of transactions will fail, which arises whenever the exchange of cash, securities and/or other assets is not simultaneous.

The Credit and Market Risk Committee (CMRC), directly and via its designated subcommittees, has responsibility for independent risk oversight and decision-making for all of State Street's credit, counterparty and trading-related activities, including market risk. The subcommittees of the CMRC include the Credit Committee, Collateral Management Oversight Committee; Tax Credit Investment Committee, Swap Dealer Senior Management Committee and the acceptance of credit risk by State Street is governed by corporate policies and guidelines that include standardized procedures applied across the entire organization. These policies and guidelines include specific requirements related to each counterparty's risk profile; the markets served; counterparty, industry and country concentrations; and regulatory compliance. These policies and procedures also implement a number of core principles, which include the following:

- We measure and consolidate credit risks to each counterparty, or group of counterparties, in accordance with a "one-obligor" principle that aggregates risks across our business units;
- ERM reviews and approves all material extensions of credit, or changes to extensions of credit (such as changes in term, collateral structure or covenants), in accordance with assigned credit-approval authorities;
- Credit-approval authorities are assigned to individuals according to their qualifications, experience and training, and these authorities are periodically reviewed. Our largest exposures require approval by the Credit Committee. With respect to small and low-risk extensions of credit to certain types of counterparties, approval authority is granted to individuals outside of ERM;
- We seek to avoid or limit undue concentrations of risk. Counterparty (or groups of counterparties), industry, country and product-specific concentrations of risk are subject to frequent review and approval in accordance with our risk appetite;
- We determine the creditworthiness of counterparties through a detailed risk assessment, including the use of internal risk-rating methodologies;
- We review all extensions of credit and the creditworthiness of counterparties at least annually. The nature and extent of these reviews are determined by the size, nature and term of the extensions of credit and the creditworthiness of the counterparty; and
- We subject all corporate policies and guidelines to periodic review as an integral part of our periodic assessment of our risk appetite.

Our corporate policies and guidelines require that all extensions of credit comply with the bank's credit standards, limit credit-related losses, and are consistent with the goal of maintaining a strong financial condition.

For more information on credit risk management, refer to our 2023 Form 10-K.

### **Structure and Organization**

The Credit Risk group within ERM is responsible for the assessment, approval and monitoring of credit risk across State Street. The group is managed centrally, has dedicated teams in a number of locations worldwide across our businesses, and is responsible for related policies and procedures and for our internal credit-rating systems and methodologies. In addition, the group, in conjunction

with the business units, establishes appropriate measurements and limits to control the amount of credit risk accepted across State Street's various business activities at the country of risk level, portfolio level and individual counterparty or group of counterparty level. These measurements and limits are reviewed periodically.

In conjunction with other groups in ERM, the Credit Risk group is jointly responsible for the design, implementation and oversight of our credit risk measurement and management systems, including data and assessment systems, quantification systems and the reporting framework.

Various key committees within State Street are responsible for the oversight of credit risk and associated credit risk policies, systems and models. All credit-related activities are governed by our risk appetite framework and our credit risk guidelines, which define our general philosophy with respect to credit risk and the manner in which we control, manage and monitor such risks.

The previously described CMRC has primary responsibility for the oversight of credit risk, including the periodic review and approval of the bank's credit risk guidelines and policies.

The Credit Committee has responsibility for assigning credit authority and approving the largest and higher-risk extensions of credit to individual counterparties or groups of counterparties.

CMRC provides periodic updates to MRAC and the Board's RC.

### **Credit Ratings**

We perform initial and ongoing reviews to exercise due diligence on the creditworthiness of our counterparties when conducting any business with them or approving any credit limits.

This due diligence process includes the assignment of an internal credit rating, which is determined by the use of internally developed and validated methodologies, scorecards and a 15-grade rating scale. This risk-rating process incorporates the use of risk-rating tools in conjunction with management judgment; qualitative and quantitative inputs are captured in a replicable manner and, following a formal review and approval process, an internal credit rating based on our rating scale is assigned. Credit ratings are reviewed and approved by the Credit Risk group or designees within ERM. To facilitate comparability across the portfolio, counterparties within a given sector are rated using a risk-rating tool developed for that sector.

Our risk-rating methodologies are approved for use by the Trading Methodology Committee (TMC), after completion of internal model validation processes, and are subject to an annual review, including re-validation.

We generally rate our counterparties individually, although some accounts defined by us as low-risk are rated on a pooled basis. We evaluate and rate the credit risk of our counterparties on an ongoing basis.

### **Risk Parameter Estimates**

Our internal risk-rating system promotes a clear and consistent approach to determining appropriate credit risk classifications for our credit counterparties and exposures. This allows us to track changes in risk associated with these counterparties and exposures over time and enhances our ability to more accurately calculate both risk exposures and capital, and enables better strategic decision making across the organization.

We use credit risk parameter estimates for the following purposes:

- The assessment of the creditworthiness of counterparties and, in conjunction with our risk appetite statement, the development of appropriate credit limits for our products and services, including loans, foreign exchange, securities finance, placements and repurchase agreements;
- The use of an automated process for limit approvals for certain low-risk counterparties, as defined in our credit risk guidelines, and based on the counterparty's probability of default (PD) rating class;
- The development of approval authority matrices based on PD, credit limit and counterparty type; counterparties with higher PDs and/or higher limits require higher levels of approval compared to counterparties with lower PDs and/or lower limits;
- The analysis of risk concentration trends using PD and exposure-at-default (EAD) data;
- The standardization of rating integrity testing by Global Credit Review group (GCR);
- The level of management review of overdrafts;
- The monitoring of credit facility utilization levels;
- The aggregation and comparison of counterparty exposures with risk appetite levels to determine if businesses are maintaining appropriate risk levels; and
- The determination of our regulatory capital requirements for the AIRB provided in the Basel framework.

### **Credit Risk Mitigation**

State Street seeks to limit its credit exposure and reduce its potential credit losses through the use of credit risk mitigation. The Basel III final rule permits

State Street to reflect the application of credit risk mitigation when it meets the standards outlined therein. Examples of forms of credit risk mitigation include a security interest in financial and non-financial assets (collateral), netting and guarantees. Where possible, we apply the recognition of collateral, guarantees and netting to mitigate overall risk within its counterparty credit portfolio. While credit default swaps are permitted under the Basel III final rule, State Street does not actively use credit default swaps as a risk mitigation tool.

### **Collateral**

In many parts of our business, we regularly require collateral to be received from counterparties or agree to provide collateral to counterparties in connection with contracts that involve credit risk. In our trading businesses, this collateral is typically in the form of cash, as well as highly-rated and/or liquid securities (i.e., government securities and other bonds or equity securities). Credit risks in our non-trading and securities finance businesses are also often secured by bonds and equity securities and by other types of assets. Collateral serves to reduce the risk of loss inherent in an exposure by reducing the level of exposure or improving the prospect of recovery in the event of a counterparty default. However, rapidly changing market values of the collateral we hold, unexpected increases in the credit exposure to a client or counterparty, reductions in the value or change in the type of securities held by us, as well as operational errors or errors in the manner in which we seek to exercise our rights, may reduce the risk mitigation effects of collateral. While collateral is often an alternative source of repayment, it generally does not replace the requirement within our policies and guidelines for high-quality underwriting. We also may choose to incur credit exposure without the benefit of collateral or other risk mitigating credits rights.

Our credit risk guidelines require that the collateral we accept for risk mitigation purposes is of high quality, can be reliably valued and is supported by a valid security interest that permits liquidation if or when required. Generally, when collateral is of lower quality, more difficult to value or more challenging to liquidate, higher discounts to market values are applied for the purposes of measuring credit risk. For certain less liquid collateral, longer liquidation periods are assumed when determining the credit exposure.

All types of collateral are assessed regularly by ERM, as is the basis on which the collateral is valued. Our assessment of collateral, including the ability to liquidate collateral in the event of a counterparty default, and also with regard to market values of collateral under a variety of hypothetical market conditions, is an integral component of our assessment of risk and approval of credit limits. We also seek to identify, limit and monitor instances of

"wrong-way" risk, where a counterparty's risk of default is positively correlated with the risk of our collateral eroding in value.

We maintain policies and procedures requiring that documentation used to collateralize a transaction is legal, valid, binding and enforceable in the relevant jurisdictions. We also conduct legal reviews periodically to assess whether our documentation meets these standards.

For a discussion of the additional collateral or termination payments that may be called in the event of a future credit rating downgrade of the Firm, see "Derivatives Netting and Credit Contingencies" section in "Note 10. Derivative Financial Instruments" in our 2023 Form 10-K.

### **Netting**

Netting is a mechanism that allows institutions and counterparties to net offsetting exposures and payment obligations against one another through the use of qualifying master netting agreements. A master netting agreement allows for, upon a counterparty default, the netting of rights and obligations arising under derivatives or other transactions under such agreement. In such an event, the netting of obligations would result in a single net claim owed by, or to, the counterparty. This is commonly referred to as "close-out netting", and is pursued wherever possible. We may also enter into master agreements that allow for the netting of amounts payable on a given day and in the same currency, reducing our settlement risk. This is commonly referred to as "payment netting", and is widely used in our foreign exchange activities.

As with collateral, we have policies and procedures in place to apply close-out and payment netting only to the extent allowed under the master agreement. In the case of payment netting, operational constraints may preclude us from reducing settlement risk, notwithstanding the legal right to require the same under the master netting agreement. In the event we become unable, due to operational constraints, actions by regulators, changes in accounting principles, law or regulation (or related interpretations) or other factors, to net some or all of our offsetting exposures and payment obligations under those agreements, we would be required to gross up our assets and liabilities on our statement of condition and our calculation of RWA, accordingly. This would result in a potentially material change in our regulatory ratios, including the Liquidity Coverage Ratio (LCR), and present increased credit, liquidity, asset-and-liability management and operational risks, some of which could be material.

### **Guarantees**

A guarantee is a financial instrument that results in credit support being provided by a third party, (i.e., the protection provider) to the underlying obligor (the

beneficiary of the provided protection) on account of an exposure owing by the obligor. The protection provider may support the underlying exposure either in whole or in part. Support of this kind may take different forms, including, for example, financial guarantees and letters of credit.

ERM and Legal teams have established a review process to evaluate guarantees under the applicable requirements of State Street policies and Basel III requirements. The governance process requires ongoing consideration of various factors that may impact the recognition of the guarantee (e.g., documentation changes and/or credit quality of protection providers).

State Street currently recognizes the risk mitigating benefit of eligible guarantees issued by investment grade affiliates of certain Securities Finance and FX derivative counterparties (banking entities).

We do not believe that our exposure to any particular credit risk mitigation tool results in a significant concentration risk.

### **Credit Limits**

Central to our philosophy for our management of credit risk is the approval and imposition of credit limits, against which we monitor the current and potential future credit exposure arising from our business activities with counterparties or groups of counterparties. Credit limits are a reflection of our risk appetite, which may be determined by the creditworthiness of the counterparty, the nature of the risk inherent in the business undertaken with the counterparty, or a combination of relevant credit factors. Our risk appetite for certain sectors and certain countries and geographic regions may also influence the level of risk we are willing to assume to certain counterparties.

The analysis and approval of credit limits are undertaken in a consistent manner across our businesses, although the nature and extent of the analysis may vary, based on the type, term and magnitude of the risk being assumed. Credit limits and underlying exposures are assessed and measured on both a gross and net basis where appropriate, with net exposure determined by deducting the value of any collateral held from gross exposure. For certain types of risk being assumed, we will also assess and measure exposures under a variety of hypothetical market conditions.

Credit limits are re-evaluated annually, or more frequently as needed, and are revised periodically on prevailing and anticipated market conditions, changes in counterparty or country-specific credit ratings and outlook, changes in State Street's risk appetite for certain counterparties, sectors or countries, and enhancements to the measurement of credit utilization.

### **Advanced Internal Ratings-Based Approach**

We measure and monitor our wholesale credit risk exposures by applying the AIRB approach using standard risk parameters, all of which apply methodologies consistent with the Basel framework. With respect to our Securities Finance - Agency securities lending business, we measure our credit risk exposures using a VaR model that has been reviewed and approved by our primary regulator.

The AIRB approach consists of three main building blocks:

- **PD.** We define probability of default (PD) as our estimate of the long-run average likelihood that a counterparty will be unable to meet its financial or settlement obligations over a one-year time horizon, expressed as a percentage. A PD is computed for each of our counterparties using a model specific to the type of counterparty or sector; the PD is then converted into a numeric credit rating using our 15-grade rating masterscale.
- **LGD.** We define loss given default (LGD) as our estimate of the economic loss per dollar of EAD (described below) that we would expect to incur in the event of a counterparty default, within a one-year time horizon in economic downturn conditions, expressed as a percentage. LGD amounts are based on the specific characteristics and structure of the individual exposures to a counterparty.
- **EAD.** We define exposure at default (EAD) as our estimate of our exposure to a counterparty upon a default by that counterparty. For example, this amount may represent the outstanding principal balance of a loan or the fair value and potential future exposure of a derivative contract.

### **Estimation and Validation of PD, LGD and EAD**

We calculate our PD, LGD and EAD parameters under a unified framework that assesses the relative risk of different exposures and counterparty types. All three parameters are based upon a consistent definition of default.

### **Definition of Default**

We consider a counterparty to be in default if: (1) we determine that the counterparty is unlikely to pay its credit obligations to State Street in full, without recourse by State Street to actions such as underlying collateral (if held); or (2) the counterparty is past due more than 90 days on any material credit obligation(s) to us.

A counterparty in default remains in default until we have reasonable assurance of repayment and performance for all contractual principal and interest payments on all of our exposures to the counterparty

(other than exposures that we have fully written down or charged off).

### ***PD Models and Development***

Our PD models incorporate a combination of quantitative and qualitative factors to calculate a PD for a given counterparty to estimate the probability that a counterparty will default within the next year. These factors may include the counterparty's leverage, debt service capacity, return on equity and other financial ratios, including those derived from publicly-available financial reports. Other factors may include the quality of management and, for counterparties that are investment funds, the investment strategy of the counterparty, derived from research performed by our credit analysts. The weights, or coefficients, of the factors used in our PD models are generally estimated using a statistical method known as regression analysis.

We use professional judgment to determine some of the qualitative risk factors, including the use of warning signals. Such professional judgment is consistently supported and validated by in-depth analysis.

PD estimates require sufficient data to provide a reasonable level of statistical certainty that ensure the results are reasonable and acceptable. All of our PD models are developed with a minimum of five years of data. When internal and external default information is limited, a margin of conservatism is included within the estimates to allow for a level of uncertainty to be reflected in the model output.

Since historical default rates in our portfolios are low, our PD models rely on a shadow-rating method based on default-rate data obtained from independent credit rating agencies. We update our models in accordance with our internal model governance policies and related regulatory requirements.

We perform tests of model integrity on each PD model as part of our model development and annual process update.

Our PD models are based on the following assumptions:

- The selected modeling approach is valid, (i.e., the data is representative of the current portfolio), the model is suitable for the parameter estimation, and the estimated relationship based on the historical data can be applied to the current portfolio;
- Since defaults in our portfolio are rare, we use the default data from nationally recognized statistical rating agencies for modeling purposes; and
- Non-publicly-rated counterparties share the same risk characteristics as publicly-rated

counterparties; this allows the use of internal models developed on publicly-rated counterparties to be applied to non-publicly-rated counterparties.

### ***Credit Rating Process***

We have created rating tools to rate the credit quality of our counterparties, as delineated below:

- Banks;
- Broker/dealers;
- Commercial Real Estate;
- Corporations;
- Insurance Companies;
- Sovereigns;
- Municipalities;
- Alternative Funds;
- Real Money Funds.

### ***PD Mapping***

We have developed mapping models based on the actual long-term average annual default rates for each external rating reported by the major independent credit rating agencies. External ratings are associated with corresponding PDs and, in turn, are mapped to the appropriate State Street internal ratings by comparing the PDs to the upper and lower boundaries of our masterscale. The mapping specifies the relationship between the internal and external credit ratings.

The following table presents our general masterscale, which is used for the vast majority of our counterparties:

**TABLE 7: GENERAL MASTERSCALE**

Category	State Street Risk Rating	PD (Basis Points)	PD Band (Basis Points)		External Equivalent	
			Lower Bound (PD>)	Upper Bound (PD<=)	External Agency Rating	External Agency Rating for Municipal
Pass	1	1	—	1.7	AAA to AA	Aaa to A3
	2	3	1.7	3.9	AA-	Baa1
	3	5	3.9	7	A+ to A	Baa2 to Baa3
	4	10	7	14	A-	Ba1
	5	20	14	28	BBB+	Ba2
	6	40	28	57	BBB to BBB-	Ba3
	7	80	57	113	BB+	B1
	8	160	113	219	BB to BB-	B2
	9	300	219	387	B+	B3
	10	500	387	707	B	
Special Mention	11	1,000	707	1,414	B- to CCC+	Caa
	12	2,000	1,414	3,162	CCC to CCC-	Ca
Substandard	13	5,000	3,162	7,071	CC to C	C
Doubtful	14	10,000	7,071	—		
Loss	15	10,000	—	—	D	D

Note: Exposures within rating bands 1-10 may also be considered Special Mention if rated 10 and on the Counterparty Surveillance List or if deemed to fit the regulatory definition

## ***LGD Models and Development***

Our LGD models incorporate professional judgment as well as statistical and structural approaches. Among other things, our LGD models incorporate several factors, including facility type, facility seniority, counterparty type, industry, jurisdiction, market type, type of collateral, and the amount of underlying collateral.

The Basel framework requires robust LGD models to be built using at least seven years of historical default data. Since the historical default rates of our counterparties are low, generally external data is used to construct our LGD models. Downturn LGD estimates are determined based upon historical stress periods and incorporate conservative recovery assumptions.

Our models calculate LGD as the ratio of final economic loss to EAD. The final loss is adjusted to reflect the cost and time needed to recover any underlying collateral. Final loss is also adjusted to reflect currency and jurisdiction for counterparties not domiciled in the U.S., as well as factors that affect present value.

LGD estimates generally require sufficient data to provide a reasonable level of statistical certainty that results are reliable. When internal and external default data are limited, a margin of conservatism is added to the estimates that reflects the level of uncertainty inherent in the model output.

Our LGD models are based on the following assumptions:

- External data sources used to address our lack of internal default experience are representative of our portfolio; where possible, we have taken steps to show that external data sources are representative of our portfolio;
- Where no internal or external data are available, a structured approach combined with expert judgment is used to provide reasonable and supportable LGD estimates; and
- Recovery amount calculations may include a distinct cost-of-recovery component related to the direct and indirect costs of liquidating assets, legal proceedings and other steps; recoveries are discounted back to the default date using discount rates and model dependent assumed times to recovery.

## ***EAD Models and Development***

Our EAD models incorporate a mix of qualitative assessment and quantitative modeling. Given the importance of EAD in our determination of RWA, we subject our EAD calculations to the same rigorous standards as our PD and LGD calculations. We follow

the general principles described below in our determination of EAD:

- We apply conservatism in our calculation of EAD, without unduly sacrificing risk sensitivity;
- We base our EAD adjustments for credit risk mitigation on properly documented qualifying master netting agreements that we determine to be legally enforceable, as well as eligible collateral; and
- We model the distribution of EAD for positions with stochastic or random exposure over the life of the exposure or, for a collateralized exposure, the liquidation time horizon of the collateral.

We use a variety of methodologies to calculate EAD for our exposures where applicable. For example, we use the SA-CCR methodology to calculate the EAD for derivative contracts, a VaR methodology for indemnified agency securities lending, and the collateral haircut approach using supervisory haircuts for Prime Services.

The following section describes our calculations of EAD for certain lending activities, as well as our indemnified agency securities lending and principal securities lending and borrowing activities.

### ***Committed Facilities***

A Credit Conversion Factor (CCF) is designed to capture the exposure implicit in these commitments, and represents the percentage of the undrawn portion of a facility that we expect to be exposed in a default event.

Given the high quality of our credit portfolio, very few empirical observations on draw-down behavior under stress exist for the vast majority of our counterparty types and associated loan products. This gives rise to challenges in deriving a quantitative estimate for potential future draws on commitments via modeling of credit conversion factors. As such, we have adopted a conservative stance by applying a CCF of 100% for all undrawn commitments for the purposes of State Street's regulatory capital calculation.

For such committed facilities, business specialists evaluate the terms of the agreements, as well as the need for and use of facilities across different counterparties, periodically to assess whether the 100% CCF is appropriate.

For these facilities, the outstanding balance on any particular facility does not fully capture our potential exposure in the event of a default, since the commitments have not been fully funded. As a result, we are exposed to additional losses if committed but undrawn amounts are funded. Total EAD equals the current outstanding amount plus the product of the

CCF and the undrawn portion of the committed facility.

### **Principal and Indemnified Agency Securities Lending and Borrowing**

We calculate EAD for our indemnified agency lending business using a VaR model, which is a hybrid of historical and parametric simulation. This hybrid VaR model separates a daily return into a systematic return and an idiosyncratic return. To determine the systematic return, a given security is mapped to an index based on several characteristics, including whether or not the security is an equity or fixed-income security, and whether it is a U.S. or a non-U.S. security, as well as other characteristics. The systematic return is then determined by the volatility-adjusted historical return on the benchmark to which the security was mapped.

The idiosyncratic return is determined by a draw from a parametric distribution. The returns are aggregated at the netting-set level, as determined by legally enforceable netting agreements. The VaR for each netting set is calculated as the convolution of the systematic and idiosyncratic returns of the securities within the netting set. The EAD for a netting set is the greater of the VaR less margin or zero.

Conservative adjustments are considered and applied to exposures when empirical observations are scarce.

We calculate EAD for our Prime Services business using the collateral haircut approach as described by the Basel III final rule.

### **Impairment Analysis and Allowance for Credit Losses**

Our credit portfolio, and the risk profile of our counterparties, is generally of high quality, such that ordinarily the size of our watch list is small relative to our overall credit exposure and our impaired credit assets are not significant relative to our financial assets. The processes we use to consider potential and actual impairment, together with those we use to assess the appropriate level of our allowance for credit losses, are outlined in this section.

#### **Non-Accrual**

We define past-due credits as those assets where contractually agreed payments of principal and/or interest remain unpaid by the borrower, but for which interest continues to be accrued. We generally place credit assets on non-accrual status when they become 90 days past due as to either principal and/or interest, or earlier when full collection of principal or interest is not considered probable. Credit assets 90 days past due, but considered both well-secured and in the process of collection, are treated as exceptions and may be excluded from non-accrual status.

When we place a credit asset on non-accrual status, the accrual of interest is discontinued and

previously recorded but unpaid interest is reversed and charged against interest income. For credits on non-accrual status, revenue is recognized on a cash basis after recovery of principal, if and when interest payments are received. Credits may be removed from non-accrual status when repayment is reasonably assured and performance under the terms of the asset has been demonstrated.

As of December 31, 2023 and 2022, we had three and zero loans on non-accrual status, respectively.

### **Allowance for Credit Losses**

We recognize an allowance for credit losses for financial assets held at amortized cost and off-balance sheet commitments utilizing a current expected credit loss (CECL) methodology. The allowance for credit losses for financial assets is recorded as a reduction of the financial asset's amortized cost in our consolidated statement of condition, and represents management's estimate of expected credit losses for such assets as of the date of our consolidated statement of condition. The allowance for credit losses is evaluated on a regular basis by management. Factors considered in evaluating the appropriate level of the allowances for credit losses for our credit portfolio include:

- Loss experience;
- The cumulative PD based on our internal risk rating of the counterparty's creditworthiness;
- Current and expected economic conditions and adverse situations that may affect the borrower's ability to repay;
- The LGD;
- The performance of individual counterparties in relation to contract terms, including expected rates of prepayment; and
- Other relevant factors.

The allowance for credit losses may be determined using other methods, including discounted cash flow methods, loss-rate methods, and other quantitative or qualitative methods as determined by us. The method used to estimate expected credit losses may vary depending on the type of financial asset, our ability to predict the timing of cash flows, and the information available to us.

We measure expected credit losses of financial assets on a collective (pool) basis when similar risk characteristics exist. In each reporting period, we assess whether the assets in the pool continue to display similar risk characteristics.

For a financial asset that does not share risk characteristics with other assets, the expected credit losses for the individual asset are evaluated using a variety of methods, including measuring the difference between the discounted value of the expected future cash flows, utilizing the effective interest rate, and the amortized cost basis of the asset.

When the asset is collateral dependent, which means when the borrower is experiencing financial difficulty and repayment is expected to be provided substantially through the operation or sale of the collateral, expected credit losses are measured as the difference between the amortized cost basis of the asset and the fair value of the collateral, adjusted for the estimated costs to sell.

An allowance for credit losses is recognized on Held-to-Maturity (HTM) securities upon acquisition of the security, and on AFS securities when the expected future cash flows of the investment securities are less than their amortized cost basis.

Determining the appropriateness of the allowance is complex and requires judgment by management about the effect of matters that are inherently uncertain. The factors and forecasts that prevail in future periods may result in significant changes in the allowance for credit losses in those future periods.

Provisions for credit losses, recorded in our consolidated statement of income, reflect our estimate of the amount necessary to maintain the allowance for credit losses at a level considered by us to be appropriate to absorb the estimate of expected credit losses in our credit portfolio. As of December 31, 2023, the allowance for credit losses increased \$29 million compared to December 31, 2022, primarily reflecting a provision for credit losses of \$46 million driven by an increase in loan loss reserves associated with credit portfolio rating changes, partially offset by charge-offs of \$17 million.

Financial assets are charged off to the allowance for credit losses in the reporting period in which either an event occurs that confirms the existence of a loss on an asset or a portion of an asset is determined to be uncollectible. In addition, any impaired financial asset that is determined to be collateral-dependent is reduced to an amount equal to the fair value of the collateral less costs to sell. Recoveries are recorded on a cash basis as adjustments to the allowance for credit losses.

The reserve for off-balance sheet credit exposures represents management's estimate of probable credit losses on unfunded commitments as of the balance sheet date. The reserve is evaluated on a regular basis by management. Factors considered in evaluating the appropriate level of this reserve are similar to those considered with respect to the allowance for credit losses. Provisions to maintain the reserve at a level considered by us to be appropriate to absorb the estimate of expected credit losses are recorded in the provision for credit losses in our consolidated statement of income.

As of December 31, 2023, two financial assets, including one commercial and financial loan and one commercial real estate loan, were classified as financial distressed modification loans. As of December 31, 2023, there are three financial assets

on non-accrual status. Our reserve for off-balance sheet credit exposures totaled \$14 million for the twelve months ended December 31, 2023.

**TABLE 8: ALLOWANCE FOR CREDIT LOSSES**

	Twelve months ended December 31, 2023 2023
<b>(In millions)</b>	
Beginning balance	121
Provision for credit losses (funded commitments) <sup>(1)</sup>	56
Provisions for credit losses (unfunded commitments)	(9)
Provisions for credit losses (investment securities and all other)	(1)
Charge-offs <sup>(2)</sup>	(17)
FX translation	—
<b>Ending balance</b>	<b>\$ 150</b>

<sup>(1)</sup> The provision for credit losses is primarily related to commercial and financial loans.

<sup>(2)</sup> The charge-offs are related to commercial and financial loans.

The following table presents the EAD of our wholesale credit risk exposures by type as of the date indicated, and the average EAD for the period indicated:

**TABLE 9: WHOLESALE CREDIT RISK EXPOSURE AT DEFAULT**

(In millions)	December 31, 2023		Quarter Ended December 31, 2023	
	EAD		Average EAD <sup>(1)</sup>	
<b>Wholesale credit risk exposures<sup>(2)</sup></b>				
Cash and due from, and interest-bearing deposits with, banks <sup>(3)</sup>	\$	91,789	\$	92,904
Investment securities - wholesale		91,722		93,785
Loans <sup>(4)</sup>		60,224		60,942
Derivative contracts <sup>(5)</sup>		23,024		22,493
Repo-style transactions <sup>(6)</sup>		15,122		16,172
Other wholesale		12,595		11,748
<b>Total</b>	<b>\$</b>	<b>294,476</b>	<b>\$</b>	<b>298,044</b>

<sup>(1)</sup> Amounts represent the average of the three month-end EAD amounts in the quarter.

<sup>(2)</sup> Amounts exclude securitizations, equity exposures, assets not in a defined exposure category and exposures classified as "non material".

<sup>(3)</sup> Amounts predominantly consist of deposits with banks and central banks.

<sup>(4)</sup> Amounts include unused commitments and financial standby letters of credit.

<sup>(5)</sup> Amounts reflect the benefit of netting permitted by GAAP and the Basel III final rule, as applicable.

<sup>(6)</sup> Amounts include the aggregate of indemnified agency securities lending, prime services, reverse repurchase, repurchase agreements, eligible margin loans; exposure reflects the benefit of collateral and netting permitted by GAAP and the Basel III final rule, as applicable.

The following table presents the EAD of our wholesale credit risk exposures by major geographic region as of the date indicated:

**TABLE 10: WHOLESALE CREDIT RISK EXPOSURE AT DEFAULT - GEOGRAPHIC MIX**

**December 31, 2023**

(In millions)	December 31, 2023				
	EAD	Americas	Europe	Asia/Pacific	Other <sup>(1)</sup>
<b>Wholesale credit risk exposures<sup>(2)</sup></b>					
Cash and due from, and interest-bearing deposits with, banks <sup>(3)</sup>	\$ 91,789	\$ 44,114	\$ 33,942	\$ 13,670	\$ 63
Investment securities - wholesale	91,722	76,244	11,751	3,727	—
Loans <sup>(4)</sup>	60,224	49,062	11,117	42	3
Derivative contracts <sup>(5)</sup>	23,024	8,234	9,767	4,606	417
Repo-style transactions <sup>(6)</sup>	15,122	11,577	1,617	1,747	181
Other wholesale	12,595	11,646	867	54	28
<b>Total</b>	<b>\$ 294,476</b>	<b>\$ 200,877</b>	<b>\$ 69,061</b>	<b>\$ 23,846</b>	<b>\$ 692</b>

<sup>(1)</sup> "Other" geographic region represents our exposures primarily in Africa and the Middle East.

<sup>(2)</sup> Amounts exclude securitizations, equity exposures, assets not in a defined exposure category and exposures classified as "non material".

<sup>(3)</sup> Amounts predominantly consist of deposits with banks and central banks.

<sup>(4)</sup> Amounts include unused commitments and financial standby letters of credit.

<sup>(5)</sup> Amounts reflect the benefit of netting permitted by GAAP and the Basel III final rule, as applicable.

<sup>(6)</sup> Amounts include the aggregate of indemnified agency securities lending, prime services, reverse repurchase, repurchase agreements, eligible margin loans; exposure reflects the benefit of collateral and netting permitted by GAAP and the Basel III final rule, as applicable.

The following table presents the EAD of our wholesale credit risk exposures by counterparty type as of the date indicated:

**TABLE 11: WHOLESALE CREDIT RISK EXPOSURE AT DEFAULT - COUNTERPARTY TYPE**

**December 31, 2023**

(In millions)	EAD	Governments, central banks and supra- nationals <sup>(1)</sup>	Commercial Banks	Broker/ Dealers	Funds	Other <sup>(2)</sup>
<b>Wholesale credit risk exposures<sup>(3)</sup></b>						
Cash and due from, and interest-bearing deposits with, banks <sup>(4)</sup>	\$ 91,789	\$ 84,572	\$ 7,074	\$ —	\$ —	\$ 143
Investment securities - wholesale	91,722	88,912	2,311	—	—	499
Loans <sup>(5)</sup>	60,224	6,461	4	200	42,632	10,927
Derivative contracts <sup>(6)</sup>	23,024	2,465	5,841	1,308	11,960	1,450
Repo-style transactions <sup>(7)</sup>	15,122	282	834	4,490	7,892	1,624
Other wholesale	12,595	629	357	5,931	590	5,088
<b>Total</b>	<b>\$ 294,476</b>	<b>\$ 183,321</b>	<b>\$ 16,421</b>	<b>\$ 11,929</b>	<b>\$ 63,074</b>	<b>\$ 19,731</b>

<sup>(1)</sup> Amounts include municipalities, government agencies and multi-lateral development banks.

<sup>(2)</sup> "Other" counterparty type category represents our exposures primarily to corporates and insurance companies.

<sup>(3)</sup> Amounts exclude securitizations, equity exposures, assets not in a defined exposure category and exposures classified as "non material".

<sup>(4)</sup> Amounts predominantly consist of deposits with banks and central banks.

<sup>(5)</sup> Amounts include unused commitments and financial standby letters of credit.

<sup>(6)</sup> Amounts reflect the benefit of netting permitted by GAAP and the Basel III final rule, as applicable.

<sup>(7)</sup> Amounts include the aggregate of indemnified agency securities lending, prime services, reverse repurchase, repurchase agreements, eligible margin loans; exposure reflects the benefit of collateral and netting permitted by GAAP and the Basel III final rule, as applicable.

The following table presents the EAD of our wholesale credit risk exposures by remaining contractual maturity as of the date indicated:

**TABLE 12: WHOLESALE CREDIT RISK EXPOSURE AT DEFAULT - REMAINING CONTRACTUAL MATURITY**

**December 31, 2023**

(In millions)	EAD	< = 1 year	1 - 3 years	> 3 years <sup>(1)</sup>
<b>Wholesale credit risk exposures<sup>(2)</sup></b>				
Cash and due from, and interest-bearing deposits with, banks <sup>(3)</sup>	\$ 91,789	\$ 91,789	\$ —	\$ —
Investment securities - wholesale	91,722	11,729	17,699	62,294
Loans <sup>(4)</sup>	60,224	36,933	10,658	12,633
Derivative contracts <sup>(5)</sup>	23,024	21,786	823	415
Repo-style transactions <sup>(6)</sup>	15,122	15,108	—	14
Other wholesale	12,595	7,568	112	4,915
<b>Total</b>	<b>\$ 294,476</b>	<b>\$ 184,913</b>	<b>\$ 29,292</b>	<b>\$ 80,271</b>

<sup>(1)</sup> Exposures with remaining contractual maturities of greater than five years are capped at five years for RWA calculation purposes as per the Basel III final rule.

<sup>(2)</sup> Amounts exclude securitizations, equity exposures, assets not in a defined exposure category and exposures classified as "non material".

<sup>(3)</sup> Amounts predominantly consist of deposits with banks and central banks.

<sup>(4)</sup> Amounts include unused commitments and financial standby letters of credit.

<sup>(5)</sup> Amounts reflect the benefit of netting permitted by GAAP and the Basel III final rule, as applicable.

<sup>(6)</sup> Amounts include the aggregate of indemnified agency securities lending, prime services, reverse repurchase, repurchase agreements, eligible margin loans; exposure reflects the benefit of collateral and netting permitted by GAAP and the Basel III final rule, as applicable.

The following table presents EAD of our wholesale credit risk exposures, by range of PD as of the date indicated:

**TABLE 13: WHOLESALE CREDIT RISK EXPOSURE - PROBABILITY OF DEFAULT**

**December 31, 2023**

(Dollars in millions, except where otherwise noted)

PD range	EAD <sup>(1)(2)</sup>	Weighted-Average LGD	Weighted-Average PD	Weighted-Average Risk Weight	Unfunded Commitments <sup>(3)</sup>	Average EAD (in thousands) <sup>(4)</sup>
0.00 to < 0.03%	\$ 115,327	17.00 %	— %	2.00 %	\$ —	\$ 82,494
0.03 to < 0.10%	112,627	24.00	—	7.00	26,717	2,669
0.10 to < 0.15%	15,635	36.00	—	18.00	4,238	2,901
0.15 to < 0.20%	221	38.00	—	18.00	—	436
0.20 to < 1.00%	33,490	31.00	—	38.00	11,100	3,142
1.00 to < 5.00%	4,507	44.00	2.00	120.00	253	6,850
5.00 to < 10.00%	405	41.00	5.00	152.00	33	4,938
10.00 to < 20.00%	77	33.00	10.00	164.00	—	2,147
20.00 to < 100%	268	55.00	48.00	289.00	7	20,645
100%	1,542	83.00	100.00	100.00	2	77,083
<b>Total</b>	<b>\$ 284,099</b>				<b>\$ 42,350</b>	

<sup>(1)</sup> EAD does not reflect the effect of credit risk mitigation, such as collateral and netting, except for OTC derivatives and securities finance exposures, which reflect the benefit of netting and collateral, as applicable.

<sup>(2)</sup> Amounts exclude securitizations, equity exposures, and assets not in a defined exposure category and exposures classified as "non material." These amounts also exclude centrally cleared exposures not subject to AIRB and PD treatment.

<sup>(3)</sup> Unfunded commitments represent contractual unfunded amount prior to credit conversion.

<sup>(4)</sup> This represents average EAD per transaction within the PD range.

The following table presents information with respect to the EAD of our credit risk exposures that meet the definition of OTC derivative contracts and other cleared transactions as of the date indicated:

**TABLE 14: DERIVATIVE CONTRACTS<sup>(1)</sup>**

**December 31, 2023**

(in millions)	Replacement Cost	Potential Future Exposure	EAD
OTC derivative contracts <sup>(2)</sup>	\$ 4,624	\$ 11,030	\$ 21,914
Other contracts <sup>(3)</sup>	266	421	1,110
<b>Total</b>	<b>\$ 4,890</b>	<b>\$ 11,451</b>	<b>\$ 23,024</b>

<sup>(1)</sup> Amounts exclude contracts treated as securitizations; refer to "Securitizations" in this Public Disclosure.

<sup>(2)</sup> "OTC derivative contracts" primarily consist of foreign exchange contracts, where exposure is calculated using SA-CCR. EAD for foreign exchange contracts includes the benefit of collateral, which predominantly consists of cash and government securities.

<sup>(3)</sup> "Other contracts" include cleared transactions with central counterparties where State Street acts as agent, riskless principal, and principal.

The following tables present information with respect to our exposures treated as repo-style transactions or eligible margin loans, by type of exposure and treatment methodology as of the date indicated. The first table presents information with respect to EAD associated with reverse repurchase and repurchase agreements, which predominantly result from our activities executed on behalf of our clients; the second table presents information with respect to EAD associated with our indemnified agency securities lending and Prime Services, which is State Street's principal securities finance offering for our custody clients; the third table presents information with respect to EAD associated with our eligible margin loans:

**TABLE 15: REVERSE REPURCHASE AND REPURCHASE AGREEMENTS**

<b>December 31, 2023</b>			
<b>(In millions)</b>	<b>Gross Exposure<sup>(1)</sup></b>	<b>Collateral<sup>(2)</sup></b>	<b>Net EAD<sup>(3)</sup></b>
Agreements centrally cleared	\$ 402,272	\$ 398,771	\$ 3,578
Agreements not centrally cleared	84,238	83,795	1,865
<b>Total</b>	<b>\$ 486,510</b>	<b>\$ 482,566</b>	<b>\$ 5,443</b>

<sup>(1)</sup> Gross exposure does not reflect the benefits of legally enforceable netting agreements and collateral. In instances where State Street facilitates both sides of the same trade (i.e. repurchase agreement on one side and reverse repurchase agreement on the other), the gross exposure includes State Street's exposure on both sides.

<sup>(2)</sup> Collateral consists primarily of cash, U.S. Treasury securities and U.S. government agency securities. The amount of collateral may exceed the measure for gross exposure for individual agreements, because certain repo-style transactions are over-collateralized, while others are under-collateralized. In instances wherein State Street facilitates both sides of the same trade (i.e. repurchase agreement on one side and reverse repurchase agreement on the other), the collateral includes the fair value of cash and the securities received by State Street on both sides.

<sup>(3)</sup> Under the collateral haircut approach, EAD for repo-style transactions is calculated using a supervisory formula that incorporates the benefits of legally enforceable netting agreements and collateral, as well as prescribed supervisory haircuts for market price volatility and currency mismatches.

**TABLE 16: INDEMNIFIED AGENCY LENDING AND PRIME SERVICES**

<b>December 31, 2023</b>			
<b>(In millions)</b>	<b>Base EAD<sup>(1)</sup></b>	<b>Netting Benefit<sup>(2)</sup></b>	<b>Net EAD<sup>(3)</sup></b>
<b>Indemnified Agency Lending<sup>(4)</sup></b>	<b>\$ 5,327</b>	<b>\$ 4,333</b>	<b>\$ 994</b>

  

<b>(In millions)</b>	<b>Gross Exposure<sup>(5)</sup></b>	<b>Collateral<sup>(6)</sup></b>	<b>Net EAD<sup>(3)</sup></b>
<b>Prime Services<sup>(7)</sup></b>	<b>\$ 57,054</b>	<b>\$ 60,488</b>	<b>\$ 8,257</b>

<sup>(1)</sup> Base EAD represents the net exposure of securities lending or borrowing agreements at a client or counterparty level under a single agreement.

<sup>(2)</sup> The netting benefit for indemnified agency securities lending represents the benefit of collateral arrangements under a qualifying master netting agreement that allows for the netting, as applicable, of repurchase and securities lending exposures to a particular counterparty.

<sup>(3)</sup> As of December 31, 2023, approximately \$126 million (approximately 12.7%) of Net EAD for indemnified agency lending and approximately \$80 million (approximately 1.0%) of Net EAD for prime services is currently covered by guarantees considered eligible for Basel III purposes.

<sup>(4)</sup> EAD is calculated by applying a VaR methodology.

<sup>(5)</sup> Gross exposure does not reflect the benefits of legally enforceable netting agreements and collateral.

<sup>(6)</sup> The amount of collateral may exceed the measure for gross exposure for individual agreements, because certain repo-style transactions are over-collateralized, while others are under-collateralized.

<sup>(7)</sup> EAD is calculated by applying the collateral haircut approach using a supervisory formula that incorporates the benefits of legally enforceable netting agreements and collateral, as well as prescribed supervisory haircuts for market price volatility and currency mismatches.

**TABLE 17: ELIGIBLE MARGIN LOANS**

<b>December 31, 2023</b>			
<b>(In millions)</b>	<b>Gross Exposure<sup>(1)</sup></b>	<b>Collateral<sup>(2)</sup></b>	<b>Net EAD<sup>(3)</sup></b>
Eligible margin loans	\$ 4,823	\$ 5,811	\$ 428
<b>Total</b>	<b>\$ 4,823</b>	<b>\$ 5,811</b>	<b>\$ 428</b>

<sup>(1)</sup> Gross exposure does not reflect the benefits of legally enforceable netting agreements and collateral.

<sup>(2)</sup> Collateral consists primarily of cash, U.S. Treasury securities and U.S. government agency securities. The amount of collateral may exceed the measure for gross exposure for individual agreements, because certain repo-style transactions are over-collateralized, while others are under-collateralized.

<sup>(3)</sup> Under the collateral haircut approach, EAD for repo-style transactions is calculated using a supervisory formula that incorporates the benefits of legally enforceable netting agreements and collateral, as well as prescribed supervisory haircuts for market price volatility and currency mismatches.

## SECURITIZATIONS

We engage in securitization activities primarily as an investor. Most of our aggregate securitization exposure is carried in our investment securities portfolio in our consolidated statement of condition. We purchase various types of securitized financial assets in the form of U.S. and non-U.S. asset-backed securities which meet the definition of securitizations under the Basel framework. These securities are typically collateralized by various types of assets, including, for example, the Federal Family Education Loan Program (FFELP), bank loans, consumer loans, residential mortgages, automobile and equipment leases, commercial mortgages, and credit card receivables. Our primary objective with respect to our investments in asset-backed securities is to generate interest income. Additionally, State Street takes positions in securitizations outside of our investment portfolio, such as private credit special purpose vehicle (SPV) securitizations and collateralized loan obligations (CLO) in loan form.

Investing in securitizations carries the risk of loss. Default risk, credit downgrade risk, interest rate risk and liquidity risk are present in these securitizations. We are aware of these risks and endeavor to mitigate these and other risks through various measures.

Our investments in securitizations are diversified across a variety of sectors and jurisdictions. To calculate the required capital and RWA of our securitization exposures, we apply the Simplified Supervisory Formula Approach (SSFA) methodology. We elected to apply the SSFA methodology as a result of the availability of underlying information with respect to the exposures.

We have securitization exposures to highly-rated commercial mortgage-backed securities through third-party managed separate accounts associated with our investment in Bank-Owned Life Insurance (BOLI), which we include in the Full Look-Through Approach on Table 20. We treat these securitization exposures as equity exposures, specifically investments in investment funds. Refer to "Equity Exposures not Subject to Market Risk Rule" in this Public Disclosure. We also enter into a limited number of liquidity/credit facilities with counterparties which qualify as securitizations under the Basel framework.

The following table presents the EAD, Capital Requirement and RWA of our securitization exposures, by type of exposure as of the date indicated.

**TABLE 18: SECURITIZATION EXPOSURES**

**December 31, 2023**

(In millions)	EAD	Capital Requirement	RWA <sup>(1)</sup>
<b>Asset class</b>			
U.S. asset-backed	\$ 3,508	\$ 60	\$ 746
U.S. residential mortgage-backed	7	—	2
U.S. commercial mortgage-backed	250	4	53
Collateralized loan obligations <sup>(2)</sup>	10,200	173	2,161
Non-U.S. asset-backed	1,117	20	250
Non-U.S. residential mortgage-backed	1,857	34	424
Other <sup>(3)</sup>	910	16	200
<b>Total</b>	<b>\$ 17,849</b>	<b>\$ 307</b>	<b>\$ 3,836</b>

<sup>(1)</sup> RWA reflects 1.06 supervisory scaling factor described earlier in this Public Disclosure under "Regulatory Capital Requirements."

<sup>(2)</sup> Amounts include Collateralized Loan Obligations in security and loan form which meet the definition of securitizations.

<sup>(3)</sup> Amounts include structured loans which meet the definition of securitizations.

The following table presents the EAD, Capital Requirement and RWA of our securitization exposures, by range of risk weights as of the date indicated:

**TABLE 19: SECURITIZATION EXPOSURES - RANGE OF RISK WEIGHTS**

December 31, 2023

(In millions)

Risk Weight Range	EAD	Capital Requirement	RWA <sup>(1)</sup>
<b>Asset Securitizations</b>			
20%-100%	\$ 17,832	\$ 306	\$ 3,812
101%-200%	15	1	18
201%-500%	2	—	5
501%-1000%	—	—	1
1001%-1250%	—	—	—
<b>Total Asset Securitizations</b>	<b>\$ 17,849</b>	<b>\$ 307</b>	<b>\$ 3,836</b>

<sup>(1)</sup> RWA reflects 1.06 supervisory scaling factor described earlier in this Public Disclosure under "Regulatory Capital Requirements."

### Credit Risk Monitoring

Our Global Treasury group manages our portfolio of asset-backed investment securities, in conjunction with a comprehensive risk management process. The elements of this process require a prescribed management structure and an investment policy with supporting guidelines, as well as governance and management oversight in connection with the group's asset-and-liability and liquidity management activities.

The Global Credit Finance (GCF) group is responsible for the securitizations not held in the investment portfolio. The GCF group has established a rigorous underwriting process for private credit SPV securitizations and CLOs in loan form. The GCF group reviews transaction data on an ongoing basis, and reports a summary of transaction information, stress test results, and market developments quarterly. Additionally, the GCF group performs annual reviews of each facility for private credit SPV transactions. Internal ratings are reviewed and updated quarterly for both private credit SPV securitizations as well as CLOs in loan form.

Both groups are subject to corporate risk policies and guidelines, including the limits prescribed by the credit risk guidelines. A consistent work-flow applies to the qualitative and quantitative examination conducted at various steps during the investment process, before and after trade execution, for all approved asset classes; however, the examination process, as well as ongoing monitoring, varies according to the asset class and type of security being considered for purchase.

As a general policy, all investments (both securities and loans) are analyzed from a credit perspective regardless of the availability of external credit ratings data and/or credit analysis from various major independent credit rating agencies, or from other sources. Credit analysts review each

investment prior to purchase to assess creditworthiness and the associated level of credit risk. This process is applied across the risk spectrum; the analysts review credit fundamentals, servicer risk, underlying collateral, structure, peer comparisons and considerations of expected and downside loss projections. Credit professionals must approve any complex or less diversified asset classes or securities prior to purchase, and a consensus must be reached for any investment by the credit analyst and the portfolio manager responsible for the applicable asset class. Each trade is tested for compliance with internal credit limits prior to purchase.

While the same pre-purchase process is applied across the portfolio, a specific surveillance process is followed for each sector, given the diversity of the portfolio and each sector's unique attributes included in the monitoring process.

ERM oversees the securitization exposures carried in the investment portfolio, including re-securitizations, and is responsible for State Street's quarterly assessment of impairment. The quarterly impairment assessment includes a "deep-dive" credit review of any exposure deemed to be at higher risk for impairment, based on future economic outlook, historical collateral repayment and loss behavior.

Final impairment and required credit reserve recommendations, along with key assumptions used and results of stress and sensitivity testing of loss assumptions, are presented to and approved by State Street's Credit Reserve Assessment Committee, composed of senior management from ERM and Corporate Finance.

In addition to ongoing credit surveillance and the performance of regular stress testing by ERM, we test the investment portfolio for potential impact to regulatory capital under corporate-wide stress tests, in conjunction with the Federal Reserve's CCAR process. We utilize econometric credit models to

forecast impairment and RWA impact under a variety of macroeconomic scenarios. In addition, we forecast changes in the fair value of AFS securities portfolio under prescribed CCAR macroeconomic scenarios, which can affect capital.

We do not utilize credit risk mitigation for our securitization exposures.

### **Significant Accounting Policies**

The following provides information on State Street's significant accounting policies associated with securitizations.

As previously described, we purchase various types of securitized financial assets in the form of U.S. and non-U.S. asset-backed securities which meet the definition of securitizations under the Basel framework. These securitized financial assets, which we account for as investment securities, are classified as either trading account assets, AFS securities or securities held to maturity at the time of purchase, based on management's intent. Generally, we do not hold any securitization exposures classified as trading account assets. CLOs in loan form and private credit SPV facilities are accounted for as loans.

AFS securities are carried at fair value, with any allowance for credit losses recorded through the consolidated statement of income and after-tax net unrealized non-credit gains and losses are recorded in Accumulated Other Comprehensive Income (AOCI). Gains or losses realized on sales of AFS debt securities are computed using the specific identification method and are recorded in gains (losses) related to investment securities, net, in our consolidated statement of income. HTM investment securities are carried at cost, adjusted for amortization of premiums and accretion of discounts, with any allowance for credit losses recorded through the consolidated statement of income. CLOs in loan form and private credit SPV facilities are recorded at their principal amount outstanding, net of the allowance for credit losses, unearned income and any net unamortized deferred loan origination fees.

We recognize interest income generated by these investment securities, CLOs in loan form and private credit SPV facilities using the effective interest method, or on a basis approximating a level rate of return over the contractual or estimated life of the security or loan. The level rate of return considers any non-refundable fees or costs, as well as purchase premiums or discounts, resulting in amortization or accretion, accordingly.

We conduct quarterly reviews of HTM securities, CLOs in loan form and private credit SPV facilities on a collective (pool) basis when similar risk characteristics exist to determine the amount of credit losses should be recognized.

An AFS security is impaired when the current fair value of an individual security is below its

amortized cost basis. For additional information about the review of investment securities for expected credit losses or impairment, refer to Note 3 to the consolidated financial statements included under Item 8, Financial Statements and Supplementary Data, in our 2023 Form 10-K.

Our evaluation of impairment of mortgage- and asset-backed securities incorporates the most granular collateral performance information available to us as investors. Accordingly, the range of estimates pertaining to each collateral type reflects the unique characteristics of the underlying loans, such as payment options and collateral geography, among other factors.

### **EQUITY EXPOSURES NOT SUBJECT TO MARKET RISK RULE**

We carry two major categories of equity exposures: investments in entities and investments in funds. These investments include the following:

- Tax-advantaged investments, primarily composed of equity investments in alternative energy and low-income housing projects;
- Investments in joint ventures and other partnerships, and Community Reinvestment Act investments;
- Seed capital investments in sponsored investment funds and equity futures used to hedge these exposures;
- General investments in investment funds;
- Investments in connection with our BOLI program; and
- Stable value wrap contracts.

We carry the above-described equity exposures in our investment portfolio and in other assets in our consolidated statement of condition. Currently, our investment portfolio strategy does not support investments in equity exposures other than investments in funds. We hold investments in many different types of funds, ranging from money market funds to U.S. and foreign mutual funds. For regulatory capital purposes, we use a combination of the Full Look-through, Alternative Modified Look-through, and Simple Look-through approaches in calculating RWA for these positions.

The equity exposures recorded in other assets predominantly consist of equity investments in alternative energy and low-income housing projects; seed capital investments in sponsored investment funds and equity futures; investments in separate accounts in connection with our BOLI program; equity held in clearing houses; joint ventures; and Federal Reserve Bank and Federal Home Loan Bank stock. RWA for these exposures are calculated under the Simple Risk Weight Approach, excluding investments in sponsored investment funds and separate accounts associated with BOLI, which receive similar

capital treatment as described above for equity investments in funds.

Our exposure related to stable value wrap contracts represents contingent off-balance sheet exposure; these contingent exposures are treated as equity derivatives on investments funds, from a Basel classification perspective.

### Significant Accounting Policies

The following provides information on State Street's significant accounting policies associated with equity investments. We generally account for our equity investments under one of the approaches described below.

#### Investment Securities

Our investments in funds carried in our investment securities portfolio are held at fair value through profit and loss.

When measuring the fair value of these investments, we consider the principal or most advantageous market in which we would transact and

The following table presents our equity exposures by type and risk-weighting approach as of the date indicated:

**TABLE 20: EQUITY EXPOSURES**

December 31, 2023

(In millions)	Risk Weight	Carrying Value <sup>(1)</sup>	EAD	Capital Requirement	RWA <sup>(2)</sup>
<b>Simple risk-weight approach:</b>					
Equity investments in the 0% risk-weight category	0 %	\$ 391	\$ 391	\$ —	\$ —
Equity investments in the 20% risk-weight category	20	105	105	2	22
Community development equity exposures	100	869	869	74	921
Non-significant equity exposures	100	864	864	68	916
Significant investments to financial institutions	250	18	18	4	48
<b>Total simple risk-weight approach</b>		<b>2,247</b>	<b>2,247</b>	<b>148</b>	<b>1,907</b>
<b>Investment funds:</b>					
Full look-through approach		\$ 2,981	\$ 2,981	\$ 60	\$ 748
Simple modified look-through approach		349	349	100	1,246
Alternative modified look-through approach		1,111	1,111	456	5,694
<b>Total investment funds</b>		<b>4,441</b>	<b>4,441</b>	<b>616</b>	<b>7,688</b>
<b>Total equity investments</b>		<b>\$ 6,688</b>	<b>\$ 6,688</b>	<b>\$ 764</b>	<b>\$ 9,595</b>

<sup>(1)</sup> Amounts represent the fair value of investments recorded in AFS securities, as well as investments recorded in other assets that are accounted for under either the equity method or the cost method. Refer to "Significant Accounting Policies" described in this Public Disclosure.

<sup>(2)</sup> RWA reflects 1.06 supervisory scaling factor described earlier in this Public Disclosure under "Regulatory Capital Requirements."

### OPERATIONAL RISK

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, systems and/or from external events (including legal risk but excluding strategic and reputation risk).

Operational risk may arise from errors in transaction processing, breaches of internal control, internal or external fraud, failing to meet compliance

consider assumptions that market participants would use when pricing the asset or liability. Investments in money market funds are valued at a net asset value of \$1 per share.

### Investments in Joint Ventures and Other Unconsolidated Entities

Investments in unconsolidated subsidiaries, recorded in other assets, generally are accounted for under the equity method or proportional method of accounting. For investments accounted for under the equity method, our share of income or loss is recorded in software and processing fees in our consolidated statement of income.

Investments not meeting the criteria for equity method or proportional amortization treatment are measured at fair value through earnings, except for investments where a fair market value is not readily available, which are accounted for under the cost method of accounting.

requirements, system failures, damage to physical assets and/or business disruption due to external events or system failures. Operational risk can also arise from potential regulatory actions or legal matters as a consequence of non-compliance with prudential ethical standards, contractual obligations or regulatory requirements.

State Street's Operational Risk Management Program provides the tools and processes necessary

to fulfill the Company's strategy for managing operational risk. The Company uses the Operational Risk Management Program to identify, manage, mitigate (where possible), monitor and report operational risks in an organized way to management and the appropriate governance bodies. The Operational Risk Management Program defines roles and responsibilities through the global policy which uses the Three Lines of Defense Model as a foundation. Through which the First Line of Defense has the responsibility for the management of operational risk.

Monitoring and reporting of operational risks occurs within the business, entity and legal entity risk oversight functions as well as decision-making forums, such as business risk committees and the Company's Operational Risk And Controls Committee (ORCC).

The firm employs a variety of risk processes and tools to manage its operational risk exposures. The tools utilized include but are not limited to a strong governance framework, a comprehensive operational risk framework, a business oversight capability, and a risk infrastructure.

The firm's Operational Risk Framework consists of programs which support the identification, measurement and assessment, monitoring and mitigation of operational risk across the organization.

The business oversight capability oversees the risk-taking activities of the organization and independently challenges the risks, controls and issues of the front line units.

The risk infrastructure component consists of an enterprise-wide Governance, Risk and Compliance (GRC) application that provides a unified technology infrastructure to support the evaluation of operational risks in a coordinated and consistent manner across the firm.

State Street's Advanced Measurement Approach (AMA) for calculating the capital requirement for operational risk is based on a Loss Distribution Approach (LDA). Under the LDA, capital and RWA totaled \$3.5 billion and \$42.7 billion, respectively, as of December 31, 2023; refer to the "Components of Risk-Weighted Assets" table provided under "Total Risk-Weighted Assets" in this Public Disclosure for RWA details as of December 31, 2023.

The Company's LDA model uses internal and external loss data as inputs and estimates an annual loss distribution for each unit of measure. In a given annual period, the total operational loss across the enterprise is the sum of the losses across all the units of measure in this time period. Once a set of annual losses for each Unit of Measure (UOM) are simulated, the inter-UOM correlations are applied to estimate top-of-the-house operational risk capital. Internal loss event data provides State Street-specific

frequency and severity information to the capital calculation process. External loss event data provides information about loss event severity at other financial institutions. External loss event data is sourced from an industry association, and then filtered for relevancy based on the regions and business lines in which the Company operates. The loss amounts included in this data represent the sum of all profit-and-loss (P&L) impacts related to operational risk events, inclusive of any regulatory fines and penalties imposed. This information supplements the data pool available for use by our LDA model.

Scenario analysis aids management in contemplating plausible high severity, low frequency operational events. Outcomes of scenario analysis are utilized in a benchmarking process to assess the adequacy of the LDA model capital estimate. Business environment and internal control factors are those characteristics of a bank's internal and external operating environment that bear an exposure to operational risk. This information informs the scenario analysis process.

The MRM Group is responsible for reviewing and challenging the operational risk model and any related changes to the model. The model is run quarterly based upon its predefined parameters.

State Street mitigates certain types of operational risk with a range of insurance policies that cover operational events. Although the firm maintains insurance policies to mitigate certain types of operational events, insurance recoveries are not included in the loss information used in the LDA model.

For additional information about operational risk, refer to our 2023 Form 10-K.

## **MARKET RISK**

Market risk is defined by U.S. banking regulators as the risk of loss that could result from broad market movements, such as changes in the general level of interest rates, credit spreads, foreign exchange rates or commodity prices. We are exposed to market risk in both our trading and certain of our non-trading, or asset-and-liability management, activities.

Information about the market risk associated with our trading activities is provided below under "Trading Activities." Information about the market risk associated with our non-trading activities, which consists primarily of interest rate risk, is provided below under "Asset-and-Liability Management Activities."

### **Trading Activities**

In the conduct of our trading activities, we assume market risk, the level of which is a function of our overall risk appetite, business objectives and liquidity needs, our clients' requirements, market volatility and our execution against those factors.

We engage in trading activities primarily to support our clients' needs and to contribute to our overall corporate earnings and liquidity. In connection with certain of these trading activities, we enter into a variety of derivative financial instruments to support our clients' needs and to manage our interest rate and currency risk. These activities are generally intended to generate foreign exchange trading services revenue and to manage potential earnings volatility. In addition, we provide services related to derivatives in our role as both a manager and a servicer of financial assets.

Our clients use derivatives to manage the financial risks associated with their investment goals and business activities. With the growth of cross-border investing, our clients often enter into foreign exchange forward contracts to convert currency for international investments and to manage the currency risk in their international investment portfolios. As an active participant in the foreign exchange markets, we provide foreign exchange forward and option contracts in support of these client needs, and act as a dealer in the currency markets.

As part of our trading activities, we assume positions in the foreign exchange and interest rate markets by buying and selling cash instruments and entering into derivative instruments, including foreign exchange forward contracts, foreign exchange and interest rate options and interest rate swaps, interest rate forward contracts and interest rate futures. As of December 31, 2023, the notional amount of these derivative contracts was \$2.57 trillion, of which \$2.54 trillion was composed of foreign exchange forward, swap and spot contracts. We seek to match positions closely with the objective of mitigating related currency and interest rate risk. All foreign exchange contracts are valued daily at current market rates.

### **Governance**

Our assumption of market risk in our trading activities is an integral part of our corporate risk appetite. Our Board reviews and oversees our management of market risk, including the approval of key market risk policies and the receipt and review of regular market risk reporting, as well as periodic updates on selected market risk topics.

The CMRC oversees all market risk-taking activities across State Street associated with trading. The CMRC, which reports to MRAC, is composed of members of ERM, our global markets business and our Global Treasury group, as well as our senior executives who manage our trading businesses and other members of management who possess specialized knowledge and expertise. The CMRC meets regularly to monitor the management of our trading market risk activities.

Our business units identify, actively manage and are responsible for the market risks inherent in their

businesses. A dedicated market risk management group within ERM, and other groups within ERM, work with those business units to assist them in the identification, assessment, monitoring, management and control of market risk, and assist business unit managers with their market risk management and measurement activities. ERM provides an additional line of oversight, support and coordination designed to promote the consistent identification, measurement and management of market risk across business units, separate from those business units' discrete activities.

The ERM market risk management group is responsible for the management of corporate-wide market risk, the monitoring of key market risks and the development and maintenance of market risk management policies, guidelines, and standards aligned with our corporate risk appetite. This group also establishes and approves market risk tolerance limits and trading authorities based on, but not limited to, measures of notional amounts, sensitivity, VaR and stress. Such limits and authorities are specified in our trading and market risk guidelines which govern our management of trading market risk.

Corporate Audit separately assesses the design and operating effectiveness of the market risk controls within our business units and ERM. Other related responsibilities of Corporate Audit include the periodic review of ERM and business unit compliance with market risk policies, guidelines, and corporate standards, as well as relevant regulatory requirements. We are subject to regular monitoring, reviews and supervisory exams of our market risk function by the Federal Reserve. In addition, we are regulated by, among others, the SEC, the Federal Deposit Insurance Corporation (FDIC), the Financial Industry Regulatory Authority and the U.S. Commodities Futures Trading Commission.

### **Risk Appetite**

Our corporate market risk appetite is specified in policy statements that outline the governance, responsibilities and requirements surrounding the identification, measurement, analysis, management and communication of market risk arising from our trading activities. These policy statements also set forth the market risk control framework to monitor, support, manage and control this portion of our risk appetite. All groups involved in the management and control of market risk associated with trading activities are required to comply with the qualitative and quantitative elements of these policy statements. Our trading market risk control framework is composed of the following components:

- A trading market risk management process led by ERM, separate from the business units' discrete activities;

- Clearly defined responsibilities and authorities for the primary groups involved in trading market risk management;
- A trading market risk measurement methodology that captures correlation effects and allows aggregation of market risk across risk types, markets and business lines;
- Daily monitoring, analysis, and reporting of market risk exposures associated with trading activities against market risk limits;
- A defined limit structure and escalation process in the event of a market risk limit excess;
- Use of VaR models to measure the one-day market risk exposure of trading positions;
- Use of VaR as a ten-day-based regulatory capital measure of the market risk exposure of trading positions;
- Use of non-VaR-based limits and other controls;
- Use of stressed-VaR models, stress-testing analysis and scenario analysis to support the trading market risk measurement and management process by assessing how portfolios and global business lines perform under extreme market conditions;
- Use of back-testing as a diagnostic tool to assess the accuracy of VaR models and other risk management techniques; and
- A new product approval process that requires market risk teams to assess trading-related market risks and apply risk tolerance limits to proposed new products and business activities.

With respect to market risk associated with trading activities, our risk management and our calculations of regulatory capital are based primarily on our internal VaR models and stress testing analysis. As discussed in detail under “Value-at-Risk” below, VaR is measured daily by ERM.

The CMRC oversees our market risk exposure in relation to limits established within our risk appetite framework. These limits define threshold levels for VaR- and stressed VaR-based measures and are applicable to all trading positions subject to regulatory capital requirements. These limits are designed to prevent any undue concentration of market risk exposure, in light of the primarily non-proprietary nature of our trading activities. The risk appetite framework and associated limits are reviewed and approved by the Board's RC.

### **Covered Positions**

Our trading positions are subject to regulatory market risk capital requirements if they meet the regulatory definition of a covered position. A covered position is generally defined by U.S. banking

regulators as an on- or off-balance sheet position associated with the organization's trading activities that is free of any restrictions on its tradability, but does not include intangible assets, certain credit derivatives recognized as guarantees and certain equity positions not publicly traded. All FX and commodity positions are considered covered positions, regardless of the accounting treatment they receive. The identification of covered positions for inclusion in our market risk capital framework is governed by our trading and market risk guidelines, which outlines the standards we use to determine whether a trading position is a covered position.

Our covered positions consist primarily of the trading portfolios held by our global markets business. They also arise from certain positions held by our Global Treasury group. These trading positions include products such as spot FX, FX forwards, non-deliverable forwards, FX options, FX funding swaps, currency futures, financial futures, and interest rate futures. New activities are analyzed to determine if the positions arising from such new activities meet the definition of a covered position and conform to our trading and market risk guidelines. This documented analysis, including any decisions with respect to market risk treatments, must receive approval from the CMRC.

We use spot rates, forward points, yield curves and discount factors imported from third-party sources to measure the value of our covered positions, and we use such values to mark our covered positions to market on a daily basis. These values are subject to separate validation by us in order to evaluate reasonableness and consistency with market experience. The mark-to-market gain or loss on spot transactions is calculated by applying the spot rate to the foreign currency principal and comparing the resultant base currency amount to the original transaction principal. The mark-to-market gain or loss on a forward FX contract or forward cash flow contract is determined as the difference between the life-to-date (historical) value of the cash flow and the value of the cash flow at the inception of the transaction. The mark-to-market gain or loss on interest-rate swaps is determined by discounting the future cash flows from each leg of the swap transaction.

### **VaR and Stressed VaR**

As noted above, we use a variety of risk measurement tools and methodologies, including VaR, which is an estimate of potential loss for a given period within a stated statistical confidence interval. We use a risk measurement methodology to measure trading-related VaR daily. We have adopted standards for measuring trading-related VaR, and we maintain regulatory capital for market risk associated with our trading activities in conformity with currently applicable bank regulatory market risk requirements.

We utilize an internal VaR model to calculate our regulatory market risk capital requirements. We use a historical simulation model to calculate daily VaR- and stressed VaR-based measures for our covered positions in conformity with regulatory requirements. Our VaR model seeks to capture identified material risk factors associated with our covered positions, including risks arising from market movements such as changes in FX rates, interest rates and option-implied volatilities.

We have adopted standards and guidelines to value our covered positions which govern our VaR- and stressed VaR-based measures. Our regulatory VaR-based measure is calculated based on historical volatilities of market risk factors during a two-year observation period calibrated to a one-tail, 99% confidence interval and a ten-business-day holding period. We also use the same platform to calculate a one-tail, 99% confidence interval, one-business-day VaR for internal risk management purposes. A 99% one-tail confidence interval implies that daily trading losses are not expected to exceed the estimated VaR more than 1% of the time, or less than three business days out of a year.

Our market risk models, including our VaR model, are subject to change in connection with the governance, validation and back-testing processes described below. These models can change as a result of changes in our business activities, our historical experiences, market forces and events, regulations and regulatory interpretations and other factors. In addition, the models are subject to continuing regulatory review and approval. Changes in our models may result in changes in our measurements of our market risk exposures, including VaR, and related measures, including regulatory capital. These changes could result in material changes in those risk measurements and related measures as calculated and compared from period to period.

#### *Value-at-Risk Measures*

VaR measures are based on the most recent two years of historical price movements for instruments and related risk factors to which we have exposure. The instruments in question are limited to FX spot, forward, swap and option contracts and interest-rate contracts, including futures and interest-rate swaps. Historically, these instruments have exhibited a higher degree of liquidity relative to other available capital markets instruments. As a result, the VaR measures shown reflect our ability to rapidly adjust exposures in highly dynamic markets. For this reason, risk inventory, in the form of net open positions, across all currencies is typically limited. In addition, long and short positions in major, as well as minor, currencies provide risk offsets that limit our potential downside exposure.

Our VaR methodology uses a historical simulation approach based on market-observed changes in FX rates, U.S. and non-U.S. interest rates and implied volatilities, and incorporates the resulting diversification benefits provided from the mix of our trading positions. Our VaR model incorporates approximately 5,000 risk factors and includes correlations among currency, interest rates, and other market rates.

All VaR measures are subject to limitations and must be interpreted accordingly. Some, but not all, of the limitations of our VaR methodology include the following:

- Compared to a shorter observation period, a two-year observation period is slower to reflect increases in market volatility (although temporary increases in market volatility will affect the calculation of VaR for a longer period); consequently, in periods of sudden increases in volatility or increasing volatility, in each case relative to the prior two-year period, the calculation of VaR may understate current risk;
- Compared to a longer observation period, a two-year observation period may not reflect as many past periods of volatility in the markets, because such past volatility is no longer in the observation period; consequently, historical market scenarios of high volatility, even if similar to current or likely future market circumstances, may fall outside the two-year observation period, resulting in a potential understatement of current risk;
- The VaR-based measure is calibrated to a specified level of confidence and does not indicate the potential magnitude of losses beyond this confidence level;
- In certain cases, VaR-based measures approximate the impact of changes in risk factors on the values of positions and portfolios; this may happen because the number of inputs included in the VaR model is necessarily limited; for example, yield curve risk factors do not exist for all future dates;
- The use of historical market information may not be predictive of future events, particularly those that are extreme in nature; this “backward-looking” limitation can cause VaR to understate or overstate risk;
- The effect of extreme and rare market movements is difficult to estimate; this may result from non-linear risk sensitivities as well as the potential for actual volatility and correlation levels to differ from assumptions implicit in the VaR calculations; and

- Intra-day risk is not captured.

### *Stress Testing*

We have a corporate-wide stress testing program in place that incorporates an array of techniques to measure the potential loss we could suffer in a hypothetical scenario of adverse economic and financial conditions. We also monitor concentrations of risk such as concentration by branch, risk component, and currency pairs. We conduct stress testing on a daily basis based on selected historical stress events that are relevant to our positions in order to estimate the potential impact to our current portfolio should similar market conditions recur, and we also perform stress testing as part of the Federal Reserve's CCAR process. Stress testing is conducted, analyzed and reported at the corporate, trading desk, division and risk-factor level (for example, exchange risk, interest rate risk and volatility risk).

We calculate a stressed VaR-based measure using the same model we use to calculate VaR, but with model inputs calibrated to historical data from a range of continuous twelve-month periods that reflect significant financial stress. The stressed VaR model identifies the second-worst outcome occurring in the worst continuous one-year rolling period since July 2007. This stressed VaR meets the regulatory requirement as the rolling ten-day period with an outcome that is worse than 99% of other outcomes during that twelve-month period of financial stress. For each portfolio, the stress period is determined algorithmically by seeking the one-year time horizon that produces the largest ten-business-day VaR from within the available historical data. This historical data set includes the financial crisis of 2008, the highly volatile period surrounding the Eurozone sovereign debt crisis and the Standard & Poor's downgrade of U.S. Treasury debt in August 2011. As the historical data set used to determine the stress period expands over time, future market stress events will be automatically incorporated.

We perform scenario analysis daily based on selected historical stress events that are relevant to our positions in order to estimate the potential impact to our current portfolio should similar market conditions recur. Relevant scenarios are chosen from an inventory of historical financial stresses and applied to our current portfolio. These historical event scenarios involve spot FX, credit, equity, unforeseen geo-political events and natural disasters, and government and central bank intervention scenarios. Examples of the specific historical scenarios we incorporate in our stress testing program may include the Asian financial crisis of 1997, the September 11, 2001 terrorist attacks in the U.S., and the 2008 financial crisis. We continue to update our inventory of historical stress scenarios as new stress conditions emerge in the financial markets.

As each of the historical stress events is associated with a different time horizon, we normalize results by scaling down the longer horizon events to a ten-day horizon and keeping the shorter horizon events (i.e., events that are shorter than ten days) at their original terms. We also conduct sensitivity analysis daily to calculate the impact of a large predefined shock in a specific risk factor or a group of risk factors on our current portfolio. These predefined shocks include parallel and non-parallel yield curve shifts and FX spot and volatility surface shifts. In a parallel shift scenario, we apply a constant factor shift across all yield curve tenors. In a non-parallel shift scenario, we apply different shock levels to different tenors of a yield curve, rather than shifting the entire curve by a constant amount. Non-parallel shifts include steepening, flattening and butterflies.

Stress testing results and limits are actively monitored on a daily basis by ERM and reported to the CMRC. Limit breaches are addressed by ERM risk managers in conjunction with the business units, escalated as appropriate, and reviewed by the CMRC if material. In addition, we have established several action triggers that prompt review by management and the implementation of a remediation plan.

### ***Validation and Back-Testing***

We perform frequent back-testing to assess the accuracy of our VaR-based model in estimating loss at the stated confidence level. This back-testing involves the comparison of estimated VaR model outputs to daily, actual P&L outcomes, observed from daily market movements. We back-test our VaR model using "clean" P&L, which excludes non-trading revenue such as fees, commissions and NII, as well as estimated revenue from intra-day trading. Our VaR definition of trading losses excludes items that are not specific to the price movement of the trading assets and liabilities themselves, such as fees, commissions, changes to reserves and gains or losses from intra-day activity.

We had no back-testing exception for the twelve months ended December 31, 2023.

Our model validation process also evaluates the integrity of our VaR models through the use of regular outcome analysis. This outcome analysis includes back-testing, which compares the VaR model's predictions to actual outcomes using out-of-sample information. Consistent with regulatory guidance, the back-testing compared "clean" P&L, defined above, with the one-day VaR produced by the model. The back-testing was performed for a time period not used for model development. The number of occurrences where "clean" trading-book P&L exceeded the one-day VaR was within our expected VaR tolerance level.

## Market Risk Reporting

Our ERM market risk management group is responsible for market risk monitoring and reporting. We use a variety of systems and controlled market feeds from third-party services to compile data for several daily, weekly, and monthly management reports.

The following tables present VaR and stressed VaR associated with our trading activities for covered positions held as of the dates indicated, as measured by our VaR methodology:

**Table 21: TEN-DAY VaR ASSOCIATED WITH TRADING ACTIVITIES FOR COVERED POSITIONS**

(In thousands)	Year Ended December 31, 2022			As of December 31, 2023
	Average	Max.	Min.	VaR
Global Markets	\$ 11,697	\$ 23,797	\$ 5,106	\$ 9,029
Global Treasury	2,712	7,311	407	1,591
Diversification	(2,819)	(6,829)	(1,021)	(1,276)
Total VaR	<u>\$ 11,590</u>	<u>\$ 24,279</u>	<u>\$ 4,492</u>	<u>\$ 9,344</u>

**Table 22: TEN-DAY STRESSED VaR ASSOCIATED WITH TRADING ACTIVITIES FOR COVERED POSITIONS**

(In thousands)	Year Ended December 31, 2022			As of December 31, 2023
	Average	Max.	Min.	VaR
Global Markets	\$ 42,569	\$ 103,551	\$ 19,606	\$ 62,724
Global Treasury	6,710	16,762	3,252	5,578
Diversification	(8,463)	(18,555)	(3,486)	(7,936)
Total Stressed VaR	<u>\$ 40,816</u>	<u>\$ 101,758</u>	<u>\$ 19,372</u>	<u>\$ 60,366</u>

The average and period-end stressed VaR-based measures were approximately \$41 million and \$60 million, respectively, for the year ended December 31, 2023, compared to \$34 million and \$27 million, respectively, for the year ended December 31, 2022.

The VaR-based measures presented in the preceding tables are primarily a reflection of the overall level of market volatility and our appetite for taking market risk in our trading activities. Overall levels of volatility have been low both on an absolute basis and relative to the historical information observed at the beginning of the period used for the calculations. Both the ten-day VaR-based measures and the stressed VaR-based measures are based on historical changes observed during rolling ten-day periods for the portfolios as of the close of business each day over the past one-year period.

We may, in the future modify and adjust our models and methodologies used to calculate VaR and stressed VaR, subject to regulatory review and approval, and these modifications and adjustments may result in changes in our VaR-based and stressed

VaR-based measures.

The following tables present the VaR and stressed-VaR associated with our trading activities attributable to foreign exchange risk, interest-rate risk and volatility risk as of December 31, 2023. Diversification effect in the tables represents the difference between total VaR and the sum of the VaRs for each trading activity. This effect arises because the risks present in our trading activities are not perfectly correlated.

**Table 23: TEN-DAY VaR ASSOCIATED WITH TRADING ACTIVITIES BY RISK FACTOR<sup>(1)</sup>**

(In thousands)	As of December 31, 2023		
	Foreign Exchange Risk	Interest Rate Risk	Volatility Risk
By component:			
Global Markets	\$ 2,348	\$ 10,023	\$ 356
Global Treasury	496	1,446	—
Diversification	(324)	(831)	—
Total VaR	<u>\$ 2,520</u>	<u>\$ 10,638</u>	<u>\$ 356</u>

**Table 24: TEN-DAY Stressed VaR ASSOCIATED WITH TRADING ACTIVITIES BY RISK FACTOR<sup>(1)</sup>**

(In thousands)	As of December 31, 2023		
	Foreign Exchange Risk	Interest Rate Risk	Volatility Risk
By component:			
Global Markets	\$ 5,402	\$ 64,418	\$ 501
Global Treasury	4,978	6,347	—
Diversification	(2,891)	(6,209)	—
Total Stressed VaR	<u>\$ 7,489</u>	<u>\$ 64,556</u>	<u>\$ 501</u>

<sup>(1)</sup> For purposes of risk attribution by component, FX refers only to the risk from market movements in period-end rates. Forwards, futures, options and swaps with maturities greater than period-end have embedded interest rate risk that is captured by the measures used for interest rate risk. Accordingly, the interest rate risk embedded in these FX instruments is included in the interest rate risk component.

## ASSET AND LIABILITY MANAGEMENT ACTIVITIES

The primary objective of asset and liability management is to provide sustainable NII under varying economic conditions, while protecting the economic value of the assets and liabilities carried on our consolidated statement of condition from the adverse effects of changes in interest rates. While many market factors affect the level of NII and the economic value of our assets and liabilities, one of the most significant factors is our exposure to movements in interest rates. Most of our NII is earned from the investment of client deposits generated by our businesses. We invest these client deposits in assets that conform generally to the liquidity characteristics of our balance sheet liabilities, as well as the currency composition of our significant non-U.S. dollar denominated client deposits.

We quantify NII sensitivity using an earnings simulation model that includes our expectations for new business growth, changes in balance sheet mix and investment portfolio positioning. This measure compares our baseline view of NII over a twelve-month horizon, based on our internal forecast of interest rates, to a wide range of rate shocks. Our baseline view of NII is updated on a regular basis. Table 25, Key Interest Rates for Baseline Forecasts, presents the spot and 12-month forward rates used in our baseline forecasts at December 31, 2023 and 2022. Our baseline rate forecast as of December 31, 2023 was generally consistent with common market expectations for global central bank actions at that point in time, which implied that rates have reached peak levels and rate cuts will begin in the first half of 2024.

**TABLE 25: KEY INTEREST RATES FOR BASELINE FORECASTS**

	December 31, 2023			December 31, 2022		
	Target	ECB Target <sup>(1)</sup>	Treasury	Target	ECB Target <sup>(1)</sup>	Treasury
Spot rates	5.50 %	4.00 %	3.88 %	4.50 %	2.00 %	3.87 %
12-month forward rates	4.25	2.75	3.87	4.75	3.00	3.81

<sup>(1)</sup> European Central Bank deposit facility rate.

In Table 26: Net Interest Income Sensitivity, we report the expected change in NII over the next twelve months from instantaneous 100 basis point shocks to various tenors on the yield curve relative to our baseline rate forecast, including the impacts from U.S. and non-U.S. rates. Each scenario assumes no management action is taken to mitigate the adverse effects of changes in interest rates on our financial performance. While investment securities balances and composition can fluctuate with the level of rates as prepayment assumptions change, for purposes of this analysis our deposit balances and mix are assumed to remain consistent with the baseline forecast which assumes client deposit balance rotation including reductions in non-interest-bearing deposit balances. The results of these scenarios should not be extrapolated for other (e.g., more severe) shocks as the impact of interest rate shocks may not be linear. In lower rate scenarios, the full impact of the shock is realized for all currencies even if the result is negative interest rates.

**TABLE 26: NET INTEREST INCOME SENSITIVITY**

(In millions)	December 31, 2023			December 31, 2022		
	U.S. Dollar	All Other Currencies	Total	U.S. Dollar	All Other Currencies	Total
Rate change:	Benefit (Exposure)			Benefit (Exposure)		
<b>Parallel shifts:</b>						
+100 bps shock	\$ (26)	\$ 274	\$ 248	\$ (225)	\$ 432	\$ 207
-100 bps shock	4	(227)	(223)	207	(419)	(212)
<b>Steeper yield curve:</b>						
+100 bps shift in long-end rates <sup>(1)</sup>	28	11	39	42	23	65
-100 bps shift in short-end rates <sup>(1)</sup>	35	(215)	(180)	250	(397)	(147)
<b>Flatter yield curve:</b>						
+100 bps shift in short-end rates <sup>(1)</sup>	(53)	262	209	(267)	409	142
-100 bps shift in long-end rates <sup>(1)</sup>	(30)	(11)	(41)	(43)	(22)	(65)

<sup>(1)</sup> The short end is 0-3 months. The long end is 5 years and above. Interim term points are interpolated.

Our overall balance sheet, including all currencies, continues to be asset sensitive with an NII benefit in higher rate scenarios and NII exposure in lower rate scenarios. As of December 31, 2023, our USD balance sheet's NII sensitivity is relatively neutral given expectations for USD deposit betas and the repricing characteristics of our USD assets. Compared to December 31, 2022, our USD NII positioning is less liability sensitive as a result of lower investment portfolio balances and hedging activity, partially offset by impact from rising deposit betas and deposit rotation. As of December 31, 2023, non-USD NII benefits from higher rate scenarios and is exposed to lower rates

primarily driven by our sensitivities on the short-end of the yield curve. USD and non-USD NII sensitivities are also impacted by routine currency-level baseline forecasting updates and refinements, including deposit betas.

EVE sensitivity is a discounted cash flow model designed to estimate the fair value of assets and liabilities under a series of interest rate shocks over a long-term horizon. In the following table, we report our EVE sensitivity to 200 bps instantaneous rate shocks, relative to spot interest rates. Management compares the change in EVE sensitivity against our aggregate Tier 1 and Tier 2 risk-based capital. EVE sensitivity is dependent on the timing of interest and principal cash flows. Also, the measure only evaluates the spot balance sheet and does not include the impact of new business assumptions.

**TABLE 27: ECONOMIC VALUE OF EQUITY SENSITIVITY**

(In millions)	As of December 31,	
	2023	2022
Rate change:	<b>Benefit (Exposure)</b>	
+200 bps shock	\$ (1,447)	\$ (917)
-200 bps shock	1,683	1,082

As of December 31, 2023, EVE sensitivity remains exposed to upward shifts in interest rates. Compared to December 31, 2022, our sensitivity in the up 200bp shock scenario increased due to lower liability duration driven by client deposit rotation and higher betas.

Both NII sensitivity and EVE sensitivity are routinely monitored as market conditions change. For additional information about our Asset and Liability Management Activities, refer to Management's Discussion and Analysis of Financial Condition and Results of Operations, "Risk Management" in our 2023 Form 10-K.