

STATE STREET CORPORATION

SUPPLEMENTAL PUBLIC DISCLOSURE
BASEL III REGULATORY CAPITAL

AS OF DECEMBER 31, 2017

ACRONYMS

Advanced approaches⁽¹⁾	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	FSB	Financial Stability Board
Advanced approaches banking organization⁽¹⁾	A banking organization subject to the advanced approaches requirements of the Basel III final rule	FX	Foreign Exchange
AFS	Available for Sale	GAAP	Accounting principles generally accepted in the U.S.
AIRB⁽¹⁾	Advanced Internal Ratings-Based Approach	GCR	Global Credit Review group
ALCO	Asset-Liability Committee	G-SIB	Global Systemically Important Bank
ALLL	Allowance for loan and lease losses	LDA	Loss Distribution Approach
AMA⁽¹⁾	Advanced Measurement Approach	LEDR	Loss Event Data Repository
AOCI	Accumulated Other Comprehensive Income	LGD⁽¹⁾	Loss Given Default
AUCA	Assets under custody and administration	MRAC	Management Risk and Capital Committee
AUM	Assets under management	MRC	Model Risk Committee
BCBS	Basel Committee on Banking Supervision	MVG	Model Validation Group
BCRC	Business Conduct Risk Committee	NII	Net interest income
Board	Board of Directors of State Street Corporation	ORM	Operational Risk Management group
BOC	Basel Oversight Committee	OTC derivative	Over-the-counter derivative contract
BOLI	Bank-Owned Life Insurance	OTTI	Other-than-temporary-impairment
bps	Basis points	Parent company	State Street Corporation without consolidation of its subsidiaries
CAP	Capital Adequacy Process	PCA provisions	Prompt Corrective Action provisions of the Federal Deposit Insurance Corporation Improvement Act of 1991, as updated by the Basel III Final Rule
CCAR	Comprehensive Capital Analysis and Review	PD⁽¹⁾	Probability of Default
CCF⁽¹⁾	Credit Conversion Factor	PUA	Purchase undertaking agreement
CEO	Chief Executive Officer	RC	Risk Committee of the Board
CFO	Chief Financial Officer	RCSA	Risk and Control Self-Assessment program
CIS	Corporate Information Security	RWA⁽¹⁾	Risk-Weighted Assets
COSO framework	Committee of Sponsoring Organizations of the Treadway Commission framework	SLR⁽¹⁾	Supplementary Leverage Ratio
CRO	Chief Risk Officer	SOX	Sarbanes-Oxley Act of 2002
CRPC	Credit Risk & Policy Committee	SRWA⁽¹⁾	Simple Risk-Weight Approach
CVA	Credit Valuation Adjustment	SSFA⁽¹⁾	Simplified Supervisory Formula Approach in the Basel III final rule
Dodd-Frank Act	Dodd-Frank Wall Street Reform and Consumer Protection Act	State Street	State Street Corporation and its subsidiaries on a consolidated basis
E&A Committee	Examining & Audit Committee of the Board	State Street Bank	State Street Bank and Trust Company and its subsidiaries on a consolidated basis
EAD⁽¹⁾	Exposure at Default	Stressed VaR	Stressed Value-at-Risk
ECC Committee	Executive Compensation Committee	TMRC	Trading and Market Risk Committee
ERM	Enterprise Risk Management Department at State Street	TORC	Technology and Operational Risk Committee
EVE	Economic Value of Equity	UOM	Unit of Measure
FDICIA	Federal Deposit Insurance Corporation Improvement Act of 1991	VaR	Value-at-Risk
Federal Reserve	Board of Governors of the Federal Reserve System		

⁽¹⁾ As defined by the applicable U.S. regulations.

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Basel III Disclosure Map

The table below highlights where sections of this disclosure can be referenced to in State Street's December 31, 2017 Pillar 3 disclosure and 2017 Form 10-K.

Section	Description	December 31, 2017 Pillar 3 Page Reference	2017 Form 10-K Page Reference
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GENERAL

State Street Corporation, referred to as the Parent Company, is a financial holding company organized in 1969 under the laws of the Commonwealth of Massachusetts. For purposes of this 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 provide a broad range of financial products and services to institutional investors worldwide, with \$33.12 trillion of AUCA and \$2.78 trillion of AUM as of December 31, 2017.

As of December 31, 2017, we had consolidated total assets of \$238.43 billion, consolidated total deposits of \$184.90 billion, consolidated total shareholders' equity of \$22.32 billion and 36,643 employees. We operate in more than 100 geographic markets worldwide, including in the U.S., Canada, Europe, the Middle East and Asia.

We prepare our consolidated financial statements in conformity with U.S. GAAP. Our consolidated financial statements include the accounts of our parent company and its majority- and wholly-owned subsidiaries, including State Street Bank. All material inter-company transactions and balances have been eliminated.

On the "Investor Relations" section of our corporate website at www.statestreet.com, we make available, free of charge, all reports we electronically file with, or furnish to, the SEC including our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as any amendments to those reports, as soon as reasonably practicable after those documents have been filed with, or furnished to, the SEC. These documents are also accessible on the SEC's website at www.sec.gov. We have included the website addresses of State Street and the SEC in this report as inactive textual references only. Information on those websites is not part of this Basel III public disclosure.

The 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, in 2013, which we refer to as the Basel III final rule. The Disclosure provides qualitative and quantitative information about regulatory capital, calculated in conformity with the "advanced approaches" provisions of the Basel III final rule, for State Street and, where applicable, State Street Bank as of December 31, 2017. The

Disclosure also provides qualitative and quantitative information about the market risk associated with our trading activities and our related VaR and stressed-VaR measures. This market risk disclosure is required by the final market risk capital rule issued by the Federal Reserve in 2012 and applicable to us since January 1, 2013. Beginning with March 31, 2015, State Street also includes a supplementary leverage ratio disclosure within this Disclosure.

We expect to update this Disclosure on a quarterly basis and make it available on the "Investor Relations" section of our corporate website. The information presented in this Disclosure may not be consistent with GAAP, and may differ, in presentation, form or otherwise, from similar information, or disclosures on similar topics, provided in our SEC filings. In addition, the information provided in this Disclosure may also differ from, and may not be comparable to, similar disclosures made by other banking organizations. The information provided in this 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, 2017 presented in this Disclosure were calculated in conformity with the advanced approaches provisions of the Basel III final rule as well as the final rules implementing a supplementary leverage ratio (SLR). These ratios reflect calculations and determinations with respect to our capital and related matters as of December 31, 2017, 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 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 disclosure.

FORWARD-LOOKING STATEMENTS

This 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 the 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, dividend and stock purchase programs, outcomes of legal proceedings, market growth, acquisitions, joint ventures and divestitures, client growth and new technologies, services and opportunities, as well as industry, regulatory, economic and market trends, initiatives and developments, the business environment and other matters that do not relate strictly to historical facts.

Please see our latest Annual Report on Form 10-K, Part I, Item IA Risk Factors for a fulsome discussion of the statements contained in this disclosure and our other regulatory reports that might be considered "forward-looking statements."

REGULATION AND SUPERVISION

Overview

We are subject to the Basel III framework in the U.S. Provisions of the Basel III final rule become effective under a transition timetable which began in January 2014, with full implementation required beginning on January 1, 2019. U.S. banking regulators have also jointly issued a final market risk capital rule to implement the changes to the market risk capital framework in the U.S. The final market risk capital rule became effective and was applicable to State Street in January 2013, and replaced the market risk capital framework associated with Basel I and Basel II.

The Basel III final rule provides for two frameworks: the "standardized" approach, intended to replace Basel I, and the "advanced" approaches, applicable to advanced approaches banking organizations, like State Street, as originally defined under Basel II. The standardized approach modifies the provisions of Basel I related to the calculation of RWA and prescribes standardized risk weights for certain on- and off-balance sheet exposures.

The advanced approaches consist of the AIRB approach used for the calculation of RWA related to credit risk, and the AMA used for the calculation of RWA related to operational risk. RWA related to market risk continue to be calculated in conformity with the final market risk capital rule described below.

The final market risk capital rule requires us to use internal models to calculate daily measures of Value-at-Risk, referred to as VaR, that reflect general market risk for certain of our trading positions defined by the rule as "covered positions," as well as stressed-VaR measures to supplement the VaR measures. The rule also requires a public disclosure composed of qualitative and quantitative information about the market risk associated with our trading activities and our related VaR and stressed-VaR measures. The qualitative and quantitative information required by the rule is provided under "Market Risk" in this Disclosure.

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 permanent "capital floor," also referred to as the Collins Amendment, in the assessment of our regulatory capital adequacy, including the capital conservation buffer and countercyclical capital buffer described below under "Regulation and Supervision - Regulatory Capital Adequacy"). Since 2015, our risk-based capital ratios for regulatory assessment purposes are the lower of each ratio calculated under the standardized approach and the advanced approaches.

The requirement for the capital conservation buffer is being phased in beginning on January 1, 2016, with full implementation by January 1, 2019. The countercyclical buffer is currently set to zero by the agencies.

The methods used in the calculation of our and State Street Bank's risk-based capital ratios will change as the provisions of the Basel III final rule related to the numerator (capital) and denominator (RWA) are phased in, and as we begin calculating our RWA using the advanced and standardized approaches. These ongoing methodological changes may result in differences in our reported capital ratios from one reporting period to the next that are independent of applicable changes to our capital base, our asset composition, our off-balance sheet exposures or our risk profile.

In 2014, U.S. federal banking regulators issued final rules implementing a supplementary leverage ratio, referred to as SLR, for certain bank holding companies, like State Street, and their insured depository institution subsidiaries, like State Street Bank. We refer to these final rules as the SLR final rule. Under the SLR final rule, upon implementation as of January 1, 2018, (1) State Street Bank must maintain an SLR of at least 6% to be well capitalized under the U.S. banking regulators' prompt corrective action framework and (2) if State Street maintains an SLR of at least 5%, it is not subject to limitations on distribution and discretionary bonus payments under the SLR final rule.

Regulatory Restrictions

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 capital distributions, including 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. The multitude of banking 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.

Currently, future common stock dividend payments by our parent company to its shareholders, as well as the repurchases by our parent company of our common stock, are subject to the review of and non-objection to our capital plan by the Federal Reserve in connection with its annual CCAR process. Federal regulations also require that extensions of credit by State Street Bank to certain affiliates,

including the parent company, be secured by specific collateral, that the extension of credit to any one affiliate be limited to 10% of State Street Bank's capital and surplus, as defined, and that extensions of credit to all such affiliates be limited to 20% of State Street Bank's capital and surplus. Additional information about these restrictions is provided under Item 5 included in our 2017 Form 10-K, pages 49 through 50.

Provisions of the Federal Reserve Act require that the Federal Reserve approve the payment of dividends by State Street Bank to our parent company if the total amount of all dividends declared by State Street Bank in any calendar year, including any proposed dividend, would exceed the total of its net income for such calendar year plus its "retained net income" for the preceding two calendar years. For these purposes, "retained net income," as of any date of determination, is defined as an amount equal to State Street Bank's net income less any dividends declared during such year. In determining the amount of dividends that are payable, the total of State Street Bank's net income for the current year and its retained net income for the preceding two calendar years is reduced by any net losses incurred in the current or preceding two-year period and by any required transfers to surplus or to a fund for the retirement of preferred stock.

Prior Federal Reserve approval also must be obtained if a proposed dividend by State Street Bank would exceed its "undivided profits," also referred to as retained earnings, as reported in its regulatory reports filed with U.S. banking regulators. State Street Bank may include in its undivided profits amounts contained in its surplus account, if the amounts reflect transfers of undivided profits made in prior periods and if the Federal Reserve's approval for the transfer back to undivided profits has been obtained.

Under the PCA provisions of the FDICIA of 1991, State Street Bank may not pay a dividend when it is deemed, under the PCA provisions, to be under-capitalized, or when the payment of the dividend would cause State Street Bank to be under-capitalized. If State Street Bank is under-capitalized under the PCA provisions, it must cease paying dividends for so long as it is deemed to be under-capitalized. Once earnings have begun to improve and an adequate capital position has been restored, dividend payments may resume in conformity with federal statutory limitations and guidelines.

The following table presents the minimum ratio requirements under the PCA provisions for State Street Bank:

PROMPT CORRECTIVE ACTION PROVISIONS

	Well Capitalized		Adequately Capitalized	
	January 1, 2017	January 1, 2018	January 1, 2017	January 1, 2018
Common equity tier 1 risk-based capital	6.5%	6.5%	4.5%	4.5%
Tier 1 risk-based capital	8.0	8.0	6.0	6.0
Total risk-based capital	10.0	10.0	8.0	8.0
Supplementary leverage ratio (SLR) ⁽¹⁾		6.0		3.0

⁽¹⁾ State Street Bank, as an insured depository institution subsidiary of State Street, a U.S. G-SIB, must achieve a higher SLR requirement of 6% in order to remain well capitalized. There is no well capitalized SLR requirement for State Street Corporation.

Regulatory Capital Adequacy

Among other things, the Basel III final rule does the following:

- Adds requirements for a minimum common equity tier 1 risk-based capital ratio of 4.5% and a minimum supplementary leverage ratio of 3% for advanced approaches banking organizations;
- Raises the minimum tier 1 risk-based capital ratio from 4% under Basel I and Basel II to 6%;
- Leaves the existing, minimum total capital ratio at 8%;
- Implements the capital conservation and countercyclical capital buffers, referenced below, as well as a G-SIB surcharge further described in the Regulatory Capital section;
- Implements the previously described standardized approach to replace the calculation of RWA under Basel I; and
- Implements the advanced approaches for the calculation of RWA.

The Basel III final rule also incorporates the above-described final market risk capital rule to create a single and comprehensive regulatory capital adequacy framework.

Additionally, beginning January 1, 2018, the SLR rule introduced a higher minimum SLR requirement for the eight U.S. G-SIBs of at least 6% for the insured banking entity (State Street Bank) in order to be well capitalized under the U.S. banking regulators' PCA framework, as well as a requirement of a

minimum SLR of 5% for the holding company (the Parent Company) in order to avoid any limitations on distributions and discretionary bonus payments. In addition to the SLR, State Street is subject to a minimum tier 1 leverage ratio of 4%, which differs from the SLR primarily in that the denominator of the tier 1 leverage ratio is a quarterly average of on-balance sheet assets and the SLR, does not include any off-balance sheet exposures. The Parent Company is required to include SLR disclosures, calculated on a transitional basis, with its other Basel disclosures.

Under the Basel III final rule, a banking organization would be able to make capital distributions (subject to other regulatory constraints, such as regulator review of its capital plans) and discretionary bonus payments without specified limitations, as long as it maintains the required capital conservation buffer of 2.5% plus applicable G-SIB surcharge over the minimum required common equity tier 1 risk-based capital ratio and each of the minimum required tier 1 and total risk-based capital ratios (plus any potentially applicable countercyclical capital buffer). Banking regulators would establish the minimum countercyclical capital buffer, which is initially set by banking regulators at zero, up to a maximum of 2.5% of total risk-weighted assets under certain economic conditions.

Regulatory Capital Requirements

Under the Basel III final rule, our total regulatory capital is divided into three tiers, composed of common equity tier 1 capital, tier 1 capital (which includes common equity tier 1 capital), and tier 2 capital. The total of tier 1 and tier 2 capital, adjusted as applicable, is referred to as total regulatory capital.

Common equity tier 1 capital is composed of core capital elements, such as qualifying common shareholders' equity and related surplus; retained earnings; the cumulative effect of foreign currency translation; and net unrealized gains (losses) on debt and equity securities classified as AFS; reduced by treasury stock. Subject to certain phase-in or phase-out provisions, tier 1 capital is composed of common equity tier 1 capital plus additional tier 1 capital composed of qualifying perpetual preferred stock and minority interests. Goodwill and other intangible assets, net of related deferred tax liabilities, are deducted from common equity tier 1 capital and tier 1 capital. Subject to certain phase-in or phase-out provisions, tier 2 capital is composed primarily of qualifying subordinated long-term debt.

Certain other items, if applicable, must be deducted from tier 1 and tier 2 capital. These items primarily include deductible investments in unconsolidated banking, financial and insurance entities where we hold more than 50% of the entities' capital; 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 final rule.

The common equity tier 1 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 common equity tier 1 capital with the sum of its total 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 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" and "securitizations" 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; this scaling factor is designed to avoid an unacceptable decline in our existing capital requirement resulting from our calculation of RWA under the new rule.

As an advanced approaches banking organization in the U.S., we are required by the Basel III final rule to apply the 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 Disclosure.

We calculate our RWA related to market risk associated with our trading activities based on our

measures of VaR and stressed VaR in conformity with the requirements of the previously described 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 Disclosure.

REGULATORY CAPITAL MANAGEMENT

Our objective with respect to regulatory capital management is to maintain a strong capital base in order to provide financial flexibility for our business needs, including funding corporate growth and supporting clients' cash management needs, 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.

Our primary goal with respect to regulatory capital adequacy is to exceed all applicable minimum regulatory capital requirements and to be "well-capitalized" under applicable regulations, including the PCA provisions of FDICIA. With respect to our internal capital requirements, our primary goal is to maintain capital adequacy according to our CAP and associated capital policy.

In conformity with our capital policy, we strive to maintain an appropriate level of capital, not just at a point in time, but over time and during periods of stress, to account for changes in our strategic direction, evolving economic conditions, and financial and market volatility.

We maintain investment grade credit ratings. Currently, that rating is "A" (Standard & Poor's), "A1" (Moody's Investors Service), "AA-" (Fitch Ratings) and "AA (Low)" (Dominion Bond Rating Service). Our capital position and associated credit rating are used to promote client confidence, retention of business and client deposits, and orderly and cost-efficient access to the global financial markets, including funding our business.

Another objective of our capital policy is to allow us the opportunity to provide our shareholders with an appropriate return through business reinvestment and capital action.

Capital adequacy is a key element in maintaining our financial well-being, which affects our ability to attract and maintain client relationships; deal effectively in the global capital markets; and satisfy regulatory, bondholder, and shareholder needs. Capital is one of several elements that affect our external debt ratings and those of our principal subsidiaries. The financial crisis highlighted that although under normal operating conditions capital

levels are important, a heightened awareness of capital adequacy and liquidity occurs when environments turn stressful.

Given the importance of capital adequacy, we have implemented a process to assess our capital adequacy that strives to accomplish the following:

- Balance the needs of external stakeholders, who may have different ways of assessing capital adequacy. For example, non-shareholders (such as depositors and creditors) are often concerned with the safety of their funds, whereas shareholders may sometimes prefer that we deploy our capital in methods designed to achieve a higher return, even if that means exposing that capital to somewhat higher levels of risk;
- Find the optimal level of capital and mix of capital instruments to satisfy all constituents of capital, with the lowest overall cost and highest return to shareholders; and
- Maintain capital levels that address our material risks, link directly with our risk appetite and satisfy all regulatory capital requirements.

Our capital management process focuses on our risk exposures, our regulatory capital requirements, the evaluations of the major independent credit rating agencies that assign ratings to our public debt and our capital position relative to our peers. Our CAP, as defined by our capital policy, incorporates aspects of our capital adequacy goals and targets established within our risk appetite framework, capital contingency measures, performance metrics, early warning triggers, and recovery and resolution plan triggers. This corporate-wide CAP leverages expertise across business and risk functions and is executed across both business-as-usual and stressful operating environments. We routinely measure and forecast our regulatory risk-based and leverage capital ratios, existing and proposed.

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 and standardized approaches provisions of the Basel III final rule as of the dates indicated:

TABLE 1: REGULATORY CAPITAL STRUCTURE AND RELATED REGULATORY CAPITAL RATIOS⁽¹⁾

	State Street				State Street Bank			
	Basel III Advanced Approach		Basel III Standardized Approach		Basel III Advanced Approach		Basel III Standardized Approach	
	December 31, 2017	September 30, 2017	December 31, 2017	September 30, 2017	December 31, 2017	September 30, 2017	December 31, 2017	September 30, 2017
(Dollars in millions)								
Common shareholders' equity:								
Common stock and related surplus	\$ 10,302	\$ 10,307	\$ 10,302	\$ 10,307	\$ 11,612	\$ 11,382	\$ 11,612	\$ 11,382
Retained earnings	18,856	18,675	18,856	18,675	12,312	12,286	12,312	12,286
Accumulated other comprehensive income (loss)	(972)	(985)	(972)	(985)	(809)	(808)	(809)	(808)
Treasury stock, at cost	(9,029)	(8,697)	(9,029)	(8,697)	—	—	—	—
Total	19,157	19,300	19,157	19,300	23,115	22,860	23,115	22,860
Regulatory capital adjustments:								
Goodwill and other intangible assets, net of associated deferred tax liabilities ⁽²⁾	(6,877)	(6,739)	(6,877)	(6,739)	(6,579)	(6,447)	(6,579)	(6,447)
Other adjustments	(76)	(122)	(76)	(122)	(5)	(90)	(5)	(90)
Common equity tier 1 capital	12,204	12,439	12,204	12,439	16,531	16,323	16,531	16,323
Preferred stock	3,196	3,196	3,196	3,196	—	—	—	—
Other adjustments	(18)	(29)	(18)	(29)	—	—	—	—
Tier 1 capital	15,382	15,606	15,382	15,606	16,531	16,323	16,531	16,323
Qualifying subordinated long-term debt	980	1,072	980	1,072	983	1,076	983	1,076
ALLL and Other	4	5	72	79	—	—	72	79
Other adjustments	1	1	1	1	—	—	—	—
Total capital	\$ 16,367	\$ 16,684	\$ 16,435	\$ 16,758	\$ 17,514	\$ 17,399	\$ 17,586	\$ 17,478
Risk-weighted assets⁽³⁾								
Credit risk	\$ 49,976	\$ 50,197	\$ 101,349	\$ 106,377	\$ 47,448	\$ 47,282	\$ 98,433	\$ 103,024
Operational risk	45,822	45,795	N/A	N/A	45,295	45,270	N/A	N/A
Market risk ⁽⁴⁾	3,358	3,005	1,334	1,203	3,375	3,005	1,334	1,203
Total	\$ 99,156	\$ 98,997	\$ 102,683	\$ 107,580	\$ 96,118	\$ 95,557	\$ 99,767	\$ 104,227
Capital Ratios:								
	Minimum Requirements ⁽⁵⁾ 2017							
Common equity tier 1 risk-based capital	6.5%	12.3%	12.6%	11.9%	11.6%	17.2%	17.1%	15.7%
Tier 1 risk-based capital	8.0%	15.5	15.8	15.0	14.5	17.2	17.1	15.7
Total risk-based capital	10.0%	16.5	16.9	16.0	15.6	18.2	18.2	16.8

⁽¹⁾ Common equity tier 1 capital, tier 1 capital and total capital ratios were calculated in conformity with the transitional provisions of the Basel III final rule.

⁽²⁾ Amounts for State Street and State Street Bank consisted of goodwill, net of associated deferred tax liabilities, and 80% of other intangible assets, net of associated deferred tax liabilities, the latter phased in as a deduction from capital, in conformity with the Basel III final rule.

⁽³⁾ Refer to "Total Risk-Weighted Assets" in this "Regulatory Capital" section for detail about the underlying sub-components of each type of RWA.

⁽⁴⁾ Market risk RWA reported in conformity with the Basel III advanced approaches included a credit valuation adjustment, or CVA, which reflected the risk of potential fair-value adjustments for credit risk reflected in our valuation of over-the-counter derivative contracts. The CVA was not provided for in the final market risk capital rule; however, it was required by the advanced approaches provisions of the Basel III final rule. State Street uses the simple CVA approach in conformity with the Basel III advanced approaches.

⁽⁵⁾ Basel III minimum requirements will be phased in up to full implementation beginning on January 1, 2019; minimum requirements listed are as of September 30, 2017. See Table 3: Basel III Final Rules Transition Arrangements and Minimum Risk Based Capital Ratios.

Supplementary Leverage Ratio

The following table presents the SLR using transitional tier 1 capital as calculated under the supplementary leverage ratio provisions of the Basel III final rule as of the date indicated:

TABLE 2: SUPPLEMENTARY LEVERAGE RATIO

	State Street
	December 31, 2017
(In millions)	
Part 1: Summary comparison of accounting assets and total leverage exposure	
Total consolidated assets as reported in published financial statements ⁽¹⁾	238,425
Derivative exposure adjustments	13,289
Repo-Style exposure adjustments	2,076
Other off-balance sheet exposures adjustments	12,527
Other Adjustments ⁽²⁾	(6,972)
Adjustments for frequency calculations ⁽¹⁾	(22,358)
Total Leverage Exposure	236,987
Part 2: Supplementary leverage ratio	
On-balance sheet exposures	
On-balance sheet assets (excluding on-balance sheet assets for repo-style transactions and derivative exposures, but including cash collateral received in derivative transactions)	189,649
LESS: Amounts deducted from tier 1 capital	6,972
Total on-balance sheet exposures (excluding on-balance sheet assets for repo-style transactions and derivative exposures, but including cash collateral received in derivative transactions)	182,677
Derivative exposures	
Replacement cost for derivative exposures (that is, net of cash variation margin)	4,433
Add-on amounts for potential future exposure (PFE) for derivative exposures	10,669
Gross-up for certain cash collateral posted if deducted from the on-balance sheet assets, except for cash variation margin	978
Effective notional principal amount of sold credit protection	
Total derivative exposures	16,080
Repo-style transactions	
On-balance sheet assets for repo-style transactions, except include the gross value of receivables for reverse repurchase transactions. Exclude from this item the value of securities received in a security-for-security repo-style transaction where the securities lender has not sold or re-hypothecated the securities received. Include in this item the value of securities that qualified for sales treatment that must be reversed	60,401
LESS: Reduction of the gross value of receivables in reverse repurchase transactions by cash payables in repurchase transactions under netting agreements	36,585
Counterparty credit risk for all repo-style transactions	1,887
Total exposures for repo-style transactions	25,703
Other off-balance sheet exposures	
Off-balance sheet exposures at gross notional amounts	33,823
LESS: Adjustments for conversion to credit equivalent amounts ⁽³⁾	21,296
Off-balance sheet exposures	12,527
Capital and total leverage exposure	
Total leverage exposure	236,987
Tier 1 capital ⁽⁴⁾	15,382
Supplementary leverage ratio⁽⁵⁾	6.5%

⁽¹⁾ 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.

⁽²⁾ "Other Adjustments" includes goodwill, net of associated deferred tax liabilities, and 80% of other intangible assets, net of associated deferred tax liabilities, the latter phased in as a deduction from capital, with all such adjustments applied in conformity with the Basel III final rule as well as other applicable regulatory adjustments.

⁽³⁾ Credit equivalent amounts are calculated using the credit conversion factors in accordance with the Basel III standardized approach.

⁽⁴⁾ Tier 1 capital was calculated in conformity with the transitional provisions of the Basel III final rule.

⁽⁵⁾ 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.

The following table presents the Basel III final rules transition arrangements and minimum risk-based capital ratios from 2017 to 2019. For more information on minimum regulatory capital ratios, see page 16 in the Supplemental Public Disclosure of Basel III Regulatory Capital as of December 31, 2017.

TABLE 3: TRANSITION ARRANGEMENTS AND MINIMUM RISK-BASED CAPITAL RATIOS⁽¹⁾⁽²⁾

	2017	2018	2019
Capital Conservation Buffer (CET1)	1.250%	1.875%	2.500%
GSIB surcharge (CET1) ⁽²⁾	0.750	1.125	1.500
Minimum Common Equity Tier 1 Capital ⁽³⁾	6.500	7.500	8.500
Minimum Tier 1 Capital ⁽³⁾	8.000	9.000	10.000
Minimum Total Capital ⁽³⁾	10.000	11.000	12.000

⁽¹⁾ Minimum ratios shown above reflect the countercyclical buffer, currently set at zero by U.S. banking regulators.

⁽²⁾ State Street's G-SIB surcharge applicable on January 1, 2017 is 0.75%. Including a 1.5% surcharge, State Street's minimum risk-based capital ratio requirements, as of January 1, 2019 would be 8.5% for common equity tier 1, 10% for tier 1 capital and 12.0% for total capital.

⁽³⁾ Minimum Common Equity Tier 1 Capital, Minimum Tier 1 Capital and Minimum Total Capital presented include the transitional capital conservation buffer as well as a transitional G-SIB surcharge based on an estimated 1.5% surcharge in all periods being phased-in beginning January 1, 2017 through January 1, 2019.

The specific calculation of State Street's and State Street Bank's risk-based capital ratios will change as the provisions of the Basel III final rule related to the numerator (capital) and denominator (RWA) are phased in, and as our RWA calculated using the advanced approaches change due to potential changes in methodology. These ongoing methodological changes will result in differences in our reported capital ratios from one reporting period to the next that are independent of applicable changes to our capital base, our asset composition, our off-balance sheet exposures or our risk profile.

Global Systemically Important Bank

We are designated as a large bank holding company subject to enhanced supervision and prudential standards, commonly referred to as a "systemically important financial institution," or SIFI, and we are one among a group of 30 institutions worldwide that have been identified by the FSB and the BCBS as G-SIBs. Our designation as a G-SIB requires us to maintain an additional capital buffer above the Basel III final rule minimum common equity tier 1 capital ratio of 4.5%, based on a number of factors, as evaluated by banking regulators.

On August 14, 2015, the Federal Reserve published a final rule on the implementation of capital requirements for U.S. G-SIBs. The surcharge requirements within the final rule started phasing in on January 1, 2016 and will be fully effective on January 1, 2019. The eight U.S. banks deemed to be G-SIBs are required to calculate the G-SIB surcharge according to two methods and be bound by the higher of the two:

- Method 1: Assesses systemic importance based upon five equally-weighted components: size, interconnectedness,

complexity, cross-jurisdictional activity and substitutability

- Method 2: Alters the calculation from Method 1 by factoring in a wholesale funding score in place of substitutability and applying a 2x multiplier to the sum of the five components

As part of the final rule, the Federal Reserve published estimated G-SIB surcharges for the eight U.S. G-SIBs based on our relevant data from 2012-2014. Method 2 is identified as the binding methodology for State Street, and the Federal Reserve estimated the resulting G-SIB surcharge to be 1.5%. The actual surcharge applicable on January 1, 2017 utilizing relevant data from 2015 to 2016 is calculated to be 1.5%. Assuming completion of the phase-in period for the capital conservation buffer, and a countercyclical buffer of 0%, the minimum capital ratios as of January 1, 2019, including a capital conservation buffer of 2.5% and a G-SIB surcharge of 1.5% in 2019, would be 10.0% for tier 1 risk-based capital, 12.0% for total risk-based capital, and 8.5% for common equity tier 1 capital, in order for State Street to make capital distributions and discretionary bonus payments without limitation. Not all of our competitors have similarly been designated as systemically important, and therefore some of our competitors may not be subject to the same additional capital requirements. However, certain competitors deemed systemically important may be subject to higher capital requirements.

Regulatory Capital Instruments

We include multiple types of capital instruments in our regulatory capital. Within common equity tier 1 capital, we include common stock. Within tier 1 capital, we include qualifying preferred stock. Within tier 2 capital, we include qualifying subordinated long-term debt. The following table presents summary information about the capital instruments included in our common equity tier 1, tier 1 and tier 2 regulatory capital as of December 31, 2017:

TABLE 4: REGULATORY CAPITAL INSTRUMENTS

December 31, 2017

(Dollars in millions)

Description	Amount Issued	Capital Amount	Capital Category	Type	Maturity	Dividend/Coupon
Equity:						
Common stock ⁽¹⁾	\$ 1,273	\$ 1,273	Common equity tier 1	NA	NA	NA ⁽³⁾
Preferred stock ⁽²⁾	492	492	Tier 1	Fixed	NA	5.25%
Preferred stock ⁽²⁾	742	742	Tier 1	Fixed to Float	NA	5.90 ⁽⁴⁾
Preferred stock ⁽²⁾	727	727	Tier 1	Fixed	NA	6.00
Preferred stock ⁽²⁾	742	742	Tier 1	Fixed to Float	NA	5.25 ⁽⁵⁾
Preferred stock ⁽²⁾	494	494	Tier 1	Fixed to Float	NA	5.35 ⁽⁶⁾
Qualifying subordinated long-term debt:						
Subordinated debt	\$ 1,000	\$ 981	Tier 2	Fixed	May 15, 2023	3.10%
Subordinated debt	500	— ⁽⁷⁾	Tier 2	Fixed	March 15, 2018	4.96
Subordinated debt	400	— ⁽⁷⁾	Tier 2	Fixed	October 15, 2018	5.25
Total	\$ 1,900	\$ 981				

NA: Not applicable.

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

⁽²⁾ 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.

⁽³⁾ Common Stock dividends are declared quarterly with no contractual obligation or stated coupon rate.

⁽⁴⁾ From the date of issuance to, but excluding, March 15, 2024, dividends will be calculated at an annual rate of 5.9%; from, and including, March 15, 2024, dividends will be calculated at an annual rate equal to 3-month LIBOR plus 3.108%.

⁽⁵⁾ From the date of issuance to, but excluding, September 15, 2020, dividends will be calculated at an annual rate of 5.25%; from, and including, September 15, 2020, dividends will be calculated at an annual rate equal to 3-month LIBOR plus 3.597%.

⁽⁶⁾ From the date of issuance to, but excluding, March 15, 2026, dividends will be calculated at an annual rate of 5.35%, and from, and including, March 15, 2026, dividends will be calculated at an annual rate equal to three-month LIBOR plus 3.709%.

⁽⁷⁾ Amounts included in tier 2 capital were reduced by 20% annual increments of the outstanding balance if the issuance is within five years of its maturity as of December 31, 2017.

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, 136,229,784 shares were held in treasury, and 367,649,858 shares were outstanding as of December 31, 2017. 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 our parent company to its shareholders, or the purchase by our parent company of shares of our 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.

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 State Street's liquidation, winding up or dissolution. Our preferred stock also has such other preferences as may be fixed by the Board.

Preferred Stock

The following table presents the details on each of the series of the preferred stock issued and outstanding as of December 31, 2017:

TABLE 5: PREFERRED STOCK

	<u>Issuance Date</u>	<u>Depository Shares Issued</u>	<u>Ownership Interest Per Depository Share</u>	<u>Liquidation Preference Per Share</u>	<u>Liquidation Preference Per Depository Share</u>	<u>Net Proceeds of Offering (in millions)</u>	<u>Redemption Date⁽¹⁾</u>
Preferred Stock:⁽²⁾							
Series C	August 2012	20,000,000	1/4,000th	\$ 100,000	\$ 25	\$ 488	September 15, 2017
Series D	February 2014	30,000,000	1/4,000th	100,000	25	742	March 15, 2024
Series E	November 2014	30,000,000	1/4,000th	100,000	25	728	December 15, 2019
Series F	May 2015	750,000	1/100th	100,000	1,000	742	September 15, 2020
Series G	April 2016	20,000,000	1/4,000th	100,000	25	493	March 15, 2026

⁽¹⁾ On the redemption date, or any dividend declaration 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.

⁽²⁾ 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.

Preferred Stock, Series C

We have 5,000 shares of our Series C preferred stock outstanding, represented by 20 million depository shares, each representing a 1/4,000th ownership interest in a share of State Street's non-cumulative perpetual preferred stock, Series C, without par value, with a liquidation preference of \$100,000 per share (equivalent to \$25 per depository share).

Dividends on shares of the Series C preferred stock are not mandatory and are non-cumulative. If declared, dividends will be payable on the liquidation preference of \$100,000 per share quarterly in arrears on March 15, June 15, September 15 or December 15 of each year at an annual rate of 5.25%. If we issue additional shares of Series C preferred stock after the original issue date, dividend rights with respect to such shares will commence from the original issue date of such additional shares.

Holder 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.

Dividends on the Series C preferred stock will not be declared to the extent that such declaration would cause us to fail to comply with applicable laws and regulations, including federal regulatory capital guidelines.

On September 15, 2017, or any dividend payment date thereafter, the Series C preferred stock and corresponding depository shares may be redeemed by us, in whole or in part, at a redemption price equal to \$100,000 per share (equivalent to \$25 per depository share) plus any declared and unpaid dividends, without accumulation of any undeclared dividends. The Series C preferred stock and corresponding depository shares may be redeemed at our option, in whole or in part, prior to September 15, 2017, upon the occurrence of a "regulatory capital treatment event," as defined in the certificate of designation with respect to the Series C preferred stock, at a redemption price equal to \$100,000 per share (equivalent to \$25 per depository share) plus

any declared and unpaid dividends, without accumulation of any undeclared dividends.

Preferred Stock, Series D

We have 7,500 shares of our Series D preferred stock outstanding, represented by 30 million depositary shares, each representing a 1/4,000th ownership interest in a share of State Street's fixed-to-floating-rate non-cumulative perpetual preferred stock, Series D, without par value, with a liquidation preference of \$100,000 per share (equivalent to \$25 per depositary share).

Dividends on shares of the Series D preferred stock are not mandatory and are non-cumulative. If declared, dividends will be payable on the liquidation preference of \$100,000 per share quarterly in arrears on March 15, June 15, September 15 or December 15 of each year. From the date of issuance to, but excluding, March 15, 2024, dividends will be calculated at an annual rate of 5.9%; from, and including, March 15, 2024, dividends will be calculated at an annual rate equal to three-month LIBOR plus 3.108%.

If we issue additional shares of Series D preferred stock after the original issue date, dividend rights with respect to such shares will commence from the original issue date of such additional shares. Dividends on the Series D preferred stock will not be declared to the extent that such declaration would cause us to fail to comply with applicable laws and regulations, including federal regulatory capital guidelines.

On March 15, 2024, or any dividend payment date thereafter, the Series D preferred stock and corresponding depositary shares may be redeemed by us, in whole or in part, at a redemption price equal to \$100,000 per share (equivalent to \$25 per depositary share) plus any declared and unpaid dividends, without accumulation of any undeclared dividends. The Series D preferred stock and corresponding depositary shares may be redeemed at our option, in whole but not in part, prior to March 15, 2024, upon the occurrence of a "regulatory capital treatment event," as defined in the certificate of designation with respect to the Series D preferred stock, at a redemption price equal to \$100,000 per share (equivalent to \$25 per depositary share) plus any declared and unpaid dividends, without accumulation of any undeclared dividends.

Preferred Stock, Series E

We have 7,500 shares of our Series E preferred stock outstanding, represented by 30 million depositary shares, each representing a 1/4,000th ownership interest in a share of State Street's non-cumulative perpetual preferred stock, Series E, without par value, with a liquidation preference of

\$100,000 per share (equivalent to \$25 per depositary share).

Dividends on shares of the Series E preferred stock are not mandatory and are non-cumulative. If declared, dividends will be payable on the liquidation preference of \$100,000 per share quarterly in arrears on March 15, June 15, September 15 or December 15 of each year at an annual rate of 6%. If we issue additional shares of Series E preferred stock after the original issue date, dividend rights with respect to such shares will commence from the original issue date of such additional shares. Dividends on the Series E preferred stock will not be declared to the extent that such declaration would cause us to fail to comply with applicable laws and regulations, including federal regulatory capital guidelines.

On December 15, 2019, or any dividend payment date thereafter, the Series E preferred stock and corresponding depositary shares may be redeemed by us, in whole or in part, at a redemption price equal to \$100,000 per share (equivalent to \$25 per depositary share) plus any declared and unpaid dividends, without accumulation of any undeclared dividends. The Series E preferred stock and corresponding depositary shares may be redeemed at our option, in whole but not in part, prior to December 15, 2019, upon the occurrence of a "regulatory capital treatment event," as defined in the certificate of designation with respect to the Series E preferred stock, at a redemption price equal to \$100,000 per share (equivalent to \$25 per depositary share) plus any declared and unpaid dividends, without accumulation of any undeclared dividends.

Preferred Stock, Series F

We have 7,500 shares of our Series F preferred stock outstanding, represented by 750,000 depositary shares, each representing a 1/100th ownership interest in a share of State Street's fixed-to-floating rate non-cumulative perpetual preferred stock, Series F, without par value, with a liquidation preference of \$100,000 per share (equivalent to \$1,000 per depositary share).

Dividends on shares of the Series F preferred stock are not mandatory and are non-cumulative. If declared, dividends will be payable on the liquidation preference of \$100,000 per share semi-annually in arrears on March 15 and September 15 of each year, commencing on September 15, 2015 to and including September 15, 2020, and quarterly in arrears on the 15th day of March, June, September and December of each year, commencing on December 15, 2020. From the date of issuance up to September 15, 2020, dividends will be calculated at an annual rate of 5.25%; from, and including, September 15, 2020, dividends will be calculated at an annual rate equal to three-month LIBOR plus 3.597%.

If we issue additional shares of Series F preferred stock after the original issue date, dividend rights with respect to such shares will commence from the original issue date of such additional shares. Dividends on the Series F preferred stock will not be declared to the extent that such declaration would cause us to fail to comply with applicable laws and regulations, including federal regulatory capital guidelines.

On September 15, 2020, or any dividend payment date thereafter, the Series F preferred stock and corresponding depositary shares may be redeemed by us, in whole or in part, at a redemption price equal to \$100,000 per share (equivalent to \$1,000 per depositary share) plus any declared and unpaid dividends, without accumulation of any undeclared dividends. The Series F preferred stock and corresponding depositary shares may be redeemed at our option, in whole but not in part, prior to September 15, 2020, upon the occurrence of a "regulatory capital treatment event," as defined in the certificate of designation with respect to the Series F preferred stock, at a redemption price equal to \$100,000 per share (equivalent to \$1,000 per depositary share) plus any declared and unpaid dividends, without accumulation of any undeclared dividends.

Preferred Stock, Series G

We have 5,000 shares of our Series G preferred stock outstanding, represented by 500,000 depositary shares, each representing a 1/4000th ownership interest in a share of State Street's fixed-to-floating rate non-cumulative perpetual preferred stock, Series G, without par value, with a liquidation preference of \$100,000 per share (equivalent to \$25 per depositary share).

Dividends on shares of the Series G Preferred Stock will not be mandatory and will not be cumulative. Holders of the Series G Preferred Stock will be entitled to receive, when, as and if declared by our board of directors or any duly authorized committee of the board out of legally available assets, non-cumulative cash dividends, quarterly in arrears on the 15th day of March, June, September and December, commencing June 15, 2016. From the date of issuance to, but excluding, March 15, 2026 (the "Fixed Rate Period"), dividends will be calculated at an annual rate of 5.35%, and from, and including, March 15, 2026 (the "Floating Rate Period"), dividends will be calculated at an annual rate equal to three-month LIBOR plus 3.709%, in each case on the liquidation amount as described below.

If we issue additional shares of the Series G Preferred Stock, dividend rights on those additional shares will commence from, and including, the original issuance date of those additional shares at the applicable dividend rate, except with respect to

any shares issued upon the exercise of the underwriters' option to purchase additional depositary shares, which will accrue dividends from the original date of issuance of the Series G Preferred Stock offered by this prospectus supplement.

Notwithstanding the foregoing, dividends on the Series G Preferred Stock shall not be declared, paid or set aside for payment to the extent such act would cause us to fail to comply with laws and regulations applicable thereto, including applicable capital adequacy guidelines.

The Series G Preferred Stock may be redeemed at our option, in whole or in part, on March 15, 2026, or any dividend payment date thereafter, at a redemption price equal to \$100,000 per share (equivalent to \$25 per depositary share), plus any declared and unpaid dividends, without accumulation of any undeclared dividends. The Series G Preferred Stock may be redeemed at our option, in whole, but not in part, prior to March 15, 2026, upon the occurrence of a "regulatory capital treatment event," as described herein, at a redemption price equal to \$100,000 per share (equivalent to \$25 per depositary share), plus any declared and unpaid dividends, without accumulation of any undeclared dividends.

Qualifying Subordinated Long-Term Debt

Our subordinated debt includes various issuances of long-term debt that qualify for inclusion in tier 2 capital under Basel III. To qualify for inclusion in tier 2 capital, among other things, these issuances must have a minimum original maturity of at least five years. However, the majority of our subordinated debt has an original maturity of ten years or more and rights by us to call the debt after five or more 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 tables present 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 dates indicated:

TABLE 6: COMPONENTS OF TOTAL RISK-WEIGHTED ASSETS

(In millions)	State Street			
	December 31, 2017		September 30, 2017	
	RWA	EAD ⁽¹⁾	RWA	EAD ⁽¹⁾
Credit risk:				
Wholesale	\$ 31,748	\$ 241,889	\$ 30,927	\$ 231,620
Securizations ⁽²⁾	7,674	24,247	8,177	26,474
Equity ⁽²⁾	5,477	5,857	5,567	5,687
All other ⁽³⁾	5,077	4,789	5,526	5,213
Total credit risk⁽⁴⁾	\$ 49,976	\$ 276,782	\$ 50,197	\$ 268,994
Operational risk⁽⁵⁾	\$ 45,822	NA	\$ 45,795	NA
Market risk:		Sixty-Day Average VaR		Sixty-Day Average VaR
Value-at-risk ⁽⁶⁾	300	8	278	7
Stressed value-at-risk ⁽⁶⁾	1,034	28	925	25
Credit valuation adjustment ⁽⁷⁾	2,024	NA	1,802	NA
Total market risk	3,358		3,005	
Total risk-weighted assets	\$ 99,156		\$ 98,997	
(In millions)	State Street Bank			
	December 31, 2017		September 30, 2017	
	RWA	EAD ⁽¹⁾	RWA	EAD ⁽¹⁾
Credit risk:				
Wholesale	\$ 31,925	\$ 240,888	\$ 30,997	\$ 230,354
Securizations ⁽²⁾	7,674	24,247	8,177	26,474
Equity ⁽²⁾	3,580	4,853	3,556	4,712
All other ⁽³⁾	4,269	4,025	4,552	4,295
Total credit risk⁽⁴⁾	\$ 47,448	\$ 274,013	\$ 47,282	\$ 265,835
Operational risk⁽⁵⁾	\$ 45,295	NA	\$ 45,270	NA
Market risk:		Sixty-Day Average VaR		Sixty-Day Average VaR
Value-at-risk ⁽⁶⁾	300	8	278	7
Stressed value-at-risk ⁽⁶⁾	1,034	28	925	25
Credit valuation adjustment ⁽⁷⁾	2,041	NA	1,802	NA
Total market risk	3,375		3,005	
Total risk-weighted assets	\$ 96,118		\$ 95,557	

NA = Not Applicable

⁽¹⁾ EAD represents our estimated exposure to a counterparty if that counterparty defaults; EAD is more fully described under "Credit Risk - Advanced Internal Ratings-Based Approach" in this Disclosure.

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

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

⁽⁴⁾ RWA reflect 1.06 supervisory scaling factor described earlier in this Public Disclosure under "Regulatory Capital Requirements."

⁽⁵⁾ RWA for operational risk are calculated using required capital measured by an internally developed loss distribution model; refer to "Operational Risk" in this Disclosure.

⁽⁶⁾ 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 Disclosure.

⁽⁷⁾ CVA reflects the risk of potential fair-value adjustments for credit risk reflected in our valuation of over-the-counter derivative contracts. CVA was not provided for in the final market risk capital rule; however, it is required by the advanced approaches provisions of the Basel III final rule. We do not use an internal model to calculate RWA related to the CVA; we use the simple CVA approach in conformity with the Basel III final rule.

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;
- strategic risk;
- model risk; and
- reputational, fiduciary and business conduct risk.

Many of these risks, as well as certain factors underlying each of these risks that could affect our businesses and our consolidated financial statements, are discussed in detail under Item 1A, Risk Factors, included in our 2016 Form 10-K, pages 19 through 44.

The scope of our business requires that we balance these risks with a comprehensive and well-integrated risk management function. The identification, assessment, monitoring, mitigation and reporting of risks are essential to our financial performance and successful management of our businesses. These risks, if not effectively managed, can result in losses to State Street as well as erosion of our capital and damage to our reputation. Our approach, including Board and senior management oversight and a system of policies, procedures, limits, risk measurement and monitoring and internal controls, allows for an assessment of risks within a framework for evaluating opportunities for the prudent use of capital that appropriately balances risk and return.

Our objective is to optimize our return while operating at a prudent level of risk. In support of this objective, we have instituted a risk appetite framework that aligns our business strategy and financial objectives with the level of risk that we are willing to incur.

Our risk management is based on the following major goals:

- A culture of risk awareness that extends across all of our business activities;
- The identification, classification and quantification of State Street's material risks;

- The establishment of our risk appetite and associated limits and policies, and our compliance with these limits;
- The establishment of a risk management structure at the "top of the house" that enables the control and coordination of risk-taking across the business lines;
- The implementation of stress testing practices and a dynamic risk-assessment capability;
- A direct link between risk and strategic-decision making processes and incentive compensation practices; and
- The overall flexibility to adapt to the ever-changing business and market conditions.

Our risk appetite framework outlines the quantitative limits and qualitative goals that define our risk appetite, as well as the responsibilities for measuring and monitoring risk against limits, and for reporting, escalating, approving and addressing exceptions. Our risk appetite framework is established by ERM, a corporate risk oversight group, in conjunction with the MRAC and the RC of the Board. The Board formally reviews and approves our risk appetite statement annually, or more frequently as required.

The risk appetite framework describes the level and types of risk that we are willing to accommodate in executing our business strategy, and also serves as a guide in setting risk limits across our business units. In addition to our risk appetite framework, we use stress testing as another important tool in our risk management practice. Additional information with respect to our stress testing process and practices is provided under "Capital" in Management's Discussion and Analysis included under Item 7 of our 2016 Form 10-K, pages 107 through 108.

Governance and Structure

We have an approach to risk management that involves all levels of management, from the Board and its committees, including its E&A Committee, RC, the ECC as well as the Technology 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. Risk management is the responsibility of each employee, and is implemented through three lines of defense: the business units, which own and manage the risks inherent in their business, are considered the first line of defense; ERM and other support functions, such as Compliance, Finance and Vendor Management, provide the second line of defense; and Corporate Audit, which assesses the effectiveness of the first two lines of defense.

The responsibilities for effective review and challenge reside with senior managers, management oversight committees, Corporate Audit and,

ultimately, the Board and its committees. 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.

Corporate-level risk committees provide focused oversight, and establish corporate standards and policies for specific risks, including credit, sovereign exposure, market, liquidity, operational, information technology as well as new business products, regulatory compliance and ethics, vendor risk and model risks. These committees have been delegated the responsibility to develop recommendations and remediation strategies to address issues that affect or have the potential to affect State Street.

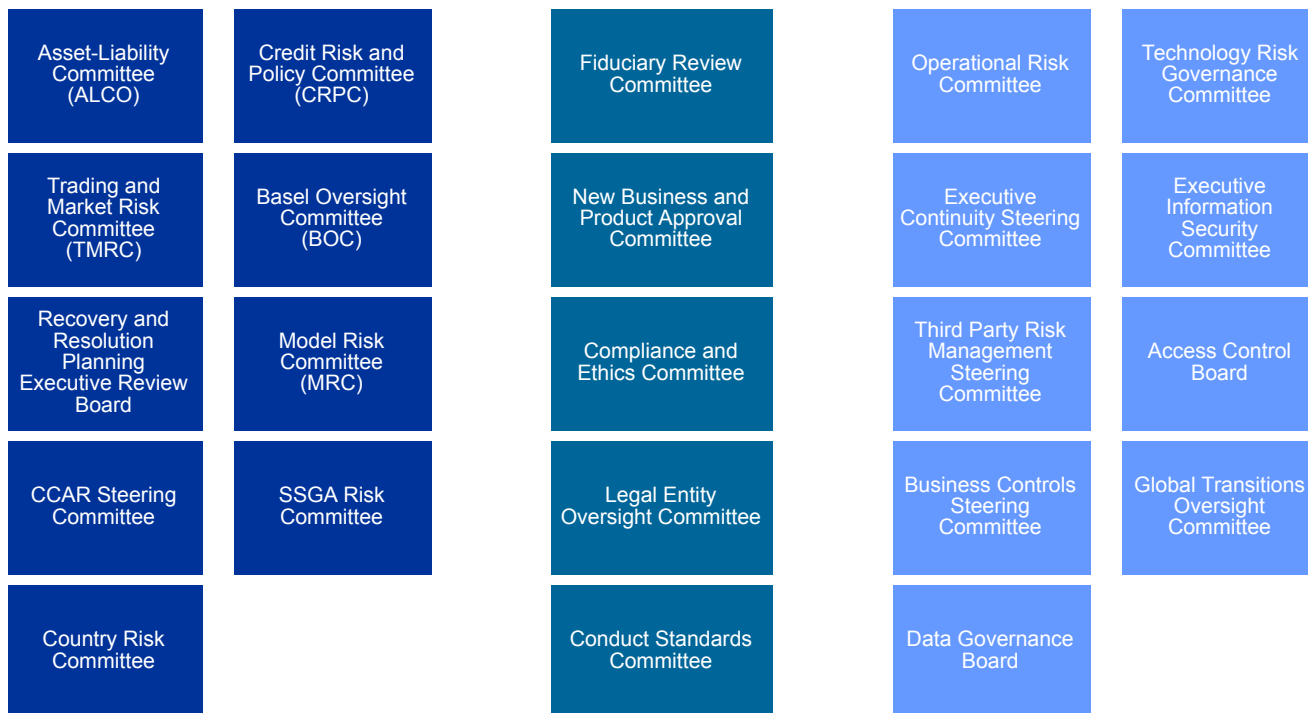
We maintain a risk governance committee structure which serves as the formal governance mechanism through which we seek to undertake the consistent identification, management and mitigation of various risks facing State Street in connection with its business activities. This governance structure is enhanced and integrated through multi-disciplinary involvement, particularly through ERM. The following chart presents this structure.

Management Risk Governance Committee Structure

Executive Management Committees:



Risk Committees:



Enterprise Risk Management

The goal of ERM is to ensure that risks are proactively identified, well-understood and prudently managed in support of our business strategy. ERM provides risk oversight, support and coordination to allow for the consistent identification, measurement and management of risks across business units separate from the business units' activities, and is responsible for the formulation and maintenance of corporate-wide risk management policies and guidelines. In addition, ERM establishes and reviews limits and, in collaboration with business unit management, monitors key risks. Ultimately, ERM works to validate that risk-taking occurs within the risk appetite statement approved by the Board and conforms to associated risk policies, limits and guidelines.

The CRO is responsible for State Street's risk management globally, leads ERM and has a dual reporting line to State Street's CEO and the Board's

RC. ERM manages its responsibilities globally through a three-dimensional organization structure:

- "Vertical" business unit-aligned risk groups that support business managers with risk management, measurement and monitoring activities;
- "Horizontal" risk groups that monitor the risks that cross all of our business units (for example, credit and operational risk); and
- Risk oversight for international activities, which combines intersecting "Verticals" and "Horizontals" through a hub and spoke model to provide important regional and legal entity perspectives to the global risk framework.

Sitting on top of this three-dimensional organization structure is a centralized group responsible for the aggregation of risk exposures across the vertical, horizontal and regional dimensions, for consolidated reporting, for setting the corporate-level risk appetite framework and

associated limits and policies, and for dynamic risk assessment across State Street.

Board Committees

The Board has four committees which assist it in discharging its responsibilities with respect to risk management: the RC, the E&A Committee, the ECC, and the Technology Committee.

The RC is responsible for oversight related to the operation of our global risk management framework, including policies and procedures establishing risk management governance and processes and risk control infrastructure for our global operations. The RC is responsible for reviewing and discussing with management our assessment and management of all risks applicable to our operations, including credit, market, interest rate, liquidity, operational and business risks, as well as compliance and reputational risk and related policies.

In addition, the RC provides oversight on strategic capital governance principles and controls, and monitors capital adequacy in relation to risk. The RC is also responsible for discharging the duties and obligations of the Board under applicable Basel and other regulatory requirements.

The E&A Committee oversees management's operation of our comprehensive system of internal controls covering the integrity of our consolidated financial statements and reports, compliance with laws, regulations and corporate policies. The E&A Committee acts on behalf of the Board in monitoring and overseeing the performance of Corporate Audit and in reviewing certain communications with banking regulators. The E&A Committee has direct responsibility for the appointment, compensation, retention, evaluation and oversight of the work of our independent registered public accounting firm, including sole authority for the establishment of pre-approval policies and procedures for all audit engagements and any non-audit engagements.

The ECC has direct responsibility for the oversight of all compensation plans, policies, and programs of State Street in which executive officers participate and incentive, retirement, welfare as well as equity plans in which certain other employees of State Street participate. In addition, the ECC oversees the alignment of our incentive compensation arrangements with our safety and soundness, including the integration of risk management objectives, and related policies, arrangements and control processes consistent with applicable related regulatory rules and guidance.

The Technology Committee leads and assists in the Board's oversight of the role of technology in executing State Street's strategy and supporting State Street's global business and operational requirements. The Technology Committee reviews

the use of technology in our activities and operations, as well as significant technology and technology-related strategies, investments and policies. In addition, the Technology Committee reviews and approves technology and technology-related risk matters, including information and cyber security.

Executive Management Committees

MRAC is the senior management decision-making body for risk and capital issues, and oversees our financial risks, our consolidated statement of condition, and our capital adequacy, liquidity and recovery and resolution planning. Its responsibilities include:

- The approval of the policies of our global risk, capital and liquidity management frameworks, including our risk appetite framework;
- The monitoring and assessment of our capital adequacy based on internal policies and regulatory requirements;
- The oversight of our firm-wide risk identification, model risk governance, stress testing and Recovery and Resolution Plan programs; and
- The ongoing monitoring and review of risks undertaken within the businesses, and our senior management oversight and approval of risk strategies and tactics.

MRAC, which is co-chaired by our CRO and the CFO, regularly presents a report to the RC outlining developments in the risk environment and performance trends in our key business areas.

BCRC provides additional risk governance and leadership, by overseeing our business practices in terms of our compliance with laws, regulations and our standards of business conduct, our commitments to clients and others with whom we do business, and potential reputational risks. Management considers adherence to high ethical standards to be critical to the success of our business and to our reputation. The BCRC is co-chaired by our CAO and our Chief Legal Officer.

TORC oversees and assesses the effectiveness of corporate-wide technology and operational risk management programs, to manage and control technology and operational risk consistently across the organization. TORC is co-chaired by the Chief Administrative Officer and the Chief Information Officer.

Risk Committees

The following risk committees, under the oversight of the respective executive management committees, have focused responsibilities for oversight of specific areas of risk management:

MRAC

- The Asset Liability Committee (ALCO) is the senior corporate oversight and decision-making body for balance sheet strategy, Global Treasury business activities and risk management for interest rate risk, liquidity risk and non-trading market risk. ALCO's roles and responsibilities are designed to be complementary to, and in coordination with, the Management Risk and Capital Committee (MRAC), which approves the corporate risk appetite and associated balance sheet strategy.
- CRPC has primary responsibility for the oversight and review of credit and counterparty risk across business units, as well as oversight, review and approval of the credit risk policies and guidelines; the Committee consists of senior executives within ERM, and reviews policies and guidelines related to all aspects of our business which give rise to credit risk; our business units are also represented on the CRPC; credit risk policies and guidelines are reviewed periodically, but at least annually;
- TMRC reviews the effectiveness of, and approves, the market risk framework at least annually; it is the senior oversight and decision-making committee for risk management within our global markets businesses; the TMRC is responsible for the formulation of guidelines, strategies and workflows with respect to the measurement, monitoring and control of our trading market risk, and also approves market risk tolerance limits, collateral and margin policies, and trading authorities; the TMRC meets regularly to monitor the management of our trading market risk activities;
- BOC provides oversight and governance over Basel related regulatory requirements, assesses compliance with respect to Basel regulations and approves all material methodologies and changes, policies and reporting;
- The Recovery and Resolution Planning Executive Review Board oversees the development of recovery and resolution plans as required by banking regulators;
- MRC monitors the overall level of model risk and provides oversight of the model governance process pertaining to financial models, including the validation of key models and the ongoing monitoring of model performance. The MRC may also, as appropriate, mandate remedial actions and

compensating controls to be applied to models to address modeling deficiencies as well as other issues identified;

- The CCAR Steering Committee provides primary supervision of the stress tests performed in conformity with the Federal Reserve's CCAR process and the Dodd-Frank Act, and is responsible for the overall management, review, and approval of all material assumptions, methodologies, and results of each stress scenario;
- The SSGA Risk Committee is the most senior oversight and decision making committee for risk management within SSGA; the committee is responsible for overseeing the alignment of SSGA's strategy, and risk appetite, as well as alignment with State Street corporate-wide strategies and risk management standards; and
- The Country Risk Committee oversees the identification, assessment, monitoring, reporting and mitigation, where necessary, of country risks.

BCRC

- The Fiduciary Review Committee reviews and assesses the fiduciary risk management programs of those units in which we serve in a fiduciary capacity;
- The New Business and Product Approval Committee provides oversight of the evaluation of the risk inherent in proposed new products or services and new business, and extensions of existing products or services, evaluations including economic justification, material risk, compliance, regulatory and legal considerations, and capital and liquidity analyses;
- The Compliance and Ethics Committee provides review and oversight of our compliance programs, including its culture of compliance and high standards of ethical behavior; and
- The Legal Entity Oversight Committee establishes standards with respect to the governance of State Street legal entities, monitors adherence to those standards, and oversees the ongoing evaluation of our legal entity structure, including the formation, maintenance and dissolution of legal entities.
- The Conduct Standards Committee provides oversight of our enforcement of employee conduct standards.

TORC

- The Technology Risk Governance Committee provides regular reporting to TORC and escalates technology risk issues to TORC, as appropriate;
- The Executive Continuity Steering Committee reviews overall business continuity program performance, provides for executive accountability for compliance with the business continuity program and standards, and reviews and approves major changes or exceptions to program policy and standards;
- The Executive Information Security Committee is responsible for managing the Enterprise Information Security posture and program, including cyber security protections, provides enterprise-wide oversight of the Information Security Program to provide that controls are measured and managed, and serves as an escalation point for issues identified during the execution of information technology activities and risk mitigation;
- The Third Party Risk Management Steering Committee provides oversight over the vendor management program, approves policies, and serves as an escalation path for program compliance exceptions;
- The Access Control Board establishes and provides appropriate governance and controls over our access control security framework;
- The Operational Risk Committee, along with the support of regional business or entity-specific working groups and committees, is responsible for oversight of our operational risk programs, including determining that the implementation of those programs is designed to identify, manage, and control operational risk in an effective and consistent manner across the firm;
- The Business Controls Steering Committee is responsible for overseeing and monitoring the execution and ongoing monitoring of our program of enhanced business controls practices across the organization;
- The Global Transitions Oversight Committee is responsible for establishing a framework to monitor and oversee transitions between and among State Street legal entities against State Street resolvability principles, to monitor compliance with that framework to support optimization of State Street's global operating footprint through increased consistency, transparency and sharing of best practices among State Street legal entities, and to serve as a forum for review

and discussion of issues impacting internal transitions among State Street legal entities; and

- The Data Governance Board is responsible for overseeing State Street's data governance vision, strategies and priorities and ensuring alignment of data governance policies and practices with corporate strategy and with State Street's obligations to comply with data-related regulations.

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 new source of risk. In large banking organizations like State Street, model results influence business decisions, and model failure could have a harmful effect on our financial performance. As a result, the Model Risk Management Framework seeks to mitigate model risk at State Street.

Our model risk management 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 design objectives.

Governance

Models used in the regulatory capital calculation can only be deployed for use after undergoing a model validation by ERM's Model Risk Management and receiving the result on the validation that allows for use.

The Model Risk Management group is responsible for defining the corporate-wide model risk governance framework, and maintains policies that achieve the framework's objectives. 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.

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

Model Development and Usage

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 for validation on a regular basis, as per existing policy.

Model Validation

MVG is part of Model Risk Management within ERM and performs model validations. MVG is independent, as contemplated by applicable bank regulatory requirements, of both the developers and users of the models. MVG validates models through a review process that assesses the appropriateness, accuracy, and suitability of data inputs, methodologies, 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 compensating controls on model use. 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 model validation and issues a model use decision that may be accompanied by mandatory remedial actions and compensating controls. Second, these decisions may be reviewed, challenged, and confirmed by the MRC. Finally, model use decisions, risk ratings, and overall levels of model risk are reported to and reviewed by State Street Corporation

MRAC. MRM 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 non-trading 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 principal securities lending and foreign exchange 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.

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 acceptance of credit risk by State Street is governed by corporate policies and guidelines, which 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 extensions of credit, or material 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, a sub-committee of the CRPC. 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 comprehensive 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 annual review as an integral part of our periodic assessment of our risk appetite.

Our corporate policies and guidelines require that the business units which engage in activities that give rise to credit and counterparty risk comply with procedures that promote the extension of credit for legitimate business purposes; are consistent with the maintenance of proper credit standards; limit credit-related losses; and are consistent with our goal of maintaining a strong financial condition.

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 its various business activities, both at the portfolio level and for each individual counterparty or group of counterparties, to individual industries, and also to counterparties by State Street Corporation

product and country of risk. These measurements and limits are reviewed periodically, but at least annually.

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 CRPC (refer to "Risk Committees") has primary responsibility for the oversight, review and approval of the credit risk guidelines and policies. Credit risk guidelines and policies are reviewed periodically, but at least annually.

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

CRPC 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 generally 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 by the CRPC, after completion of internal model validation processes, and are subject to an annual review, including re-validation.

We generally rate our counterparties individually, although a small number of 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 the determination of appropriate credit risk classifications for our credit counterparties and exposures, tracking the changes in risk associated with these counterparties and exposures over time. This capability enhances our ability to more accurately calculate both risk exposures and capital, enabling better strategic decision making across the organization.

We use credit risk parameter estimates for the following purposes:

- The assessment of the creditworthiness of new 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, based on the counterparty's probability-of-default, or PD, rating class;
- The development of approval authority matrices based on PD; riskier counterparties with higher ratings require higher levels of approval for a comparable PD and limit size compared to less risky counterparties with lower ratings;
- The analysis of risk concentration trends using historical PD and exposure-at-default, or EAD, data;
- The standardization of rating integrity testing by GCR using rating parameters;
- The determination of the level of management review of short-duration advances depending on PD; riskier counterparties with higher rating class values generally trigger higher levels of management escalation for comparable short-duration advances compared to less risky counterparties with lower rating-class values;
- The monitoring of credit facility utilization levels using EAD values and the identification of instances where counterparties have exceeded limits;

- 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

We seek to limit our credit exposure and reduce our potential credit losses through various types of risk mitigation. In our day-to-day management of credit risks, we utilize and recognize the following types of risk mitigation.

Collateral

In many parts of our business, we regularly require or agree for collateral to be received from or provided to clients and counterparties in connection with contracts that incur credit risk. In our trading businesses, this collateral is typically in the form of cash and highly-rated securities (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 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 or result in other security interests not being effective to reduce potential credit exposure. 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 standards. 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 can be liquidated 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 to assess whether our documentation meets these standards on an ongoing basis.

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 the netting of rights and obligations arising under derivative or other transactions that have been entered into under such an agreement upon the counterparty's default, resulting 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 that we have verified legal validity and enforceability of the master agreement. In the case of payment netting, operational constraints with our counterparties may preclude us from reducing settlement risk, notwithstanding the legal right to require the same under the master netting agreement.

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. Typical forms of guarantees provided to State Street include financial guarantees, letters of credit, bankers' acceptances, PUA contracts and insurance.

ERM and Legal teams have established a review process to evaluate guarantees under the applicable requirements of State Street policies and Basel III requirements. Governance for this evaluation

is covered under policies and procedures that require regular reviews of documentation, jurisdictions, and credit quality of protection providers.

Pursuant to the Basel III final rule, we are permitted to reflect the application of credit risk mitigation which may include, for example, guarantees, collateral, netting, secured interests in non-financial assets and credit default swaps. State Street does not actively use credit default swaps as a risk mitigation tool, although it increasingly applies the recognition of guarantees, collateral and security over non-financial assets to mitigate overall risk within its counterparty credit portfolio.

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 actual 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 is 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. For certain types of risk being assumed, we will also assess and measure exposures under a variety of hypothetical market conditions. Credit limit approvals across State Street are undertaken by the Credit Risk group, by individuals to whom credit authority has been delegated, or by the Credit Committee.

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.

Reporting

Ongoing active monitoring and management of our credit risk is an integral part of our credit risk management framework. We maintain management information systems to identify, measure, monitor and

report credit risk across businesses and legal entities, enabling ERM and our businesses to have timely access to accurate information on credit limits and exposures. Monitoring is performed along the dimensions of counterparty, industry, country and product-specific risks to facilitate the identification of concentrations of risk and emerging trends.

Key aspects of this credit risk reporting structure include governance and oversight groups, policies that define standards for the reporting of credit risk, data aggregation and sourcing systems, and separate testing of relevant risk reporting functions by Corporate Audit.

The Credit Portfolio Management group routinely assesses the composition of our overall credit risk portfolio for alignment with our stated risk appetite. This assessment includes routine analysis and reporting of the portfolio, monitoring of market-based indicators, the assessment of industry trends and developments, and regular reviews of concentrated risks. The Credit Portfolio Management group is also responsible, in conjunction with the business units, for defining the appetite for credit risk in the major sectors in which we have a concentration of business activities. These sector-level risk appetite statements, which include counterparty selection criteria and granular underwriting guidelines, are reviewed periodically and approved by the CRPC.

Monitoring

Regular surveillance of credit and counterparty risks is undertaken by our business units, the Credit Risk group and designees with ERM, allowing for frequent and extensive oversight. This surveillance process includes, but is not limited to, the following components:

- **Annual Reviews.** A formal review of counterparties is conducted at least annually and includes a thorough review of operating performance, primary risk factors and our internal credit risk rating. This annual review also includes a review of current and proposed credit limits, an assessment of our ongoing risk appetite and verification that supporting legal documentation remains effective.
- **Interim Monitoring.** Periodic monitoring of our largest and riskiest counterparties is undertaken more frequently, utilizing financial information, market indicators and other relevant credit and performance measures. The nature and extent of this interim monitoring is individually tailored to certain counterparties and/or industry sectors to identify material changes to the risk profile of a counterparty (or group of

counterparties) and assign an updated internal risk rating in a timely manner.

We maintain an active "watch list" for all counterparties where we have identified a concern that the actual or potential risk of default has increased. The watch list status denotes a concern with some aspect of a counterparty's risk profile that warrants closer monitoring of the counterparty's financial performance and related risk factors. Our ongoing monitoring processes are designed to facilitate the early identification of counterparties whose creditworthiness is deteriorating; any counterparty may be placed on the watch list by ERM at its sole discretion.

Counterparties that receive an internal risk rating within a certain range on our rating scale are eligible for watch list designation. These risk ratings generally correspond with the non-investment grade or near non-investment grade ratings established by the major independent credit-rating agencies, and also include the regulatory classifications of "Special Mention," "Substandard," "Doubtful" and "Loss." Counterparties whose internal ratings are outside this range may also be placed on the watch list.

The Credit Risk group maintains primary responsibility for our watch list processes, and generates a monthly report of all watch list counterparties. The watch list is formally reviewed at least on a quarterly basis, with participation from senior ERM staff, and representatives from the business units and our corporate finance and legal groups as appropriate. These meetings include a review of individual watch list counterparties, together with credit limits and prevailing exposures, and are focused on actions to contain, reduce or eliminate the risk of loss to State Street. Identified actions are documented and monitored.

Controls

GCR provides a separate level of surveillance and oversight over the integrity of our credit risk management processes, including the internal risk-rating system. GCR reviews counterparty credit ratings for all identified sectors on an ongoing basis. GCR is subject to oversight by the CRPC, and provides periodic updates to the Board's RC.

Specific activities of GCR include the following:

- Separate and objective assessments of our credit and counterparty exposures to determine the nature and extent of risk undertaken by the business units;
- Periodic credit process and credit product reviews, focusing on and assessing credit analysis, policy compliance, prudent transaction structure and underwriting

standards, administration and documentation, risk-rating integrity, and relevant trends;

- Identification and monitoring of developing counterparty, market and/or industry sector trends to limit risk of loss and protect capital;
- Regular and formal reporting of reviews, including findings and requisite actions to remedy identified deficiencies;
- Allocation of resources for specialized risk assessments (on an as-needed basis);
- Assessment of the level of the allowance for loan and lease losses and OTTI; and
- Liaison with auditors and regulatory personnel on matters relating to risk rating, reporting, and measurement.

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 business, we measure our credit risk exposures using a VaR model which has been reviewed and approved by our primary regulator.

The AIRB approach consists of three main building blocks:

- **PD.** We define 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 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 EAD as our estimate of our exposure to a counterparty upon a default by that counterparty, with a one-year time horizon under economic downturn conditions, expressed in dollars. 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.

Typically, we have credit exposure to large financial or government entities that have high creditworthiness and low historical default rates.

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 60 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, such as counterparty creditworthiness and an estimate of 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 which 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, such as our assessment of the counterparty's risk management systems, warning signals and group logic. 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 the results are accurate. 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 are 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, ratings of major independent credit rating agencies are sufficiently accurate and dynamic, and reflect the changing risk profiles and characteristics to be used for modeling purposes;
- Data used in model development allow for the estimate of PDs for these counterparties in the future as well as new counterparties; 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 groups to rate the credit quality of our counterparties, as delineated below:

- Banks;
- Broker/dealers;
- General corporations;
- Insurance companies;
- Senior secured bank loans, or leveraged loans;
- Sovereigns;
- Municipalities, including general government (U.S. and non-U.S.); essential services; airports; housing; transportation; and higher education (public and private); and
- Collective investment funds, including regulated funds, non-U.S. regulated funds, hedge funds, unregulated and lightly regulated funds, unregulated investment vehicles and trusts, charities, foundations, endowments, and pension 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 Agency Rating
Pass	1	1	—	1.7	AAA to AA+
	2	3	1.7	3.9	AA to AA-
	3	5	3.9	7	A+ to A
	4	10	7	14	A-
	5	20	14	28	BBB+ to BBB
	6	40	28	57	BBB-
	7	80	57	113	BB+ to BB
	8	160	113	219	BB-
	9	300	219	387	B+
	10	500	387	707	B
Special Mention	11	1,000	707	1,414	B-
	12	2,000	1,414	3,162	CCC+ to CCC
Substandard	13	5,000	3,162	7,071	CCC- to C
Doubtful	14	10,000	7,071	—	D
Loss	15	10,000	—	—	D

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 accurate. 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 sufficiently accurate LGD estimates; and
- Recovery amount calculations include a 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 which

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 current-exposure method to calculate the EAD for OTC derivative contracts; a VaR methodology for repo-style transactions composed of our indemnified agency securities lending; and the collateral haircut approach, using supervisory haircuts, for repo-style transactions composed of reverse repurchase and repurchase agreements initiated by our Global Treasury group as well as our principal securities lending and borrowing activities.

The calculation of RWA for our equity exposures consists of two methodologies: for exposures to investment funds, we use look-through approaches; for all other equity exposures, we use the SRWA. Under the SRWA, prescribed risk weights are applied to the carrying value of the exposure. Where applicable, we include undrawn commitments, and their respective credit conversion factors, or CCFs, and interest accruals together with the outstanding balance to calculate EAD.

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.

Undrawn Commitments

A CCF is designed to capture the exposure implicit in these commitments, and represents the percentage of the undrawn portion of a facility to which 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 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 beginning with the third quarter of 2014 by applying a CCF of 100% for all undrawn commitments for the purposes of State Street's regulatory capital calculation.

Committed Revolving Credit Facilities

For such facilities, business specialists evaluate the terms of the agreements, as well as the need for and use of facilities across different counterparties, to assess the extent to which facilities would be utilized in a default event.

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 loss 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, whether it is a U.S. or a non-U.S. security, and 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 Enhanced Custody business using the collateral haircut approach as described by the Basel III final rule.

Impairment Analysis and Allowance for Loan and Lease Losses

Our credit portfolio, and the risk profile of our counterparties, is generally of high quality, such that ordinarily, the number of counterparties on our watch list is small and our impaired loans are not significant to our consolidated financial statements. The processes we use to consider potential and actual impairment, together with those we use to assess the appropriate level of our ALLL, are outlined in this section.

Non-Accrual Loans

We generally place loans on non-accrual status when they become 60 days past due as to either principal or interest, or earlier when full collection of principal or interest is not considered probable.

Loans 60 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. We define past-due loans as those loans where contractually agreed payments of principal and/or interest remain unpaid by the borrower, but for which interest continues to be accrued.

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

Impaired Loans

Impaired loans are loans specifically identified by the Credit Risk group, in conjunction with Corporate Finance and the business units, where there is objective evidence of impairment as a result of a loss event with a counterparty, where the loss event has an impact on the estimated future cash flows from the counterparty, and when a reliable estimate of the potential loss to State Street can be determined. Where there is evidence of impairment, the impairment loss is generally calculated on the basis of discounted expected future cash flows using the original effective interest rate of the loan.

We reduce the carrying amount of an impaired loan by the level of the impairment and recognize the loss to State Street as a provision for loan losses in our consolidated statement of income. Specific loan impairment allowances are assessed for all individual loans where a risk of loss is identified. We also assess the potential for losses on loans not yet identified as being impaired.

Allowance for Loan and Lease Losses

The ALLL is recorded as a reduction of loans and leases in our consolidated statement of condition, and represents management's estimate of incurred credit losses in our loan-and-lease portfolio as of the date of our consolidated statement of condition. The ALLL is evaluated on a regular basis by management. Factors considered in evaluating the appropriate level of the ALLL for our loan-and-lease portfolio include:

- Loss experience;
- The PD reflected in our internal risk rating of the counterparty's creditworthiness;
- Current economic conditions and adverse situations that may affect the borrower's ability to repay;

- The estimated value of the underlying collateral, if any;
- The performance of individual counterparties in relation to contract terms; and
- Other relevant factors.

Provisions for loan losses, recorded in our consolidated statement of income, reflect our estimate of the amount necessary to maintain the ALLL at a level considered by us to be appropriate to absorb estimated incurred credit losses in the loan-and-lease portfolio.

Loans are charged off to the ALLL in the reporting period in which either an event occurs that confirms the existence of a loss on a loan or a portion of a loan is determined to be uncollectible. In addition, any impaired loan that is determined to be collateral-dependent is reduced to an amount equal to the fair value of the collateral less costs to sell. A loan is identified as collateral-dependent when management determines that it is probable that the underlying collateral will be the sole source of repayment. Recoveries are recorded on a cash basis as adjustments to the ALLL.

The reserve for off-balance sheet credit exposures, recorded in accrued expenses and other liabilities in our consolidated statement of condition, represents management's estimate of probable credit losses in outstanding letters and lines of credit and other credit-enhancement facilities provided to our clients and outstanding 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 loan losses. Provisions to maintain the reserve at a level considered by us to be appropriate to absorb estimated incurred credit losses in outstanding facilities are recorded in other expenses in our consolidated statement of income.

As of December 31, 2017, no institutional loans or leases and No CRE loans were modified in troubled debt restructurings. As of December 31, 2017, there are no commercial and financial loans on non-accrual status, no CRE loans or leases were on non-accrual status, and no loans or leases were 60 days or more contractually past due. Our reserve for off-balance sheet credit exposures totaled approximately \$18 million as of December 31, 2017.

The following table presents our allowance for loan and lease losses as of December 31, 2017 and December 31, 2016:

TABLE 8: ALLOWANCE FOR LOAN AND LEASE LOSSES

	Twelve Months Ended December 31,	
	2017	2016
(In millions)		
Beginning balance	\$ 53	\$ 46
Provision for loan losses ⁽¹⁾	2	10
Charge-offs ⁽²⁾	(1)	(3)
Recoveries	—	—
Ending balance	<u>\$ 54</u>	<u>\$ 53</u>

⁽¹⁾ Includes \$2 million and \$10 million of provision related to institutional loans for the twelve months ended December 31, 2017 and 2016, respectively.

⁽²⁾ Includes \$1 million in charge-offs related to institutional loans for the year ended December 31, 2017.

The following tables present the EAD of our wholesale credit risk exposures by type as of the dates indicated, and the average EAD for the periods indicated:

TABLE 9: WHOLESALE CREDIT RISK EXPOSURE AT DEFAULT

(In millions)	December 31, 2017		Quarter Ended December 31, 2017	
	EAD		Average EAD ⁽¹⁾	
Wholesale credit risk exposures⁽²⁾				
Cash and due from, and interest-bearing deposits with, banks ⁽³⁾	\$	84,479	\$	81,845
Investment securities - wholesale		74,143		69,806
Loans and leases ⁽⁴⁾		50,964		51,750
OTC derivative contracts ⁽⁵⁾		16,671		16,364
Repo-style transactions ⁽⁶⁾		11,137		11,252
Other wholesale		4,495		4,712
Total	\$	241,889	\$	235,729

(In millions)	September 30, 2017		Quarter Ended September 30, 2017	
	EAD		Average EAD ⁽¹⁾	
Wholesale credit risk exposures⁽²⁾				
Cash and due from, and interest-bearing deposits with, banks ⁽³⁾	\$	80,791	\$	80,793
Investment securities - wholesale		67,367		67,345
Loans and leases ⁽⁴⁾		51,900		51,524
OTC derivative contracts ⁽⁵⁾		15,068		16,664
Repo-style transactions ⁽⁶⁾		11,490		11,175
Other wholesale		5,004		4,910
Total	\$	231,620	\$	232,411

⁽¹⁾ Amounts each represent the average of the three month-end EAD amounts in the quarter.

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

⁽³⁾ Amounts predominantly consist of deposits with banks and central banks.

⁽⁴⁾ Amounts include unused commitments and financial standby letters of credit.

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

⁽⁶⁾ Amounts include the aggregate of indemnified agency securities lending and enhanced custody and reverse repurchase and repurchase agreements; exposure reflects the benefit of collateral and netting permitted by GAAP and the Basel III final rule, as applicable.

The following tables present the EAD of our wholesale credit risk exposures by major geographic region as of the dates indicated:

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

December 31, 2017

(In millions)	EAD	Americas	Europe	Asia/ Pacific	Other ⁽⁶⁾
Wholesale credit risk exposures⁽¹⁾					
Cash and due from, and interest-bearing deposits with, banks ⁽²⁾	\$ 84,479	\$ 29,136	\$ 39,473	\$ 15,799	\$ 71
Investment securities - wholesale	74,143	59,776	9,643	4,724	—
Loans and leases ⁽³⁾	50,964	45,983	4,885	51	45
OTC derivative contracts ⁽⁴⁾	16,671	6,718	7,342	2,542	69
Repo-style transactions ⁽⁵⁾	11,137	9,097	1,031	573	436
Other wholesale	4,495	3,717	664	101	13
Total	\$ 241,889	\$ 154,427	\$ 63,038	\$ 23,790	\$ 634

September 30, 2017

(In millions)	EAD	Americas	Europe	Asia/ Pacific	Other ⁽⁶⁾
Wholesale credit risk exposures⁽¹⁾					
Cash and due from, and interest-bearing deposits with, banks ⁽²⁾	\$ 80,791	\$ 22,788	\$ 41,570	\$ 16,379	\$ 54
Investment securities - wholesale	67,367	58,475	4,580	4,312	—
Loans and leases ⁽³⁾	51,900	46,254	5,515	130	1
OTC derivative contracts ⁽⁴⁾	15,068	5,790	6,667	2,529	82
Repo-style transactions ⁽⁵⁾	11,490	9,269	1,161	659	401
Other wholesale	5,004	4,070	792	119	23
Total	\$ 231,620	\$ 146,646	\$ 60,285	\$ 24,128	\$ 561

⁽¹⁾ Amounts exclude securitizations, equity exposures, assets not in a defined exposure category and exposures classified as "not material."

⁽²⁾ Amounts predominantly consist of deposits with banks and central banks.

⁽³⁾ Amounts include unused commitments and financial standby letters of credit.

⁽⁴⁾ Amounts reflect the benefit of netting permitted by GAAP and Basel III final rule as applicable.

⁽⁵⁾ Amounts include the aggregate of indemnified agency securities lending and enhanced custody and reverse repurchase and repurchase agreements; exposure reflects the benefit of collateral and netting permitted by GAAP and the Basel III final rule, as applicable.

⁽⁶⁾ "Other" geographic region represents our exposures primarily in Africa and the Middle East.

The following tables present the EAD of our wholesale credit risk exposures by counterparty type as of the dates indicated:

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

December 31, 2017

(In millions)	EAD	Governments, central banks and supra- nationals ⁽⁶⁾	Commercial Banks	Broker/ Dealers	Funds	Other ⁽⁷⁾
Wholesale credit risk exposures⁽¹⁾						
Cash and due from, and interest-bearing deposits with, banks ⁽²⁾	\$ 84,479	\$ 76,292	\$ 8,066	\$ 8	\$ 52	\$ 61
Investment securities - wholesale	74,143	65,285	5,620	—	32	3,206
Loans and leases ⁽³⁾	50,964	9,632	251	301	33,229	7,551
OTC derivative contracts ⁽⁴⁾	16,671	1,430	6,361	614	8,071	195
Repo-style transactions ⁽⁵⁾	11,137	854	786	2,368	6,642	487
Other wholesale	4,495	495	202	227	266	3,305
Total	\$ 241,889	\$ 153,988	\$ 21,286	\$ 3,518	\$ 48,292	\$ 14,805

September 30, 2017

(In millions)	EAD	Governments, central banks and supra- nationals ⁽⁶⁾	Commercial Banks	Broker/ Dealers	Funds	Other ⁽⁷⁾
Wholesale credit risk exposures⁽¹⁾						
Cash and due from, and interest-bearing deposits with, banks ⁽²⁾	\$ 80,791	\$ 69,301	\$ 11,319	\$ 29	\$ 44	\$ 98
Investment securities - wholesale	67,367	57,259	5,352	209	—	4,547
Loans and leases ⁽³⁾	51,900	9,731	190	300	33,515	8,164
OTC derivative contracts ⁽⁴⁾	15,068	1,196	3,982	448	9,122	320
Repo-style transactions ⁽⁵⁾	11,490	890	1,228	2,296	6,890	186
Other wholesale	5,004	591	165	196	677	3,375
Total	\$ 231,620	\$ 138,968	\$ 22,236	\$ 3,478	\$ 50,248	\$ 16,690

⁽¹⁾ Amounts exclude securitizations, equity exposures, assets not in a defined exposure category and exposures classified as "not material."

⁽²⁾ Amounts predominantly consist of deposits with banks and central banks.

⁽³⁾ Amounts include unused commitments and financial standby letters of credit.

⁽⁴⁾ Amounts reflect the benefit of netting permitted by GAAP and the Basel III final rule, as applicable.

⁽⁵⁾ Amounts include the aggregate of indemnified agency securities lending and enhanced custody and reverse repurchase and repurchase agreements; exposure reflects the benefit of collateral and netting permitted by GAAP and the Basel III final rule, as applicable.

⁽⁶⁾ Amounts include municipalities, government agencies and multi-lateral development banks.

⁽⁷⁾ "Other" counterparty type category represents our exposures primarily to corporates and insurance companies.

The following tables present the EAD of our wholesale credit risk exposures by remaining contractual maturity as of the dates indicated:

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

December 31, 2017

(In millions)	<u>EAD</u>	<u>< = 1 year</u>	<u>1 - 3 years</u>	<u>> 3 years⁽⁶⁾</u>
Wholesale credit risk exposures⁽¹⁾				
Cash and due from, and interest-bearing deposits with, banks ⁽²⁾	\$ 84,479	\$ 84,479	\$ —	\$ —
Investment securities - wholesale	74,143	6,569	14,277	53,297
Loans and leases ⁽³⁾	50,964	31,706	10,459	8,799
OTC derivative contracts ⁽⁴⁾	16,671	16,568	64	39
Repo-style transactions ⁽⁵⁾	11,137	11,137	—	—
Other wholesale	4,495	4,443	52	—
Total	\$ 241,889	\$ 154,902	\$ 24,852	\$ 62,135

September 30, 2017

(In millions)	<u>EAD</u>	<u>< = 1 year</u>	<u>1 - 3 years</u>	<u>> 3 years⁽⁶⁾</u>
Wholesale credit risk exposures⁽¹⁾				
Cash and due from, and interest-bearing deposits with, banks ⁽²⁾	\$ 80,791	\$ 80,791	\$ —	\$ —
Investment securities - wholesale	67,367	8,149	13,585	45,633
Loans and leases ⁽³⁾	51,900	31,683	10,783	9,434
OTC derivative contracts ⁽⁴⁾	15,068	14,856	173	39
Repo-style transactions ⁽⁵⁾	11,490	11,490	—	—
Other wholesale	5,004	4,969	35	—
Total	\$ 231,620	\$ 151,938	\$ 24,576	\$ 55,106

⁽¹⁾ Amounts exclude securitizations, equity exposures, assets not in a defined exposure category and exposures classified as "not material."

⁽²⁾ Amounts predominantly consist of deposits with banks and central banks.

⁽³⁾ Amounts include unused commitments and financial standby letters of credit.

⁽⁴⁾ Amounts reflect the benefit of netting permitted by GAAP and the Basel III final rule, as applicable.

⁽⁵⁾ Amounts include the aggregate of indemnified agency securities lending and enhanced custody and reverse repurchase and repurchase agreements; exposure reflects the benefit of collateral and netting permitted by GAAP and the Basel III final rule, as applicable.

⁽⁶⁾ 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.

The following tables present EAD and related information associated with our wholesale credit risk exposures, by range of PD, as of the dates or for the periods indicated:

TABLE 13: WHOLESALE CREDIT RISK EXPOSURE - PROBABILITY OF DEFAULT

December 31, 2017

(Dollars in millions, except where otherwise noted)

PD range	EAD ⁽¹⁾⁽²⁾	Weighted-Average LGD	Weighted-Average PD	Weighted-Average Risk Weight	Unfunded Commitments ⁽³⁾	Average EAD (in thousands)
0.00 to < 0.03% ⁽⁴⁾	\$ 84,970	23.41%	0.01%	1.06%	\$ —	\$ 92,558
0.03 to < 0.10%	118,913	35.23	0.04	9.84	19,902	516
0.10 to < 0.15%	12,096	40.20	0.11	25.12	2,548	389
0.15 to < 0.20%	4,005	32.41	0.17	24.94	1,119	405
0.20 to < 1.00%	17,655	39.52	0.38	47.40	4,759	411
1.00 to < 5.00%	4,146	36.61	2.07	112.96	304	1,153
5.00 to < 10.00%	36	51.27	5.00	205.18	—	1,386
10.00 to < 20.00%	35	66.62	10.00	308.62	—	750
20.00 to < 100%	33	50.78	22.89	253.93	—	4,728
100%	—	86.00	100.00	100.00	—	1
Total	\$ 241,889				\$ 28,632	

September 30, 2017

(Dollars in millions, except where otherwise noted)

PD range	EAD ⁽¹⁾⁽²⁾	Weighted-Average LGD	Weighted-Average PD	Weighted-Average Risk Weight	Unfunded Commitments ⁽³⁾	Average EAD (in thousands)
0.00 to < 0.03% ⁽⁴⁾	\$ 78,202	24.91%	0.02%	1.20%	\$ —	\$ 65,994
0.03 to < 0.10%	115,298	36.65	0.04	8.33	21,041	493
0.10 to < 0.15%	12,007	46.91	0.11	29.41	1,912	387
0.15 to < 0.20%	4,092	35.93	0.17	27.19	901	647
0.20 to < 1.00%	17,295	42.68	0.37	51.30	4,833	391
1.00 to < 5.00%	4,591	34.71	2.06	106.80	359	602
5.00 to < 10.00%	86	36.44	5.00	137.61	—	1,840
10.00 to < 20.00%	34	47.46	10.00	186.45	—	647
20.00 to < 100%	6	80.28	40.19	406.23	—	893
100%	9	78.81	100.00	100.00	—	29
Total	\$ 231,620				\$ 29,046	

⁽¹⁾ 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.

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

⁽³⁾ Unfunded commitments represent contractual unfunded amount prior to credit conversion.

⁽⁴⁾ Amounts include sovereign exposures and exposures to, or directly and unconditionally guaranteed by, the Bank for International Settlements, the International Monetary Fund, the European Commission, the European Central Bank and multilateral development banks.

The following tables present information with respect to the EAD of our credit risk exposures that meet the definition of OTC derivative contracts as of the dates indicated:

TABLE 14: OVER-THE-COUNTER DERIVATIVE CONTRACTS⁽¹⁾⁽²⁾

December 31, 2017

(in millions)	Gross Positive Fair Value	Potential Future Exposure	Netting Benefit	Net Positive Fair Value	EAD
Foreign exchange contracts	\$ 11,440	\$ 16,620	\$ 10,864	\$ 6,035	\$ 16,629
Other contracts ⁽³⁾⁽⁴⁾⁽⁵⁾	34	20	12	34	42
Total	\$ 11,474	\$ 16,640	\$ 10,876	\$ 6,069	\$ 16,671

September 30, 2017

(in millions)	Gross Positive Fair Value	Potential Future Exposure	Netting Benefit	Net Positive Fair Value	EAD
Foreign exchange contracts	\$ 11,543	\$ 15,852	\$ 12,277	\$ 5,291	\$ 14,898
Other contracts ⁽³⁾⁽⁴⁾⁽⁵⁾	157	22	8	156	170
Total	\$ 11,700	\$ 15,874	\$ 12,285	\$ 5,447	\$ 15,068

⁽¹⁾ Exposure is calculated using the current exposure method.

⁽²⁾ Amounts exclude contracts treated as securitizations; refer to "Securitizations" in this Disclosure.

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

⁽⁴⁾ EAD and RWA for "Other contracts" include the benefit of collateral, which predominantly consists of cash and government securities.

⁽⁵⁾ "Other contracts" may reflect a 0.71 scaling factor, which represents a five-day holding period, as outlined in the Basel III final rule.

The following tables present information with respect to our exposures treated as repo-style transactions, by type of exposure and treatment methodology as of the dates 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 enhanced custody business, which is State Street's principal securities finance for our custody clients:

TABLE 15: REVERSE REPURCHASE AND REPURCHASE AGREEMENTS

December 31, 2017

(In millions)	Gross Exposure ⁽¹⁾	Collateral ⁽²⁾	Net EAD ⁽³⁾
Agreements centrally cleared	\$ 80,509	\$ 79,684	\$ 907
Agreements not centrally cleared	6,967	6,942	262
Total	\$ 87,476	\$ 86,626	\$ 1,169

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(In millions)	Gross Exposure ⁽¹⁾	Collateral ⁽²⁾	Net EAD ⁽³⁾
Agreements centrally cleared	\$ 66,140	\$ 65,508	\$ 666
Agreements not centrally cleared	4,151	4,104	190
Total	\$ 70,291	\$ 69,612	\$ 856

⁽¹⁾ Gross exposure does not reflect the benefits of legally enforceable netting agreements and collateral. 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 gross exposure includes State Street's exposure on both sides.

⁽²⁾ 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.

⁽³⁾ 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 ENHANCED CUSTODY**December 31, 2017**

(In millions)	Base EAD ⁽²⁾	Netting Benefit ⁽³⁾	Net EAD ⁽⁸⁾
Indemnified Agency Lending⁽¹⁾	\$ 3,423	\$ 2,555	\$ 867

(In millions)	Gross Exposure ⁽⁵⁾	Collateral ⁽⁶⁾	Net EAD ⁽⁷⁾⁽⁸⁾
Enhanced Custody⁽⁴⁾	\$ 88,342	\$ 94,131	\$ 9,100

September 30, 2017

(In millions)	Base EAD ⁽²⁾	Netting Benefit ⁽³⁾	Net EAD ⁽⁸⁾
Indemnified Agency Lending⁽¹⁾	\$ 4,328	\$ 3,382	\$ 946

(In millions)	Gross Exposure ⁽⁵⁾	Collateral ⁽⁶⁾	Net EAD ⁽⁷⁾⁽⁸⁾
Enhanced Custody⁽⁴⁾	\$ 95,131	\$ 100,943	\$ 9,688

⁽¹⁾ EAD is calculated by applying a VaR methodology.

⁽²⁾ Base EAD represents the net exposure of repurchase and securities lending or borrowing agreements at a client or counterparty level under a single agreement.

⁽³⁾ 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. The netting benefit for enhanced custody represents the benefit of netting, as applicable, of repurchase and securities lending or securities borrowing exposures to a particular counterparty under a qualifying master netting agreement.

⁽⁴⁾ EAD is calculated by applying the collateral haircut approach

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

⁽⁶⁾ 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.

⁽⁷⁾ 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.

⁽⁸⁾ As of December 31, 2017, approximately \$ 43 MM (approximately 4.6%) of Net EAD for indemnified agency lending and approximately \$13 MM (approximately 0.14%) of Net EAD for enhanced custody is currently covered by guarantees considered eligible for Basel purposes.

SECURITIZATIONS

Overview

We engage in securitization activities primarily as an investor. Most of our aggregate securitization exposure (approximately 96%), measured by EAD, 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, FFELP and private student loans, credit card receivables, residential mortgages, automobile and equipment leases and commercial mortgages. Our primary objective with respect to our investment in asset-backed securities is to generate interest income.

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 SSFA. We elected to apply the SSFA 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 BOLI, which we carry in other assets. 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 Disclosure. We also enter into a limited number of liquidity/credit facilities with counterparties which qualify as securitizations under the Basel framework.

The following tables present the EAD, capital requirement and RWA of our securitization exposures, by type of exposure as of the dates indicated.

TABLE 17: SECURITIZATION EXPOSURES

December 31, 2017

(In millions)	EAD	Capital Requirement	RWA ⁽²⁾
Asset class			
U.S. asset-backed	\$ 8,828	\$ 238	\$ 2,977
U.S. residential mortgage-backed	621	29	366
U.S. commercial mortgage-backed	1,624	28	345
Collateralized loan obligations	1,828	31	388
Non-U.S. asset-backed	2,793	71	886
Non-U.S. residential mortgage-backed	7,618	201	2,513
Re-securitizations	—	—	—
Other ⁽¹⁾	935	16	199
Total	\$ 24,247	\$ 614	\$ 7,674

September 30, 2017

(In millions)	EAD	Capital Requirement	RWA ⁽²⁾
Asset class			
U.S. asset-backed	\$ 10,377	\$ 266	\$ 3,325
U.S. residential mortgage-backed	943	36	450
U.S. commercial mortgage-backed	1,819	31	386
Collateralized loan obligations	1,296	22	275
Non-U.S. asset-backed	3,058	71	893
Non-U.S. residential mortgage-backed	8,106	209	2,618
Re-securitizations	—	—	—
Other ⁽¹⁾	875	18	230
Total	\$ 26,474	\$ 653	\$ 8,177

⁽¹⁾ Amounts include structured loans which meet the definition of securitizations.

⁽²⁾ Amounts reflect 1.06 supervisory scaling factor described in this disclosure as of December 31, 2017 under "Regulatory Capital Requirements."

The following tables present the EAD, capital requirement and RWA of our securitization exposures, by range of risk weights as of the dates indicated:

TABLE 18: SECURITIZATION EXPOSURES - RANGE OF RISK WEIGHTS
December 31, 2017

(In millions)

Risk Weight Range	EAD	Capital Requirement	RWA⁽¹⁾
Asset Securitizations			
20%-100%	\$ 23,821	\$ 412	\$ 5,158
101%-200%	99	13	158
201%-500%	106	25	307
501%-1000%	160	100	1,249
1001%-1250%	61	64	802
Total Asset Securitizations	\$ 24,247	\$ 614	\$ 7,674
Re-securitizations			
20%-100%			
101%-200%			
201%-500%			
501%-1000%			
1001%-1250%			
Total Re-securitizations	\$ —	\$ —	\$ —
Total	\$ 24,247	\$ 614	\$ 7,674

September 30, 2017

(In millions)

Risk Weight Range	EAD	Capital Requirement	RWA⁽¹⁾
Asset Securitizations			
20%-100%	\$ 26,010	\$ 450	\$ 5,639
101%-200%	105	12	152
201%-500%	139	31	381
501%-1000%	158	97	1,216
1001%-1250%	62	63	789
Total Asset Securitizations	\$ 26,474	\$ 653	\$ 8,177
Re-securitizations			
20%-100%	\$ —	\$ —	\$ —
101%-200%	—	—	—
201%-500%	—	—	—
501%-1000%	—	—	—
1001%-1250%	—	—	—
Total Re-securitizations	\$ —	\$ —	\$ —
Total	\$ 26,474	\$ 653	\$ 8,177

⁽¹⁾ Amounts reflect 1.06 supervisory scaling factor described in this disclosure as of December 31, 2016 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.

Global Treasury's approach is subject to corporate risk policies and guidelines, including the limits prescribed by the credit risk guidelines. A common 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 securities 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 in Global Treasury review each security 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. Global Treasury 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 pre-purchase process is applied across the portfolio, a 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 OTTI. 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 OTTI 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 Valuation Committee, composed of senior management from separate business units, ERM and Corporate Finance, which oversees adherence to State Street's valuation policies.

In addition to ongoing credit surveillance and the performance of regular stress testing by ERM, we test the 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 OTTI 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 to 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.

We carry AFS securities at fair value, with after-tax net unrealized gains and losses recorded in AOCI, which is a component of shareholders' equity. Gains or losses realized on sales of AFS 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. We carry securities classified as held to maturity at cost, and adjust the securities' carrying values for amortization of premiums and accretion of discounts.

We recognize interest income generated by these investment securities using the effective interest method, or on a basis approximating a level rate of return over the contractual or estimated life of the security. The level rate of return considers any nonrefundable fees or costs, as well as purchase premiums or discounts, resulting in amortization or accretion, accordingly.

For certain debt securities acquired which are considered to be beneficial interest in securitized financial assets, the excess of our estimate of undiscounted future cash flows from these securities over their initial recorded investment is accreted into interest income on a level-yield basis over the securities' estimated remaining terms. Subsequent decreases in these securities' expected future cash flows are either recognized prospectively through an adjustment of the yields on the securities over their

remaining terms, or are evaluated for OTTI. Increases in expected future cash flows are recognized prospectively over the securities' estimated remaining terms through the recalculation of their yields.

We review the fair values of these investment securities, and evaluate individual AFS and held-to-maturity securities for impairment that may be deemed to be other than temporary, at least quarterly. For impaired securities that we plan to sell, or when it is more likely than not that we will be required to sell the security, the impairment is deemed to be other than temporary and the security is written down to its fair value. Otherwise, we determine whether or not we expect to recover the entire amortized cost basis of the security, primarily by comparing the present value of expected future principal, interest and other contractual cash flows to the security's amortized cost.

Our evaluation of impairment of mortgage- and asset-backed securities incorporates detailed information with respect to underlying loan-level performance. 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

Overview

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;
- 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; 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 exposure; these contingent exposures are treated as equity derivative instruments, from a Basel classification perspective.

Significant Accounting Policies

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

Investment Securities Available for Sale

Our investments in funds carried in our investment securities portfolio are held as AFS securities, and represent investments that we intend to hold for an indefinite period. We carry AFS securities at fair value, with after-tax net unrealized gains and losses recorded in AOCI.

Gains or losses realized on sales of AFS securities are recorded in gains (losses) related to investment securities, net, in our consolidated statement of income. When measuring the fair value of these investments, we consider the principal or most advantageous market in which we would transact and 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.

Additional information with respect to our accounting for AFS securities is provided under "Securizations" in this Disclosure.

Equity Method Investments

We account for certain investments, such as low-income housing, under the equity method of accounting, if we as an investor have the ability to exercise significant influence over the operations of

the investee. Investments of more than five percent in limited partnerships and investments in joint ventures are generally accounted for under the equity method, due to the presumed presence of significant influence.

We initially record equity-method investments in other assets at cost. Subsequent to the date that significant influence is achieved, we adjust the carrying amount of our investment each reporting period to recognize our share of earnings/losses as reported by the investee. Our share of earnings/losses from investments accounted for under the equity method is recorded in our consolidated statement of income. Dividends received from an investee reduce the carrying amount of our investment.

Cost Method Investments

Investments where we, as investor, do not have the ability to exercise significant influence over the operations of the investee are recorded in other assets and are accounted for under the cost method of accounting. Examples of such investments are our alternative energy investments and certain Community Reinvestment Act investments. We initially record our investment at cost and carry the investment at that amount until it is sold or otherwise disposed of, or written down due to impairment in value that we deem to be other than temporary. Dividends received in excess of the investee's earnings subsequent to the date of our investment are considered a return of capital, and reduce the carrying value of our investment.

The following tables present our equity exposures by type and risk-weighting approach as of the dates indicated:

TABLE 19: EQUITY EXPOSURES

December 31, 2017

(In millions)	Risk Weight	Carrying Value ⁽¹⁾	EAD	Capital Requirement	RWA ⁽⁴⁾
Simple risk-weight approach:					
Equity investments in the 0% risk-weight category	0 %	\$ 342	\$ 342	\$ —	\$ —
Equity investments in the 20% risk-weight category	20	28	28	—	6
Community development equity exposures	100	803	803	68	851
Non-significant equity exposures	100	1,011	1,011	86	1,072
Significant exposures to financial institutions ⁽²⁾	100	0	0	—	0
Non-publicly traded equity investments	400	—	—	—	—
Total simple risk-weight approach		2,184	2,184	154	1,929
Investment funds:					
Full look-through approach		148	148	17	211
Alternative modified look-through approach		531	534	38	476
Simple modified look-through approach		194	198	89	1,110
Other ⁽³⁾		2,778	2,793	140	1,751
Total investment funds		3,651	3,673	284	3,548
Total equity investments		\$ 5,835	\$ 5,857	\$ 438	\$ 5,477

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(In millions)	Risk Weight	Carrying Value ⁽¹⁾	EAD	Capital Requirement	RWA ⁽⁴⁾
Simple risk-weight approach:					
Equity investments in the 0% risk-weight category	0 %	\$ 342	\$ 342	\$ —	
Equity investments in the 20% risk-weight category	20	28	28	—	6
Community development equity exposures	100	796	796	67	844
Non-significant equity exposures	100	853	853	72	905
Significant exposures to financial institutions ⁽²⁾	100	0	0	—	0
Non-publicly traded equity investments	400	—	—	—	—
Total simple risk-weight approach		2,019	2,019	139	1,755
Investment funds:					
Full look-through approach		152	152	27	335
Alternative modified look-through approach		543	546	42	519
Simple modified look-through approach		169	172	86	1,075
Other ⁽³⁾		2,783	2,798	151	1,883
Total investment funds		3,647	3,668	306	3,812
Total equity investments		\$ 5,666	\$ 5,687	\$ 445	\$ 5,567

⁽¹⁾ 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" section in our Supplemental Public Disclosure of Basel III Regulatory Capital as of December 31, 2016.

⁽²⁾ Represents equity investments in unconsolidated financial institutions considered "significant" as defined in the Basel III final rule, which are not deducted from common equity tier 1 capital and are assigned a transitional risk weight of 100% until 2017. Such risk weight will change to 250% in 2018.

⁽³⁾ Amounts consist of our investment in BOLI and contingencies related to stable value wrap contracts. Carrying value includes adjusted notional exposure of stable value wrap contracts, which is off-balance sheet and is not recorded in our consolidated statement of condition.

⁽⁴⁾ Amounts reflect 1.06 supervisory scaling factor described in our Supplemental Public Disclosure of Basel III Regulatory Capital as of December 31, 2016 under "Regulatory Capital Requirements."

OPERATIONAL RISK

Overview

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. Operational risk encompasses fiduciary risk and legal risk. Fiduciary risk is defined as the risk that State Street fails to properly exercise its fiduciary duties in its provision of products or services to clients. Legal risk is the risk of loss resulting from failure to comply with laws and contractual obligations as well as prudent ethical standards in business practices in addition to exposure to litigation from all aspects of State Street's activities.

Operational risk is inherent in the performance of investment servicing and investment management activities on behalf of our clients. Whether it be fiduciary risk, risk associated with execution and processing or other types of operational risk, a consistent, transparent and effective operational risk framework is key to identifying, monitoring and managing operational risk.

We have established an operational risk framework that is based on three major goals:

- Strong, active governance;
- Ownership and accountability; and
- Consistency and transparency.

Governance

Our Board is responsible for the approval and oversight of our overall operational risk framework. It does so through its RC, which reviews our operational risk framework and approves our operational risk policy annually.

Our operational risk policy establishes our approach to our management of operational risk across State Street. The policy identifies the responsibilities of individuals and committees charged with oversight of the management of operational risk, and articulates a broad mandate that supports implementation of the operational risk framework.

ERM and other control groups provide the oversight, validation and verification of the management and measurement of operational risk.

Executive management actively manages and oversees our operational risk framework through membership on various risk management committees, including MRAC, the BCRC, TORC, the Operational Risk Committee, the Executive Information Security Committee, Business Controls Steering Committee, Compliance and Ethics Committee, and the Fiduciary Review Committee, all of which ultimately report to the appropriate committee of the board.

The Operational Risk Committee, chaired by the global head of Operational Risk and co-chaired by the FLOD Head of Business Controls, provides cross-business oversight of operational risk, operational risk programs and their implementation to ensure that operational risk is identified, measured, managed and controlled in an effective and consistent manner and reviews and approves operational risk guidelines intended to maintain a consistent implementation of our corporate operational risk policy and framework.

Ownership and Accountability

We have implemented our operational risk framework to support the broad mandate established by our operational risk policy. This framework represents an integrated set of processes and tools that assists us in the management and measurement of operational risk, including our calculation of required capital and RWA.

The framework takes a comprehensive view and integrates the methods and tools used to manage and measure operational risk. The framework utilizes aspects of the COSO framework and other industry leading practices, and is designed foremost to address State Street's risk management needs while complying with regulatory requirements. The operational risk framework is intended to provide a number of important benefits, including:

- A common understanding of operational risk management and its supporting processes;
- The clarification of responsibilities for the management of operational risk across State Street;
- The alignment of business priorities with risk management objectives;
- The active management of risk and early identification of emerging risks;
- The consistent application of policies and the collection of data for risk management and measurement; and
- The estimation of our operational risk capital requirement.

The operational risk framework employs a distributed risk management infrastructure executed by ERM groups aligned with the business units, which are responsible for the implementation of the operational risk framework at the business unit level.

As with other risks, senior business unit management is responsible for the day-to-day operational risk management of their respective businesses. It is business unit management's responsibility to provide oversight of the implementation and ongoing execution of the operational risk framework within their respective organizations, as well as coordination and communication with ERM.

Consistency and Transparency

A number of corporate control functions are directly responsible for implementing and assessing various aspects of State Street's operational risk framework, with the overarching goal of consistency and transparency to meet the evolving needs of the business:

- The Global Head of Operational Risk, a member of the CRO's executive management team, leads ERM's corporate ORM group. ORM is responsible for the strategy, evolution and consistent implementation of our operational risk guidelines, framework and supporting tools across State Street. ORM reviews and analyzes operational key risk information, events, metrics and indicators at the business unit and corporate level for purposes of risk management, reporting and escalation to the CRO, senior management and governance committees;
- ERM's Corporate Risk Analytics group develops and maintains operational risk capital estimation models, and ORM's Capital Analysis group calculates State Street's required capital for operational risk;
- ERM's MVG independently validates the quantitative models used to measure operational risk, and ORM performs validation checks on the output of the model;
- CIS establishes the framework, policies and related programs to measure, monitor and report on information security risks, including the effectiveness of cyber security program protections. CIS defines and manages the enterprise-wide information security program. CIS coordinates with Information Technology, control functions and business units to support the confidentiality, integrity and availability of corporate information assets. CIS identifies and employs a risk-based methodology consistent with applicable regulatory cyber security requirements and monitors the compliance of our systems with information security policies; and
- Corporate Audit performs separate reviews of the application of operational risk management practices and methodologies utilized across State Street.

Our operational risk framework consists of five components, each described below, which provide a working structure that integrates distinct risk programs into a continuous process focused on managing and measuring operational risk in a coordinated and consistent manner.

Risk Identification and Assessments

The objective of risk identification and assessments is to understand business unit strategy, risk profile and potential exposures. It is achieved through a series of risk assessments across State Street using techniques for the identification, assessment and measurement of risk across a spectrum of potential frequency and severity combinations. Three primary risk assessment programs, which occur annually, augmented by other business-specific programs, are the core of this component:

- The RCSA program seeks to understand the risks associated with day-to-day activities, and the effectiveness of controls intended to manage potential exposures arising from these activities. These risks are typically frequent in nature but generally not severe in terms of exposure;
- The Material Risk Identification process utilizes a bottom-up approach to identify State Street's most significant risk exposures across all on- and off-balance sheet risk-taking activities. The program is specifically designed to consider risks that could have a material impact irrespective of their likelihood or frequency. This can include risks that may have an impact on longer-term business objectives, such as significant change management activities or long-term strategic initiatives;
- The Scenario Analysis program focuses on the set of risks with the highest severity and most relevance from a capital perspective. These are generally referred to as "tail risks," and serve as important benchmarks for our loss distribution approach model (see below); they also provide inputs into stress testing; and
- Business-specific programs to identify, assess and measure risk, including new business and product review and approval, new client screening, and, as deemed appropriate, targeted risk assessments.

Capital Analysis

The primary measurement tool used is an internally developed loss distribution approach model, referred to as the LDA model. We use the LDA model to quantify required operational risk capital, from which we calculate RWA related to operational risk. Such required capital and RWA totaled \$3.67 billion and \$45.82 billion, respectively, as of December 31, 2017, compared to \$3.66 billion and \$45.80 billion, respectively, as of September 30, 2017; refer to the "Components of Risk-Weighted Assets" table

provided under "Total Risk-Weighted Assets" in this Disclosure.

The LDA model incorporates the four required operational risk elements described below:

- Internal loss event data is collected from across State Street in conformity with our operating loss policy that establishes the requirements for collecting and reporting individual loss events. We categorize the data into seven Basel-defined event types and further subdivide the data by business unit, as deemed appropriate. Each of these loss events are represented in a UOM which is used to estimate a specific amount of capital required for the types of loss events that fall into each specific category. Some UOMs are measured at the corporate level because they are not "business specific," such as damage to physical assets, where the cause of an event is not primarily driven by the behavior of a single business unit. Internal losses of \$500 or greater are captured, analyzed and included in the modeling approach. Loss event data is collected using a corporate-wide data collection tool, which stores the data in a Loss Event Data Repository, referred to as the LEDR, to support processes related to analysis, management reporting and the calculation of required capital. Internal loss event data provides State Street-specific frequency and severity information to our capital calculation process for historical loss events experienced by State Street. Internal loss event data may be incorporated into our LDA model in a future quarter following the realization of the losses, with the timing and categorization dependent on the processes for model updates and, if applicable, model revalidation and regulatory review and related supervisory processes. An individual loss event can have a significant effect on the output of our LDA model and our operational risk RWA under the advanced approaches depending on the severity of the loss event, its categorization among the seven Basel-defined UOMs and the stability of the distributional approach for a particular UOM.
- External loss event data provides information with respect to loss event severity from other financial institutions to inform our capital estimation process of events in similar business units at other banking organizations. This information supplements the data pool available for use in our LDA model. Assessments of the sufficiency of internal data and the relevance of external data are completed before pooling the two data sources for use in our LDA model.
- Scenario analysis workshops are conducted across State Street to inform management of the less frequent but most severe, or "tail," risks that the organization faces. The workshops are attended by senior business unit managers, other support and control partners and business-aligned risk management staff. The workshops are designed to capture information about the significant risks and to estimate potential exposures for individual risks should a loss event occur. The results of these workshops are used to make a comparison to our LDA model results to determine that our calculation of required capital considers relevant risk-related information.
- Business environment and internal control factors are gathered as part of our scenario analysis program to inform the scenario analysis workshop participants of internal loss event data and business-relevant metrics, such as RCSA results, along with industry loss event data and case studies where appropriate. 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. The use of this information indirectly influences our calculation of required capital by providing additional relevant data to workshop participants when reviewing specific UOM risks.

Monitoring, Reporting and Analytics

The objective of risk monitoring is to proactively monitor the changing business environment and corresponding operational risk exposure. It is achieved through a series of quantitative and qualitative monitoring tools that are designed to allow us to understand changes in the business

environment, internal control factors, risk metrics, risk assessments, exposures and operating effectiveness, as well as details of loss events and progress on risk initiatives implemented to mitigate potential risk exposures.

Operational risk reporting is intended to provide transparency, thereby enabling management

to manage risk, provide oversight and escalate issues in a timely manner. It is designed to allow the business units, executive management, and the Board's control functions and committees to gain insight into activities that may result in risks and potential exposures. Reports are intended to identify business activities that are experiencing processing issues, whether or not they result in actual loss events. Reporting includes results of monitoring activities, internal and external examinations, regulatory reviews, and control assessments. These elements combine in a manner designed to provide a view of potential and emerging risks facing State Street and information that details its progress on managing risks.

Effectiveness and Testing

The objective of effectiveness and testing is to verify that internal controls are designed appropriately, are consistent with corporate and regulatory standards, and are operating effectively. It is achieved through a series of assessments by both internal and external parties, including Corporate Audit, independent registered public accounting firms, business self-assessments and other control function reviews, such as a SOX testing program.

Consistent with our standard model validation process, the operational risk LDA model is subject to a detailed review, overseen by the MRC. In addition, the model is subject to a rigorous internal governance process. All changes to the model or input parameters, and the deployment of model updates, are reviewed and approved by the Operational Risk Committee, which has oversight responsibility for the model, with technical input from the MRC.

Reporting

Operational risk reporting is intended to provide transparency, thereby enabling management to manage risk, provide oversight and escalate issues in a timely manner. It is designed to allow the business units, executive management, and the Board's control functions and committees to gain insight into activities that may result in risks and potential exposures. Reports are intended to identify business activities that are experiencing processing issues, whether or not they result in actual loss events. Reporting includes results of monitoring activities, internal and external examinations, regulatory reviews, and control assessments. These elements combine in a manner designed to provide a view of potential and emerging risks facing State Street and information that details its progress on managing risks.

Documentation and Guidelines

Documentation and guidelines allow for consistency and repeatability of the various

processes that support the operational risk framework across State Street.

Operational risk guidelines document our practices and describe the key elements in a business unit's operational risk management program. The purpose of the guidelines is to set forth and define key operational risk terms, provide further detail on State Street's operational risk programs, and detail the business units' responsibilities to identify, assess, measure, monitor and report operational risk. The guideline supports our operational risk policy.

Data standards have been established to maintain consistent data repositories and systems that are controlled, accurate and available on a timely basis to support operational risk management.

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

Market Risk Management

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 and 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 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 also 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, 2017, the notional amount of these derivative contracts was \$1.72 trillion, of which \$1.71 trillion was composed of foreign exchange forward, swap and spot contracts. We seek to match positions closely with the objective of minimizing 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 previously described TMRC (refer to "Risk Committees") oversees all market risk-taking activities across State Street associated with trading. The TMRC, 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 TMRC 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 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.

We use our CAP to assess our overall capital and liquidity in relation to our risk profile and provide a comprehensive strategy for maintaining appropriate capital and liquidity levels. 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 TMRC 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 covered positions policy, 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 foreign exchange, foreign exchange forwards, non-deliverable forwards, foreign exchange options, foreign exchange 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 covered positions policy. This documented analysis, including any decisions with respect to market risk treatments, must receive approval from the TMRC.

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 foreign exchange 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.

Value-at-Risk, Stress Testing 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 foreign exchange 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

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 foreign exchange spot, forward and options 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 foreign exchange 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 and Stressed VaR

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 foreign exchange, 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 foreign exchange 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 TMRC. Limit breaches are addressed by ERM risk managers in conjunction with the business units, escalated as appropriate, and reviewed by the TMRC if material. In addition, we have established several action triggers that prompt immediate 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 profit-and-loss outcomes, or P&L, 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 experienced one back-testing exception in 2016 and one back-testing exception in 2015. In reference to the 2016 exception, the trading P&L that day exceeded the VaR based on the prior day's closing positions, following a large depreciation in the U.S. dollar against several major and emerging market currencies, primarily attributable to U.S. GDP growth rate being lower than expected and market reaction to Bank of Japan's decision to leave the interest rate unchanged. In reference to the 2015 exception, the trading P&L that day exceeded the VaR based on the prior day's closing positions, following a large depreciation in the U.S. dollar against several major and emerging market currencies, which depreciation can be attributed to a

decision and related statements by the Federal Reserve's Federal Open Market Committee to hold interest rates at current levels.

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. MVG examined back testing results for the market risk regulatory capital model used for 2016. 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 during the quarters ended December 31, 2017 and September 30, 2017, and as of December 31, 2017 and September 30, 2017, as measured by our VaR methodology:

Table 20: TEN-DAY VaR ASSOCIATED WITH TRADING ACTIVITIES FOR COVERED POSITIONS

(In thousands)	Quarter Ended December 31, 2017			Quarter Ended September 30, 2017			As of December 31, 2017	As of September 30, 2017
	Average	Maximum	Minimum	Average	Maximum	Minimum	VaR	VaR
Global Markets	\$ 8,148	\$ 13,502	\$ 3,402	\$ 8,307	\$ 15,847	\$ 3,048	\$ 5,719	\$ 4,088
Global Treasury	650	1,767	126	527	756	333	1,346	756
Total VaR	\$ 8,123	\$ 13,306	\$ 3,410	\$ 8,285	\$ 15,723	\$ 2,970	\$ 5,562	\$ 3,938

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

(In thousands)	Quarter Ended December 31, 2017			Quarter Ended September 30, 2017			As of December 31, 2017	As of September 30, 2017
	Average	Maximum	Minimum	Average	Maximum	Minimum	Stressed VaR	Stressed VaR
Global Markets	\$ 27,185	\$ 41,908	\$ 14,408	\$ 36,168	\$ 52,057	\$ 18,883	\$ 31,512	\$ 26,811
Global Treasury	8,761	17,460	2,560	10,275	13,868	7,030	12,042	11,342
Total Stressed VaR	\$ 27,789	\$ 42,527	\$ 14,320	\$ 38,645	\$ 55,899	\$ 20,646	\$ 29,649	\$ 28,624

⁽¹⁾ The increase in the total stressed VaR-based measures as of December 31, 2017, compared to September 30, 2017, was driven mainly by higher end of day interest rate positions on December 31, 2017 compared to September 30, 2017.

The twelve month average of our stressed VaR-based measure was approximately \$28 million for the period ended December 31, 2017, compared to a twelve month average of approximately \$39 million for the period ended September 30, 2017.

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, 2017 and September 30, 2017. The totals of the VaR-based and stressed VaR-based measures for the three attributes in total exceeded the related total VaR and total stressed VaR presented in the foregoing tables as of each period-end, primarily due to the benefits of diversification across risk types.

Table 22: TEN-DAY VaR ASSOCIATED WITH TRADING ACTIVITIES BY RISK FACTOR⁽¹⁾

(In thousands)	As of December 31, 2017			As of September 30, 2017		
	Foreign Exchange Risk	Interest Rate Risk	Volatility Risk	Foreign Exchange Risk	Interest Rate Risk	Volatility Risk
By component:						
Global Markets	\$ 6,149	\$ 5,546	\$ 3	\$ 3,279	\$ 3,281	\$ 102
Global Treasury	100	1,372	—	220	737	—
Total VaR	\$ 6,250	\$ 5,840	\$ 3	\$ 3,269	\$ 3,004	\$ 102

Table 23: TEN-DAY Stressed VaR ASSOCIATED WITH TRADING ACTIVITIES BY RISK FACTOR⁽¹⁾⁽²⁾

(In thousands)	As of December 31, 2017			As of September 30, 2017		
	Foreign Exchange Risk	Interest Rate Risk	Volatility Risk	Foreign Exchange Risk	Interest Rate Risk	Volatility Risk
By component:						
Global Markets	\$ 15,975	\$ 27,161	\$ 3	\$ 5,026	\$ 36,563	\$ 111
Global Treasury	153	12,192	—	258	11,597	—
Total Stressed VaR	\$ 16,105	\$ 25,177	\$ 3	\$ 5,056	\$ 36,592	\$ 111

⁽¹⁾ For purposes of risk attribution by component, foreign exchange 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 foreign exchange 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 in 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 characteristics of our balance sheet liabilities, including the currency composition of our significant non-U.S. dollar denominated client liabilities.

We manage interest rate risk on a consolidated basis using two different, but complementary approaches. NII sensitivity is a short-term, earnings-based simulation that measures re-pricing mismatches on the balance sheet. It compares our baseline view of NII over a twelve-month horizon, based on our internal forecast of interest rates, to a wide range of instantaneous and gradual rate shocks. The baseline NII forecast includes our expectations

for new business growth, changes in balance sheet mix and investment portfolio positioning. While investment securities balances can fluctuate with the level of rates as prepayment assumptions change, our deposit balances remain consistent with the baseline. On the other hand, economic value of equity sensitivity is a discounted cash flow model designed to estimate the change in fair value of assets and liabilities under a series of interest rate shocks over a long-term horizon. It measures the duration mismatch of the spot balance sheet only and does not include the impact of new business.

While there are clear differences between NII and EVE sensitivity, there are several important similarities. First, both measures utilize consistent data and assumptions when modeling positions currently held on the balance sheet. Second, each approach assumes no management action is taken to mitigate the adverse effects of interest rate changes on our financial performance (and thus provides a conservative view of interest rate risk). NII and EVE sensitivity metrics are continuously monitored as market conditions change and managed within internally-approved risk limits and guidelines.

Net Interest Income at Risk

In the table below, we report the expected change in NII over the next twelve months from +/-100 bps instantaneous and gradual parallel rate shocks. Note that in each scenario, all currencies interest rates are shifted higher or lower. For the two gradual parallel rate scenarios, or interest rate ramps, the change in rates is applied evenly throughout the horizon.

We also routinely measure NII sensitivity to non-parallel rate shocks to isolate the impact of short-term or long-term market rates. In the up 100 bps instantaneous shock, approximately 75% of the expected benefit stems from the short-end of the yield curve. Additionally, we quantify how much of the change is a result of shifts in U.S. and non-U.S. rates. In the up 100 bps instantaneous shock, approximately 50-60% of the expected benefit is driven by U.S. rates.

TABLE 24: NII SENSITIVITY

(Dollars in millions)	December 31, 2017		December 31, 2016	
	Benefit / (Exposure)			
Rate change:				
+100 bps shock	\$	435	\$	585
-100 bps shock		(294)		(265)
+100 bps ramp		177		284
-100 bps ramp		(122)		(161)

As of December 31, 2017, NII sensitivity remains positioned to benefit from rising interest rates. Compared to prior year-end, the decreased benefit to the up 100 bps instantaneous shock is driven by investment portfolio activity and higher forecasted short-end rates, which impacts the repricing characteristics of client deposits and other liabilities. The increased exposure to the down 100 bps instantaneous rate shock is driven by higher observed short-term interest rates relative to prior year-end. Gradual rate shocks have a similar asset sensitive positioning compared with instantaneous shocks, but are less impactful due to the severity of the rate shift.

Economic Value of Equity

The following table highlights our economic value of equity sensitivity to a +/-200 bps instantaneous rate shock, relative to spot interest rates. Management compares the change in EVE sensitivity against State Street's aggregate tier 1 and tier 2 risk-based capital, calculated in conformity with current applicable regulatory requirements.

TABLE 25: EVE SENSITIVITY

(Dollars in millions)	December 31, 2017		December 31, 2016	
	Benefit / (Exposure)			
Rate change:				
+200 bps shock	\$	(1,507)	\$	(1,092)
-200 bps shock		11		877

As of December 31, 2017, economic value of equity sensitivity remains exposed to upward shifts in interest rates. The change in each scenario is driven by investment portfolio repositioning and higher modeled client deposit duration. The -200 bps scenario is also impacted by the low level of rates, which can limit the size of the rate shock.